U. S. DEPARTMENT OF COMMERCE
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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

JANUARY 1967
Volume 18 No. 1

ASHEVILLE: 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 1 JANUARY 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Unseasonably mild temperatures with wide fluctuations.
2. Third consecutive extremely dry month in lower Great Plains.
3. Unprecedented snowfall in Texas and Mexico.
4. Frequent snowstorms in East.
5. Tornado outbreak in Midcontinent on 24th.

TEMPERATURE.--January 1966 was relatively mild in most areas, with temperatures for the month averaging as much as 12° above normal in the Pacific Northwest, 8° in the Northeast, and tapering off to normal or slightly below in south-central areas and the Rio Grande Valley. The month began with very cold weather in most sections, but with a generally rising temperature trend during the remainder of the month it ended with above-normal warmth throughout the 48 States. This was the mildest January since the early 1950's in a large portion of the Country. Washington, D. C., had its mildest January since 1950; Boise, Idaho, since 1954; Oklahoma City, Okla., Wilmington, N. C., and Columbus, Ohio, since 1953. Green Bay, Wis., reported less ice on nearby waters than in many years.

Very cold weather the first 10 or 12 days of the month persisted for 3 weeks in extreme south-central areas. In most of the Nation, however, a warming trend began early in the second decade and continued with only brief interruptions for the rest of the month.

Lowest temperatures in the Far West generally occurred early in the month when subzero minima extended southward to northern Arizona and New Mexico, with freezing almost to the Mexican border. In the Red River of the North Valley, most of the Mississippi and Ohio Valleys, and the Northeast, the coldest period was January 17-20. During this period subzero minima extended southward to northern Kansas, central Illinois and Indiana, and were reported by many stations in New York, northern New England, and by mountain stations in Pennsylvania. Bismarck, N. Dak., recorded -40° on the 17th, a record low there for the date.

There were several warm periods during the month with most stations recording their highest temperatures in the last decade except about midmonth in California and the Great Basin. Reno, Nev., recorded 70° on the 15th, its highest during an 80-year record. Valentine, Nebr., reported its highest temperature for January during a 74-year record, 68° on the 22d, and Lansing, Mich., reported 66° on the 24th for the highest there in January during a 68-year record. At Trenton, N. J., daily maximum temperatures during the period 23d-26th ranged from 62° to 70°, the longest "January thaw" in 101 years of record. At Reading, Pa., the temperature reached 70° on the 24th and 73° on the 25th, the first time highs of 70° or higher ever occurred there on consecutive days.

PRECIPITATION.--Precipitation was above normal in about half the area of the 48 States --- mainly in the Great Basin and Pacific States, north-central areas, and Gulf and south Atlantic coastal areas. Monthly totals were more than twice normal in the vicinities of San Francisco and Sacramento, Calif., and the upper Mississippi Valley and North Dakota. This was the second consecutive month with above normal precipitation in the upper Mississippi Valley. Minneapolis, Minn., measured 3.63 inches for the month, a new January record there, and several other stations in the area reported the heaviest precipitation for January since 1950. San Francisco, Calif., recorded 10.43 inches at the Airport for the month, its greatest total since 1928. Most of the precipitation in the Far West occurred during the second half of the month when a succession of storms moved from the Pacific into the area.

In the lower Great Plains, the Ohio and lower Mississippi Valleys, and parts of the Northeast, precipitation was less than 50 percent of normal. This was the third consecutive very dry month in the lower Great Plains. Southeastern New Mexico and a considerable portion of west Texas received no measurable amounts during the month. Lubbock, Tex., had no precipitation at all during January for the first time since 1911. Roswell, N. M., had no precipitation for the second time since 1894, and the 31st was the 133d day without measurable precipitation there.

SNOWFALL.--Snowfall was both frequent and heavy in much of the Far West and some north-central areas. Falls in the Far West left a good mountain snowpack which brightened prospects for irrigation water during the warm season of 1967. At the end of the month depths ranged up to 18 feet in the Cascades and 5 feet in the Rockies. Salt Lake City, Utah, had 30.4 inches of snowfall, the second heaviest for January in 93 years.

An unprecedented snowfall occurred in southern Texas and northern Mexico on the 9th. Falls of 5 to 7 inches were measured in southern Texas from Catulla and Three Rivers south to Hebbronville, the second heaviest fall on record in this area. Monterey, Mexico, reported a record fall of 20 inches for that station, and even heavier amounts were reported in other nearby localities.

Heavy snowstorms crossed the Great Plains and Great Lakes region on the 8th and 9th, 16th, and 26th. High winds during each storm seriously hampered or halted traffic over considerable areas. During the storm on the 8th and 9th, which moved from Colorado to the Great Lakes, blizzard conditions developed locally and up to 18 inches of snowfall were reported in Minnesota. In Upper Michigan on the shore of Lake Superior, the Marquette County Airport reported 52 inches of snow on the ground on the evening of January 7.

The storm of the 16th developed blizzard intensity as it moved across the northern Great Plains to the Great Lakes. Many roads were blocked by 1 to 2 feet of drifting snow in Minnesota and Wisconsin. Winds at Jamestown, N. Dak., reached 62 m.p.h., and the South Dakota Highway patrol reported some trucks blown off roads. This was the worst blizzard over the northern Great Plains since the great blizzard of March 1965. Hibbing, Minn., recorded -47° after the storm.

The snowstorm of the 26th left a deep snow cover in the central Great Plains and Great Lakes region. Depths reached 2 feet in a belt reaching from northeastern Illinois across northern Indiana into central Lower Michigan. Winds up to 50 m.p.h. drifted snow 12 to 15 feet high. For Chicago, with a record dating back to 1886, snowfall during this storm set records

for 24 hours (19.8 in.) and a single storm (23.0 in.).

DESTRUCTIVE STORMS.--The storms which brought heavy snow to northern areas were also accompanied by local glazing. One of the worst glaze storms in several years caused heavy damage to trees and power and communication lines from central Missouri to northwestern Ohio near the end of the month. The glaze was 3/4 inch thick in Indiana.

Early-season tornadoes occurred in Missouri, Iowa, Illinois, and some nearby areas in other States on the 24th. At least 5 persons were killed and property damage was considerable.

CONDENSED CLIMATOLOGICAL SUMMARY

JANUARY 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Whatley	81	24	3 Stations	13	17+	Louisville	7.46	Trafford	1.71
Alaska	Ketchikan	50	10+	2 Stations	-58	29+	Little Port Walter	21.11	Wales Airport	.03
Arizona	2 Stations	86	28	Maverick	-22	7	Beaverhead Lodge	1.81	20 Stations	.00
Arkansas	Calico Rock	79	23	Gilbert	-4	18	Benton	2.92	2 Stations	.54
California	Indio US Date Garden	88	15	Termo	-17	23	Kentfield	26.32	Gold Rock Ranch	.00
Colorado	Wray	74	22	2 Stations	-43	8	Berthoud Pass	3.80	2 Stations	.00
Connecticut	2 Stations	68	25+	Norfolk 2SW	-4	19	Brooklyn	2.09	Wigwam Reservoir	.63
Delaware	Selbyville	75	24	Bridgeville 1NW	4	20	Georgetown 5SW	D 2.17	Lewes 1SW	1.29
Florida	4 Stations	88	19+	2 Stations	22	29+	Wewahitchka	11.10	Fort Drum 5NW	.31
Georgia	Camilla	85	26	Helen 1ESE	11	12	Ashburn 3ENE	9.59	Beaverdale	2.47
Hawaii	Hilo WBAP, Hawaii	89	24	Haleakala Summit 338.4	20	11	N Wailua Ditch 1051	16.54	Mauna Loa Slope Obs.	.46
Idaho	3 Stations	63	30+	Island Park Dam	-29	7	Burke 2ENE	10.53	Strevell	.12
Illinois	East St Louis Pks Col	77	23	2 Stations	-20	18	Bloomington Waterworks	3.71	Sparta	.70
Indiana	5 Stations	72	24+	Frankfort Disposal Pl	-11	18	Collegeville St Jo Col	3.66	Vevay	.53
Iowa	Keokuk Lock & Dam 19	68	22	2 Stations	-35	18	Britt	3.12	Primghar	.34
Kansas	Kinsley	88	23	Alton 6E	-12	8	Howard 5NE	3.04	3 Stations	T
Kentucky	Cumberland	80	25	Falmouth 5WNW	3	18	Middlesboro	3.72	Warsaw Markland Dam	.41
Louisiana	Morgan City	82	24	Plain Dealing	13	19	Schriever	6.30	Springhill 2S	.95
Maine	Sanford 2NNW	59	24	Van Buren 2	-32	19	Rockland	3.59	2 Stations	1.26
Maryland	Baltimore WB City	77	24	Sines Deep Creek 2	0	19	Hagerstown	2.59	Owings Ferry Landing	.42
Massachusetts	Weston	68	25	Knightville Dam	-6	20+	Rockport 1ESE	3.57	Adams	.77
Michigan	Lansing WBAP	66	24	Crystal Falls 6NE	-36	18	Watersmeet	6.84	Harrisville 7SW	.91
Minnesota	Preston	50	21	Cotton 11E	-48	18	Theilman	4.39	Pipestone	.32
Mississippi	Yazoo City 5NNE	80	24	Tunica 2	12	19+	Beaumont	8.25	Minter City	.88
Missouri	2 Stations	79	24+	2 Stations	-9	18	Gregory Landing	3.72	Tarkio	.61
Montana	Columbus	65	11	Opheim 10N	-48	17	Summit	9.60	Big Timber	T
Nebraska	Benkelman	75	23	2 Stations	-21	18+	Omaha WBAP	2.00	Minden	T
Nevada	2 Stations	73	16+	do	-16	26+	Glenbrook	10.77	Montello	.00
New Hampshire	do	61	25+	Mount Washington	-29	18	Mount Washington	4.92	Whitefield	.89
New Jersey	Atlantic City WBAP	78	24	2 Stations	-4	19	Phillipsburg Bridge	2.34	Millville	.53
New Mexico	2 Stations	81	30	Gavilan	-31	7+	Bateman Ranch	1.44	79 Stations	.00
New York	4 Stations	71	26+	2 Stations	-25	19	Hooker 4N	6.56	Groveland	.38
North Carolina	Goldsboro 1SSW	81	25	Grandfather Mountain	3	12	Coweeta Exp Station	6.24	Carthage 1SSE	1.10
North Dakota	2 Stations	52	29+	3 Stations	-40	18+	Grand Forks University	2.57	Selfridge	D .09
Ohio	do	74	26+	Dorset	-10	19	Chardon	2.71	Springfield Sewage Pl	.30
Oklahoma	Altus Irr Resch Stn	86	22	Hammon	3	18	Stillwater 2W	2.32	9 Stations	.00
Oregon	2 Stations	65	29+	2 Stations	-12	24+	Valsetz	32.91	Mitchell	.34
Pennsylvania	3 Stations	74	26+	Bradford 4W Res	-13	19	Hop Bottom 2SE	3.88	Newell	.35
Puerto Rico	Guayama	93	31	Cayey 1E	50	6	Rio Blanco Upper	11.52	3 Stations	.00
Rhode Island	3 Stations	65	24	Greenville	2	19	Block Island WBAP	1.90	Providence WBAP	1.60
South Carolina	do	79	27+	Union 8SW	12	17	Beaufort 7SW	7.40	Winthrop College	1.84
South Dakota	Winner	68	22	Britton	-31	17	Dumont 2ENE	1.51	Interior 3NE	.02
Tennessee	2 Stations	76	25+	2 Stations	7	20+	Kingston	4.03	Palmetto	1.04
Texas	Hallettsville	89	22	Plains	0	9+	Houston Indep Heights	4.09	139 Stations	.00
Utah	Provo Radio KOVO	68	21	Ouray 4NE	-26	8	Alta	13.57	3 Stations	T
Vermont	Bellows Falls	62	25	West Burke	-31	19	Mount Mansfield	5.39	Gilman	.80
Virginia	Danville Bridge St	79	25	Partlow 3WNW	-3	20	Newport News Press Bld	5.49	Mount Weather	.53
Washington	Ice Harbor Dam	66	30	Winthrop 1WSW	-2	22	Aberdeen 20NNE	33.35	Priest Rapids Dam	.24
West Virginia	9 Stations	75	27+	2 Stations	-1	19	McRoss	2.16	Horner	.20
Wisconsin	Beloit	61	24	Neillsville 1W	-46	18	Readstown	D 4.44	Monroe 1W	.65
Wyoming	Yoder	71	29	Lake Yellowstone	-28	7	Moran 5WNW	4.79	Burris	.02

+ And also on an earlier date or dates.

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	999.0	1022.1	55	33	44.0	-2.5	74	25	20	16+	0	18	35	73	2.84	-2.19	1.16	7	1	T	0	1.4	27	27	W	27+	7	8	16	6.6	48
HUNTSVILLE	600	998.0	1021.6	54	33	43.5	0.6	75	25+	18	12	0	19	34	70	1.83	-3.39	0.75	6	1	T	T	1.1	20	30	29	27	12	4	15	6.1	
MOBILE	211	1013.5	1021.6	63	43	53.0	0.0	75	25+	29	16	0	2	43	73	5.46	0.82	3.09	9	2	0.0	0	2.1	5	23	2	8	11	4	16	6.1	
MONTGOMERY	194	1014.6	1022.0	58	38	47.9	-0.2	75	25	27	17+	0	9	38	74	2.77	-1.29	1.03	10	0	0.0	0	1.5	31	25	SW	26	7	8	16	6.5	43
ALASKA												B																				
ANCHORAGE	114	1000.3	1005.6	15	-1	7.1		26	18	-15	15	0	31	0	71	1.25		0.65	6	0	16.7	31	3.4	1	44	4	28	11	8	12	5.5	57
ANNETTE	110	1001.0	1005.2	40	30	35.1	0.7	49	9	20	27+	0	18	29	79	9.25	-2.11	1.88	25	0	23.2	8	4.7	14	40	14	9	4	3	24	8.4	
BARROW	31	1011.5	1012.3	-4	-20	-12.0	4.2	29	22	-38	3	0	31	-20	72	0.19	0.01	0.07	5	0	2.4	12	2.7	13	29	27	25+	V	V	V		
BARTER ISLAND	39	1011.5	1013.4	-2	-19	-10.5	6.3	26	22	-36	14	0	31	-17	75	0.32	-0.08	0.10	7	0	3.2	13	4.7	25	61	26	26	X	X	X		
BETHEL	125	1002.4	1008.4	16	-2	7.4	3.8	38	17	-30	3	0	30	4	84	0.88	-0.24	0.49	7	0	8.8	16	3.4	8	41	12	17	6	5	20	7.0	
COLD BAY	96	1002.0	1005.9	31	22	26.5	-1.3	44	4	12	27	0	30	23	83	1.60	-0.72	0.46	14	0	11.4	10	3.0	23	52	13	16	5	11	15	6.4	
FAIRBANKS	436	994.9	1013.5	-7	-24	-15.3	-4.2	13	22	-44	29+	0	31	-25	59	0.40	-0.49	0.10	11	0	13.0	22	0.2	32	15	24	3+	10	7	14	6.0	
JUNEAU	12	1005.1	1005.9	29	17	23.1	-2.0	42	10	-2	25	0	31	17	79	4.04	0.04	1.19	20	0	38.2	9	7.6	10	37	12	10	9	1	21	6.8	36
KING SALMON	49	1004.4	1006.4	17	-2	7.6	-5.8	37	16	-29	3	0	30	1	74	0.93	-0.14	0.34	11	0	7.7	9	2.8	5	47	8	17	12	3	16	5.6	
KOTZEBUE	10	1009.5	1010.1	9	-6	1.5	7.2	31	21	-29	3	0	31	-3	78	0.28	-0.11	0.13	9	0	8.7	25	10.7	11	63	12	4	8	5	18	6.6	
MC GRATH	344	998.3	1012.1	-1	-21	-10.8	-1.8	20	22+	-43	15+	0	31	-18	70	0.42	-0.84	0.38	3	0	9.0	20	0.0		12	3	28+	11	3	17	6.2	
NOME	13	1006.8	1007.7	20	4	12.0	7.6	31	21	-32	2	0	31	9	86	0.44	-0.58	0.17	9	0	6.2	18	7.3	8	54	9	4	6	4	21	7.5	26
ST. PAUL ISLAND	22	1001.7	1002.6	33	25	28.9	3.5	40	3	15	2+	0	28	24	80	2.02	0.21	0.60	19	0	10.2	3	6.2	16	60	14	9	2	10	19	7.7	
SHEMYA	122	991.2	994.9	35	27	30.9	-0.4	42	2	19	13	0	28	27	83	4.34	1.84	0.90	20	0	13.8	4	9.7	21	90	19	3	2	7	22	8.1	
YAKUTAT	28	1000.7	1001.7	27	11	18.8	-8.5	38	10+	-10	28+	0	31	15	86	8.79	-2.07	2.19	14	0	68.4	47	4.1	11	32	28	7	7	6	18	6.8	
ARIZONA																																
FLAGSTAFF	6993	788.0	1021.8	44	14	29.1	1.8	57	15	-5	7	0	31	14	58	0.93	-0.90	0.70	2	0	9.8	9	1.0	15	25	21	25	13	6	12	5.1	
PHOENIX	1117	979.3	1018.9	67	34	50.7	1.0	79	28	21	7	0	10	27	47	0.25	-0.48	0.25	1	0	0.0	0	2.3	10	25Y	NE	11+	16	5	10	4.5	86
TUCSON	2584	928.9	1018.0	67	36	51.4	1.6	81	28	20	7	0	8	19	34	0.04	-0.78	0.04	1	0	0.0	0	3.7	14	32	E	11	18	5	8	3.7	90
WINSLOW	4895	855.1	1024.8	48	15	31.2	0.2	67	30	-5	2	0	28	15	60	0.10	-0.33	0.10	1	0	T	1	2.7	20	43	20	5	14	6	11	5.1	
YUMA	194	1011.9	1019.2	69	41	55.1	1.7	79	30	32	1	0	1	24	35	0.25	-0.14	0.25	1	0	0.0	0	4.8	1	26	N	2	17	8	6	3.5	85
ARKANSAS																																
FORT SMITH	447	1003.1	1020.2	57	25	41.0	1.2	78	23	10	9	0	25	28	65	0.99	-1.67	0.96	3	1	0.1	T	1.4	27	42	W	6	12	7	12	5.2	65
LITTLE ROCK	257	1011.2	1020.9	53	30	41.7	1.1	75	23	11	18	0	21	33	72	2.13	-3.09	1.16	7	3	1.6	2	1.8	23	31	S	6	10	8	13	5.8	62
TEXARKANA	391	1007.5	1021.1	57	36	46.6	1.5	77	22	17	19	0	16	34	65	1.79	-3.05	0.68	5	3	0.0	0	4.4	21				10	9	12	5.7	
CALIFORNIA																																
BAKERSFIELD	475	1004.1	1022.2	57	36	46.6	-0.8	68	20	25	18	0	10	38	75	0.96	-0.21	0.82	3	0	0.0	0	1.3	4	23	15	24	7	9	15	6.3	
BISHOP	4108	876.7		55	25	39.8	3.0	69	15	15	27+	0	27			1.64	0.65	0.54	6		7.6	7										
BLUE CANYON	5280			45	33	38.7	1.6	63	14	19	23+	0	15			20.06	8.36	7.24	14		53.0	38			46	18	21	7	6	18	7.1	
EUREKA U	43			53	42	47.4	0.0	60	26	31	6	0	1			8.87	2.17	2.11	15		0.0	0			33	SW	29	0	9	22	8.5	40
FRESNO	328	1009.8	1021.9	55	37	46.1	0.0	64	15	26	7	0	10	39	81	2.21	0.18	0.92	6	1	0.0	0	1.3	12	29	SE	24	4	13	14	6.9	51
LONG BEACH	34	1018.6	1020.0	66	43	54.6	1.5	78	10	35	19+	0	0	41	67	3.77	1.78	2.06	3	0	0.0	0	1.0	26	23	18	22	9	14	8	5.2	
LOS ANGELES	97	1015.9	1019.4	65	48	56.6	2.2	79	10	41	8	0	0	44	69	2.71	0.05	1.47	4	0	0.0	0	1.1	26	37Y	SW	24	13	10	8	5.1	
LOS ANGELES U	270			70	49	59.2	3.4	80	11+	40	8	0	0			5.93	2.86	3.69	3		0.0	0			22	SW	24	16	9	6	3.7	81
MT SHASTA R	3544			44	28	35.9	2.6	56	10	11	22	0	24			7.61	1.25	2.26	13		54.9	37										
OAKLAND	6	1020.7	1021.0	56	45	50.2	2.2	64	17	38	6+	0	0	41	73	8.90	5.07	3.38	9	1	0.0	0	1.6	19	28	27	24	6	8	17	6.9	
RED BLUFF	342	1008.1	1021.1	56	38	47.1	1.6	73	14	30	22	0	6	37	74	7.63	3.34	2.14	12	0	T	0	0.7	27	36	SE	29+	5	6	20	7.5	52
SACRAMENTO	17	1020.3	1021.1	54	38	45.9	0.7	63	16+	29	2	0	8	40	84	8.42	5.24	3.41	11	2	0.0	0	2.0	15	58	SE	24	3	9	19	7.7	53
SANDBERG R	4517	865.2		49	36	42.6	2.7	66	15	24	6+	0	10			2.44	-0.11	1.68	3		2.4	2			55	34	5				4.7	
SAN DIEGO	13	1018.3	1019.4	65	46	55.0	0.0	77	11	38	7	0	0	43	69	2.20	0.19	1.57	6	0	0.0	0	1.5	31	25	S	24	17	7	7	3.9	83
SAN FRANCISCO	8	1020.3	1020.9	57	42	49.2	0.6	66	14	36	17+	0	0	40	74	10.43	6.42	4.58	10	1	0.0	0	1.6	20	44	SSW	21	5	9	17	7.1	
SAN FRANCISCO U	52			58	47	52.6	1.9	67	13	40	4	0	0			9.49	4.94	2.88	11		0.0	0			40	SW	21					61
SANTA CATALINA	1568			63	54	58.4	4.8	79	15	46	6	0	0			2.57	-0.09	1.69	4	0	0.0	0						18	6	7	3.9	
SANTA MARIA	236			64	38	51.1	0.9	74	14+	29	9+	0	7			3.53	0.69	1.93	8		0.0	0						15	5	11	4.8	
STOCKTON	22	1020.7	1021.8	54	38	46.2	1.5	64	30+	27	9+	0	8	40	83	6.80	4.25	3.01	10	0	0.0	0	3.5	15	46	14	24	1	12	18	7.8	
COLORADO																																
ALAMOSA	7536	770.7		38	0	18.9	1.5	53	30+	-24	8	0	31			0.07	-0.19	0.03	5		1.2	2						13	10	8	4.6	
COLORADO SPRINGS	6145	808.3	1017.6	48	18	33.1	4.5	65	11	1	17	0	29	12	47	0.31	0.02	0.27	2	0	4.1	3	2.9	2	35	31	24	2	14	15	7.3	
DENVER	5283	833.4	1014.8	49	19	34.0	5.5	64	11	0	17	0	28	17	56	0.84	0.29	0.36	4	0	9.9	4	2.9	21	40	NW	3	2	12	17	7.3	70
GRAND JUNCTION	4855	855.4	1025.2	34	14	23.9	-2.1	51	31+	-2	8	0	29	17	76	0.25	-0.39	0.08	7	0	2.8	5	1.6	9	16	N	5	3	10	18	7.6	56

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
COLORADO	Ft.	Mb.	Mb.	F	F.	F.	F	F		F				F.	%	In.	In.	In.			In.	In.	M.p.h		M.p.h							%
PUEBLO	4684	854.0	1016.5	51	18	34.6	4.6	67	28	- 3	8	0	28	12	44	0.13	- 0.18	0.08	2	0	1.7	1	3.2	30	56	N	6	4	17	10	6.4	82
CONNECTICUT																																
BRIDGEPORT	7	1016.9	1017.6	40	28	33.8	3.6	63	24	10	19	0	22	26	74	1.29	- 2.40	0.89	9	0	1.8	1	5.2	30	38	9	27	7	9	15	6.6	
HARTFORD	169	1010.5	1017.2	40	25	32.8	6.8	65	24	6	19	0	23	24	70	2.01	- 1.57	1.31	9	1	3.0	8	3.0	31	28	NW	29	5	6	20	7.3	48
NEW HAVEN	6	1017.3		42	27	34.4	4.8	65	24	8	19	0	22			1.40	- 2.56	0.88	11		1.4	1			27	SW	28	6	8	17	6.8	54
DELAWARE																																
WILMINGTON	78	1015.7	1018.8	44	29	36.2	2.8	71	24	15	19	0	23	28	74	1.67	- 1.73	1.24	6	1	0.6	4	3.4	28	27	30	29	5	8	18	6.7	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1017.3	1019.5	50	32	41.0	4.1	71	25+	17	20	0	17	28	63	1.35	- 1.68	0.99	4	1	1.3	1	2.9	26	34	NW	29	6	12	13	6.5	61
FLORIDA																																
APALACHICOLA U	13			62	46	54.7	- 0.4	70	19	35	28	0	0			2.51	- 0.63	1.04	11	0	0.0	0			24	N	10+	12	6	13	5.3	55
DAYTONA BEACH	31	1020.0	1021.5	71	50	60.6	1.4	82	3	35	29	0	0	52	78	1.26	- 0.70	0.78	9	1	0.0	0	1.9	33	37	27	27	7	10	14	6.2	
FORT MYERS	15	1020.3	1020.5	76	56	66.4	2.9	82	26+	35	29	0	0	56	75	1.15	- 0.37	0.45	7	0	0.0	0	2.8	7	28	23	4	5	17	9	5.7	
JACKSONVILLE	20	1020.7	1021.6	67	45	56.0	0.1	81	1	32	6	0	1	46	76	3.05	0.60	1.45	10	0	0.0	0	1.9	35	33	W	27	9	8	14	5.7	56
KEY WEST	4	1018.6	1019.4	77	68	72.5	2.9	81	27	58	6+	0	0	65	79	0.76	- 0.77	0.28	9	1	0.0	0	7.0	7	28	W	4	9	11	11	5.5	66
LAKELAND U	214			73	53	63.1	1.4	84	3	36	29	0	0			0.85	- 1.20	0.32	7		0.0	0						7	16	8	5.5	72
MIAMI	7	1019.5	1019.6	79	64	71.4	4.5	86	3	42	29	0	0	62	75	2.75	0.72	1.06	10	2	0.0	0	4.1	10	32	29	4	6	9	16	6.6	
ORLANDO	108	1016.9	1021.1	74	52	63.2	2.8	86	3	37	30+	0	0	53	75	0.84	- 1.16	0.30	5	2	0.0	0	1.6	36	22	27	27	7	12	12	5.8	
PENSACOLA	112	1017.6	1021.9	61	43	51.9	- 1.6	71	1	31	12	0	1	44	81	4.89	0.67	1.76	13		0.0	0	2.4	2	34	SE	6	9	8	14	5.9	53
TALLAHASSEE	55	1019.3	1021.6	67	41	53.8	- 0.1	80	25	27	29	0	10	46	81	6.38	2.96	2.37	12	1	0.0	0	1.2	34	23	32	1	11	8	12	5.5	
TAMPA	19	1020.7	1020.8	73	52	62.3	1.1	81	26+	30	29	0	1	54	77	1.32	- 0.81	0.50	4	0	0.0	0	2.4	7	20	32	28+	9	11	11	5.4	64
WEST PALM BEACH	15	1019.6	1020.2	77	60	68.4	1.5	85	3+	37	6	0	0	59	75	3.18	0.70	1.81	7	2	0.0	0	3.0	10	29	20	15	4	12	15	6.7	
GEORGIA																																
ATHENS	802	991.5	1021.0	56	34	45.3	0.7	75	26	22	12	0	16	35	72	4.27	- 0.62	1.22	11	2	0.0	0	2.6	28	24	26	27	8	12	11	6.1	
ATLANTA	1010	983.7	1021.4	54	34	43.9	- 0.8	72	24	22	16	0	15	34	72	4.85	0.41	2.05	12	2	0.0	0	2.6	29	27	S	26	6	11	14	6.4	46
AUGUSTA	145	1015.6	1021.1	61	34	47.5	- 0.1	78	26	22	12+	0	16	36	73	3.37	0.38	0.86	9	0	0.0	0	2.5	26	24	29	27	11	8	12	5.6	
COLUMBUS	385			61	37	49.0	1.2	75	26	24	17	0	11	40	76	3.48	- 0.58	1.09	12		0.0	0	1.6	31	20	29	27	8	12	11	6.0	
MACON	354	1008.8	1022.0	60	36	48.2	- 1.0	78	26	23	17	0	12	37	70	3.17	- 0.20	0.99	9	0	0.0	0	1.4	30	26	S	27	8	11	12	5.9	65
ROME	637			54	31	42.5	0.4	74	25	16	12	0	19			3.66	- 1.85	1.70	10		T	0										
SAVANNAH	46	1020.0	1021.7	64	39	51.4	- 0.3	77	26	26	6	0	12	41	75	7.18	4.40	2.80	9	1	0.0	0	1.3	26	24	W	27+	12	6	13	5.3	58
HAWAII																																
HILO	27	1015.2	1016.3	80	64	71.9	1.1	89	24	58	13	0	0	62	73	8.04	- 3.78	2.37	18	3	0.0	0	1.2	27	23	E	12	7	11	13	6.1	47
HONOLULU	7	1015.6	1016.1	80	65	72.5	0.0	84	29+	59	7	0	0	62	73	0.79	- 2.97	0.36	10	0	0.0	0	5.8	6	34	NE	10	7	14	10	5.7	50
KAHULUI	48	1013.9	1016.3	78	64	71.1	- 1.0	83	23	57	7+	0	0	61	72	3.85	0.71	2.17	12	1	0.0	0	7.8	6	30	NE	10	5	18	8	5.6	66
LIHUE	103	1012.2	1017.2	75	64	69.5	- 1.4	79	28	58	13	0	0	62	78	5.59	0.08	2.15	20	2	0.0	0	6.1	4	27	NE	3	3	16	12	6.7	46
IDAHO																																
BOISE	2838	918.1	1020.2	43	30	36.2	7.1	56	29	12	2	0	21	29	77	1.49	0.17	0.47	16	0	2.0	3	4.3	12	32	E	24	1	3	27	8.9	39
IDAHO FALLS 46W R	4932			32	13	22.5	7.1	43	28	-10	7	0	31			1.39	0.66	0.73	11		8.3	4	5.1	23	34	SSW	20+					
LEWISTON	1413			46	34	39.7	9.0	58	29	23	24	0	13			1.28	0.18	0.40	16		1.3	1						2	2	27	8.8	
POCATELLO	4454	863.5	1020.3	37	23	29.8	7.5	52	28	2	7	0	24	22	74	1.08	- 0.13	0.37	9	0	3.3	2	11.2	20	37	SW	15+	1	1	29	9.3	25
ILLINOIS																																
CAIRO U	314			48	32	40.0	2.6	73	23	10	18	0	20			2.34	- 2.12	1.86	3		T	T			35	S	6	9	8	14	6.0	56
CHICAGO O HARE	658	991.2	1016.6	36	20	27.7	3.5	61	24	-11	18	0	27	19	71	2.22	0.40	1.35	12	1	25.1	21	4.5	24	38	2	27	3	8	20	7.5	
CHICAGO MIDWAY	607	993.2		36	22	28.8	2.8	65	24	-10	18	0	26	19	69	3.22	1.36	2.05	12	1	28.9	24	6.2	23	41	NE	26	5	5	21	7.5	50
MOLINE	582	994.2	1016.8	35	17	26.0	3.4	63	24	-11	18	0	28	17	68	2.00	0.39	1.18	7	1	14.4	13	5.1	24	38	SW	24+	8	4	19	6.8	46
PEORIA	652	992.6	1017.5	37	19	27.6	1.9	66	24	-10	18	0	28	19	73	1.08	- 0.80	0.64	6	1	10.0	10	4.5	24	46	SE	24	4	9	18	7.2	48
ROCKFORD	724	988.2	1016.2	33	16	24.6	2.6	60	24	-16	18	0	29	17	75	1.41	- 0.57	0.78	10	1	8.1	6	4.6	25	40	27	16	4	10	17	7.1	
SPRINGFIELD	588	994.9	1017.9	38	22	29.5	1.1	66	24+	- 5	18	0	27	22	75	2.41	0.52	1.35	4	1	6.4	5	5.9	22	51	SW	6	4	11	16	6.5	68

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1005.4	1019.8	47	27	36.9	2.7	72	23	5	18	0	24	28	73	1.09	- 2.89	0.63	4	1	0.1	T	4.5	21	31	S	7	8	6	17	6.5	53
FORT WAYNE	791	986.5	1017.6	36	21	28.1	1.1	61	24	- 1	18	0	28	21	76	1.93	- 0.74	1.31	14	0	5.6	3	7.3	24	34	SW	7	1	10	20	8.0	43
INDIANAPOLIS	792	988.2	1018.3	41	24	32.6	3.5	70	24	- 3	18	0	24	25	75	1.81	- 1.24	1.18	8	0	2.4	1	5.4	23	31	SW	25	6	7	18	7.4	34
SOUTH BEND	773	987.8	1016.6	35	23	29.0	3.4	63	24	- 2	18	0	27	21	73	3.56	1.36	2.61	15	1	30.4	17	6.5	23	28	25	25+	3	5	23	8.3	
IOWA																																
BURLINGTON	692			37	18	27.0	2.6	65	24	-10	18	0	28	18	70	2.12	0.48		4	1	14.0		4.6	27	26	3	26	7	8	16	6.3	
DES MOINES	938	981.4	1017.3	33	14	23.7	3.8	62	24	-13	18	0	30	19	82	0.77	- 0.53	0.41	9	1	4.0	5	3.3	29	39	NW	16	8	7	16	6.6	57
DUBUQUE	1056	975.3		30	13	21.5	2.3	59	24	-23	18	0	29			1.80	- 0.03	0.82	7		4.8	8						7	5	19	7.3	
SIOUX CITY	1095	975.6	1017.3	30	9	19.4	0.7	42	22+	-19	18	0	31	17	85	0.41	- 0.37	0.20	11	1	3.9	9	2.5	32	56	NW	16	5	6	20	7.3	50
WATERLOO	868	983.1	1016.3	30	11	20.2	2.3	54	24	-26	18	0	31	15	78	1.53	0.38	1.23	7	1	2.6	6	2.9	27	44	29	16	7	6	18	7.0	
KANSAS																																
CONCORDIA	1470	963.1	1017.7	39	18	28.4	0.9	59	24	- 5	8	0	29	22	79	0.38	- 0.32	0.18	7	1	2.9	10	3.2	25	34	NW	7+	11	7	13	5.7	59
DODGE CITY	2582	924.5	1017.5	47	22	34.5	3.4	78	22	2	8	0	27	20	63	0.32	- 0.25	0.19	5	0	4.1	3	3.0	25	38	N	2	13	7	11	5.2	69
GOODLAND	3650	886.9	1016.8	48	19	33.5	6.1	73	22	0	8+	0	31	20	65	0.16	- 0.23	0.08	4	0	4.3	1	5.1	26	46	31	6	7	13	11	6.0	
TOPEKA	876	985.8	1018.4	43	20	31.5	2.7	73	23	4	18	0	27	21	66	1.06	0.04	1.01	4	2	3.4	4	3.2	26	38	SW	24	9	5	17	6.0	67
WICHITA	1321	969.2	1018.6	46	23	34.3	2.3	75	22	6	8	0	27	22	66	0.28	- 0.53	0.28	2	1	2.1	4	2.3	24	39	SW	24	14	7	10	4.8	68
KENTUCKY																																
COVINGTON	869	986.8	1019.1	45	26	35.4	3.8	69	26+	5	18	0	23	26	70	0.75	- 2.81	0.44	6	0	2.5	1	6.8	24	29	28	27+	4	10	17	7.2	
LEXINGTON	966	983.4	1020.0	46	29	37.3	2.8	71	24	8	18	0	20	27	69	1.35	- 3.59	0.54	9	0	1.5	1	7.0	21	29	23	27	6	7	18	6.7	
LOUISVILLE	477	1001.4	1019.6	46	27	36.3	1.3	71	23	5	18	0	23	26	65	1.11	- 2.99	0.68	4	0	0.4	T	5.5	24	31	SW	7+	6	11	14	6.6	55
LOUISIANA																																
ALEXANDRIA	92	1017.6	1022.0	58	36	46.7	- 3.6	76	24	22	12	0	16	39	79	1.99	- 3.33	1.14	9	1	0.0	0	0.5	32	28	23	26	7	4	20	7.2	
BATON ROUGE	64	1019.0	1021.7	62	41	51.5	- 1.4	80	26+	28	16+	0	7	40	69	2.75	- 2.03	1.37	8	2	0.0	0	1.4	5	25	19	26	5	7	19	7.1	
LAKE CHARLES	9	1021.0	1021.9	62	43	52.5	- 1.2	78	31+	32	16+	0	3	44	78	1.70	- 2.74	1.06	7	1	0.0	0	1.7	7	21	21	26	6	7	18	7.1	
NEW ORLEANS	3	1020.7	1021.5	61	44	52.5	- 2.1	78	26	31	29+	0	4	46	79	4.22	0.38	1.76	8	1	0.0	0	2.6	3	23	19	26	8	5	18	6.7	
SHREVEPORT	254	1011.5	1021.0	58	37	47.6	0.1	78	23	21	19	0	17	37	71	1.36	- 3.44	0.70	6	1	0.0	0	1.9	20	37	22	26	6	5	20	6.9	53
MAINE																																
CARIBOU	624	991.2		23	5	14.3	3.8	38	26+	-20	19	0	31			2.23	0.12	0.92	19		27.8	27						4	4	23	8.0	
PORTLAND	47	1013.9	1016.1	34	15	24.4	2.6	45	26+	- 7	19	0	31	18	74	2.52	- 1.85	1.35	10	0	12.4	7	3.1	30	30	NW	30	8	5	18	6.7	42
MARYLAND																																
BALTIMORE	148	1013.2	1019.0	46	29	37.4	2.6	75	25	13	20	0	24	26	65	0.99	- 2.44	0.66	4	1	0.4	1	4.4	27	47	W	29	9	11	11	5.8	51
MASSACHUSETTS																																
BLUE HILL OBS R	629			39	25	32.3	5.3	61	23	3	19	0	24			1.96	- 2.53	0.91	10		2.4	4			43	NE	27+					48
BOSTON	15	1015.6	1016.6	41	29	35.1	5.2	62	23	7	19	0	20	24	65	2.28	- 1.66	1.15	11	0	0.5	1	6.8	28	34	NE	28+	7	5	19	6.9	49
NANTUCKET	43	1016.3	1016.7	43	28	35.2	2.2	63	24	9	19	0	22	28	76	2.36	- 1.86	0.86	9	2	0.7	T	4.8	27	38	SW	28	6	8	17	6.7	46
PITTSFIELD	1170			36	17	26.3	4.5	56	23	- 5	19	0	27			1.74	- 1.23	0.62	14		12.5	13										
WORCESTER	986	978.7	1016.6	36	23	29.4	5.4	59	23	1	19	0	26	22	75	2.38	- 1.33	1.13	12	0	2.5	5	6.3	27	29	31	18	7	5	19	6.9	
MICHIGAN																																
ALPENA	689	988.2	1014.4	31	12	21.3	1.6	49	25	-18	30	0	30	15	71	3.15	1.20	1.30	17	1	32.6	17	2.3	24	35	NE	27	5	2	24	8.0	29
DETROIT	619			36	24	30.0	3.1	61	23	2	18	0	25							0			6.7	25	29	23	25+					
DETROIT M WAYNE CO	633	991.2	1016.1	36	22	29.3	2.8	61	23	2	18	0	26	23	77	2.34	0.41	1.72	11	0	5.4	4	6.7	25	36	W	17	4	5	22	7.6	37
DETROIT WILLOW RUN	711	987.5	1016.6	35	20	27.4	0.8	59	25+	0	18	0	29	19	72	2.31	0.37	1.84	9	0	5.6	5	8.1	24	30	4	26+	4	4	23	7.7	
FLINT	770	986.8	1015.6	34	18	26.0	1.5	57	25+	-13	30	0	29	19	74	2.41	0.71	1.81	15	0	27.6	23	7.8	24	35	27	17	4	5	22	8.2	
GRAND RAPIDS	784	985.4	1015.4	36	21	28.6	4.6	62	24	-10	18	0	29	23	78	1.94	0.03	0.86	17	1	29.8	16	5.6	22	46	SW	16	4	2	25	8.5	29
HOUGHTON LAKE	1149	971.2	1014.8	30	13	21.7		50	25	-13	18	0	31	18	81	2.02		0.61	19	1	22.6	11	4.3	24	28	28	17	3	6	22	8.1	
LANSING	841	982.7	1015.4	35	19	26.9	2.6	66	24	-15	30	0	27	22	80	2.18	0.22	1.23	14	1	30.1	24	7.3	24	45	W	17	3	6	22	8.1	38
MARQUETTE U	677			27	14	20.4	0.9	46	23	-12	18	0	31			2.71	0.82	0.83	22		29.8	29			35	NW	16	3	2	26	9.6	33
MUSKEGON	627	991.9	1015.5	36	22	28.6	2.6	59	24	3	18	0	30	23	81	2.09	- 0.01	0.67	18	1	37.5	13	4.8	25	40	20	24	1	3	27	9.2	
SAULT STE MARIE	721	986.5	1014.0	25	10	17.4	1.6	39	25+	-17	18	0	31	12	76	3.03	0.96	0.53	25	1	29.2	24	0.8	36	35	NW	17	4	4	23	8.3	28
MINNESOTA																																
DULUTH	1428	961.7	1015.7	21	2	11.2	2.5	37	23	-30	18	0	31	5	73	3.12	1.97	1.13	20	1	36.7	31	2.8	31	49	E	24	8	4	19	7.0	42

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	971.2	1017.0	15	- 8	3.3	0.2	33	13+	-34	18+	0	31	- 3	70	0.95	0.11	0.28	13	0	12.4	15	1.5	28	28	27	23	6	7	18	6.9	
MINNEAPOLIS	834	984.4	1016.3	25	5	14.6	2.2	41	23	-31	18	0	31	8	73	3.63	2.93	1.21	16	1	35.3	22	1.6	32	38	NW	16	3	8	20	7.7	33
ROCHESTER	1297	966.1	1016.1	24	7	15.5	1.9	39	23	-31	18	0	31	11	81	2.53	1.62	1.42	15	1	12.4	12	4.0	25	41	27	16	5	5	21	7.6	
ST CLOUD	1034	976.0	1015.8	23	2	12.2	2.1	37	22+	-32	18	0	31		72	1.99	1.27	0.54	16		26.1	16						5	7	19	7.3	
MISSISSIPPI																																
JACKSON	310	1009.5	1021.8	58	35	46.4	- 1.5	79	24	20	16	0	15	38	78	1.86	- 3.32	1.08	9	1	0.0	0	0.9	16	26	NW	26+	6	7	18	7.0	44
MERIDIAN	290	1010.8	1022.2	59	35	46.9	- 1.2	77	24	22	16	0	14	37	73	2.19	- 2.50	0.94	8	1	0.0	0	0.8	29	23	30	26	5	9	17	6.9	
MISSOURI																																
COLUMBIA	778	988.5	1017.8	43	23	33.1	2.8	75	23+	0	18	0	25	22	66	1.92	0.21	1.25	5	4	3.4	3	3.7	24	52	SW	24	8	9	14	5.8	75
KANSAS CITY	742	990.2	1018.1	44	24	33.9	2.2	73	23	5	18	0	27	23	65	2.09	0.68	1.81	4	3	7.6	8	3.7	24	41	SW	24	10	4	17	5.9	61
SAINT JOSEPH	811			41	17	28.6	1.4	68	23+	0	18+	0	28	20	72	1.12	- 0.08	0.55	4	3	6.7	6	2.0	26	32	23	24	10	8	13	5.6	
ST LOUIS	535	997.6	1018.7	45	25	34.7	2.8	75	23	1	18	0	25	24	68	2.89	0.91	2.16	5	2	1.4	1	3.9	24	38	SW	24	4	17	10	6.3	72
SPRINGFIELD	1268	972.2	1019.0	48	22	35.1	1.5	74	22	3	18	0	27	23	64	1.17	- 0.79	1.09	3	2	0.7	1	3.9	22	34	SW	24	13	10	8	4.5	76
MONTANA																																
BILLINGS	3567	887.9	1014.9	38	22	30.2	7.0	63	28	- 2	7+	0	26	18	63	0.36	- 0.18	0.13	8	0	6.1	2	7.1	26	49	NW	15	5	4	22	7.9	39
GLASGOW	2284	930.6		23	2	12.5	2.7	43	20	-34	17	0	31			0.84	0.36	0.28	11		14.2	8						3	6	22	7.9	
GREAT FALLS	3662	883.8	1015.1	35	18	26.3	4.2	50	29+	- 8	25	0	25	17	69	1.12	0.51	0.36	12	0	10.9	3	9.1	23	51	SW	3	3	7	21	7.9	38
HAVRE	2582	920.1	1015.7	27	7	17.1	3.2	44	19	-18	7	0	31	11	78	0.35	- 0.14	0.11	7	0	6.3	3	3.7	25	40	NW	15	2	8	21	7.9	41
HELENA	3828	877.8	1016.4	38	19	28.7	10.1	54	19+	- 4	7	0	27	19	66	0.61	0.14	0.23	7	0	7.3	3	4.9	27	54	W	15	3	6	22	8.3	40
KALISPELL	2965	908.6	1015.7	35	23	28.8	9.0	44	28	0	2	0	28	24	80	1.75	0.38	0.30	18	0	8.9	6	4.6	18	32	31	15	4	4	23	8.3	
MILES CITY	2629	919.7	1016.0	33	14	23.4	6.9	48	11	- 9	17	0	31	16	73	0.33	- 0.11		6	0	2.4		2.6	27								
MISSOULA	3190	902.8	1017.3	36	26	31.0	11.8	47	15	7	24	0	29	24	77	1.22	0.30	0.21	16	1	7.4	2	2.0	29	38	SW	15	2	4	25	8.5	22
NEBRASKA																																
GRAND ISLAND	1841	949.2	1017.9	35	14	24.4	1.8	60	21	- 9	8	0	31	19	79	0.59	- 0.04	0.25	8	0	6.4	5	4.8	29	38	32	6	7	6	18	6.9	
LINCOLN U	1150			34	17	25.2	0.1	53	21	- 4	8	0	30			0.47	- 0.45	0.25	8		5.5	5			35	NW	16+	9	5	17	6.7	51
NORFOLK	1544			32	10	20.9	1.5	53	21	-13	8	0	31			0.48	- 0.30	0.37	5		5.5	8						4	9	18	7.3	
NORTH PLATTE	2775	916.4	1017.7	38	11	24.9	0.9	68	22	-13	8	0	31	16	73	0.47	0.04	0.26	7	0	9.3	6	3.5	32	41	NW	6	5	10	16	7.0	52
OMAHA	977	981.0	1017.6	37	14	25.5	3.2	57	22	- 5	18+	0	30	19	74	2.00	1.18	1.52	9	1	7.2	4	1.6	31	45	NW	16	7	11	13	6.5	46
SCOTTSBLUFF	3957	877.4	1016.5	44	18	31.0	5.7	64	22	0	8	0	30	19	65	0.18	- 0.11	0.08	4	0	3.0	2	5.8	31	45	28	30+	3	9	19	7.4	
VALENTINE	2587			38	13	25.5	5.5	68	22	-10	8	0	30			0.14	- 0.26	0.10	4		1.5	4			52	NW	16	4	13	14	6.9	64
NEVADA																																
ELKO	5050	846.6	1022.7	36	14	25.2	2.6	45	19	- 4	9	0	30	21	81	1.00	- 0.16	0.62	9	0	12.5	7	1.6	24	23	15	24	2	8	21	8.1	
ELY	6253	810.0	1021.9	40	12	26.2	3.4	56	15	- 7	6	0	30	15	67	1.86	1.08	0.88	7	0	24.8	12	4.8	20	39	S	24	6	6	19	7.2	60
LAS VEGAS	2162	943.1	1021.1	57	33	45.3	2.2	69	21	25	9+	0	15	24	47	0.47	- 0.06	0.46	3	0	0.0	0	2.3	23	44	NW	5	13	8	10	5.0	85
RENO	4404	868.3	1020.9	49	25	37.0	6.6	70	15	13	2	0	24	25	66	2.11	0.92	0.86	8	0	12.4	9	1.9	20	70	SE	20	3	8	20	7.7	56
WINNEMUCCA	4299	870.3	1021.7	44	21	32.6	5.4	58	15	4	2	0	26	24	72	0.93	- 0.12	0.26	9	0	4.1	3	2.7	20	32	SW	21	5	3	23	7.7	30
NEW HAMPSHIRE																																
CONCORD	342	1003.7	1016.9	36	14	24.8	3.6	57	24	- 8	19	0	30	17	73	1.23	- 2.00	0.69	10	0	8.3	9	3.2	31	34	W	30	5	9	17	7.0	44
MT WASHINGTON OBS	6262			16	1	8.9	2.6	36	25	-29	18	0	31			4.92	- 0.52	1.13	21	0	30.9	5			103Y	NW	31+	2	5	24	8.5	22
NEW JERSEY																																
ATLANTIC CITY	64	1016.6	1019.1	48	29	38.9	4.1	78	24	10	20	0	21	29	71	1.16	- 2.40	0.76	8	1	1.1	1	4.3	27	25	31	29	11	4	16	6.1	47
ATLANTIC CITY U	11			45	33	38.9	2.9	70	24	18	20+	0	18			0.87	- 2.88	0.40	8						39	NW	29					
NEWARK	7	1017.3	1018.4	44	30	36.9	4.6	68	24	13	19	0	20	26	67	1.15	- 2.18	0.69	9	1	1.3	1	5.0	27	33	29	29	8	11	12	6.2	
TRENTON U	56			44	31	37.7	4.6	70	24	13	19	0	21			1.47	- 1.63	1.06	7		0.4	3			35	W	28	10	11	10	5.8	53
NEW MEXICO																																
ALBUQUERQUE	5311	840.2	1021.6	48	18	33.2	- 1.8	64	31	1	8	0	31	9	39	0.01	- 0.40	0.01	1	0	T	0	3.5	35	42	NW	6	14	9	8	4.2	88
CLAYTON	4969			53	21	37.1	3.9	69	28+	4	7	0	29			0.07	- 0.28	0.05	3		1.4	1						9	9	13	5.8	
RATON	6379			47	13	30.0	1.0	66	30	-12	8	0	30			0.37	0.01	0.36	3		4.6	4						8	12	11	5.9	
ROSWELL	3617	893.0		62	20	41.2	3.3	80	30+	- 2	9	0	27	10	32	0.00	- 0.48	0.00	0	0	0.0	0	2.5	27	43	NW	6	17	10	4	3.5	90
SILVER CITY	5373			56	24	39.9	0.4	69	29	6	8	0	27			0.00	- 0.63	0.00	0		0.0	0						25	3	3	2.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ⌀	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1006.4	1017.5	36	18	27.0	4.3	53	24	- 5	19	0	29	20	72	1.22	- 1.25	0.85	11	0	5.7	13	5.0	25	33	NW	29	4	5	22	7.5	37
BINGHAMTON	1590	956.0	1016.4	35	23	29.0	5.2	63	25	0	19	0	26	23	78	1.60	- 0.90	1.04	14	0	13.2	7	5.2	24	40	E	27	0	5	26	8.8	36
BUFFALO	705	989.5	1016.0	36	23	29.8	5.3	61	25	4	19	0	26	24	79	1.18	- 1.66	0.36	21	0	11.6	3	9.8	24	37	W	17	2	3	26	8.9	27
NEW YORK U	132	1014.2	1017.4	43	32	37.4	4.2	68	24	13	19	0	19	27	69	1.39	- 1.92	0.85	9	1	1.4	T	4.4	28	35	NE	27					48
J.F. KENNEDY	13	1017.3	1018.1	43	30	36.4	4.6	64	24	11	19	0	21	28	74	1.47	- 1.76	0.83	8	1	2.8	1	4.5	29	44	9	27	7	10	14	6.3	
NEW YORK LA GUARDIA	11	1016.3	1018.2	44	33	38.2	4.6	68	24	13	19	0	16	27	65	1.06	- 2.25	0.62	9	0	0.9	T	5.1	29	41	NE	27	8	8	15	6.4	
ROCHESTER	547	995.9	1016.8	38	24	31.1	5.9	68	25	5	31+	0	25	21	66	0.94	- 1.46	0.33	15	0	12.7	4	6.9	24	37	SW	25	2	6	23	8.4	37
SYRACUSE	410	1001.0	1016.2	38	23	30.6	6.6	70	25	- 5	19	0	23	22	72	1.47	- 1.68	0.46	15	0	18.3	11	4.7	25	31	W	17	2	4	25	8.4	28
NORTH CAROLINA																																
ASHEVILLE	2140	942.4	1020.1	51	26	38.7	1.1	71	23	13	12	0	27	29	76	2.02	- 2.15	1.03	9	2	1.5	1	3.5	35	30	35	29	9	12	10	5.6	68
CAPE HATTERAS R	7	1020.0	1020.2	56	41	48.5	1.9	71	27	29	12+	0	2	41	78	4.08	0.18	0.90	13	1	0.0	0	4.9	31	34	WSW	28+	10	8	13	6.1	46
CHARLOTTE	736	992.2	1020.3	54	33	43.3	0.6	74	24	20	12	0	18	34	72	2.76	- 0.77	1.20	10	1	T	T	2.1	24	32	SW	27	11	8	12	5.4	70
GREENSBORO	897	987.8	1020.3	54	32	43.0	3.3	76	24	15	20	0	16	34	74	1.84	- 1.56	0.60	7	1	0.8	1	3.2	24	34	W	27	10	8	13	5.9	64
RALEIGH	434	1004.1	1020.3	55	35	44.8	3.2	77	24	16	12	0	15	35	71	1.64	- 1.58	0.37	8	1	0.5	1	3.2	24	28	25	27	8	10	13	6.1	54
WILMINGTON	28	1019.6	1021.1	61	40	50.4	2.5	77	24	26	12	0	6	41	73	3.89	1.04	0.86	11	0	0.0	0	1.7	27	40	SW	27	8	10	13	6.0	58
NORTH DAKOTA																																
BISMARCK	1647	954.3	1017.1	24	- 1	11.2	1.3	42	11	-40	17	0	31	4	67	0.85	0.41	0.22	10	0	12.7	6	3.6	32	47	NW	16	3	5	23	7.9	47
FARGO	896	982.1	1016.9	20	- 1	9.3	2.0	37	11	-27	18	0	31	3	75	1.03	0.50	0.36	13	0	15.1	11	2.4	34	56	N	16	5	5	21	7.7	49
WILLISTON	1899			23	0	11.7	3.4	40	21+	-34	17	0	31			1.42	0.87	0.49	13		16.6	7			45	W	8	2	9	20	7.8	38
OHIO																																
AKRON	1208	971.9	1017.6	40	25	32.3	4.0	66	25+	4	18	0	22	24	73	1.14	- 1.72	0.56	9	1	4.9	3	7.3	23	32	18	7	2	8	21	8.0	
CINCINNATI OBS	761			44	28	36.0	2.3	70	24	4	18	0	23			0.64	- 3.03	0.38	5		2.0	1			24	SE	7					39
CLEVELAND	777	987.5	1017.3	40	25	32.4	4.0	68	23	7	18	0	24	24	72	0.97	- 1.70	0.54	12	0	2.0	1	8.4	23	30	SW	25+	0	9	22	8.3	35
COLUMBUS	812	988.2	1018.9	42	27	34.8	4.9	68	23	7	18	0	23	27	72	0.78	- 2.38	0.44	7	0	2.8	2	6.2	24	34	SW	7	4	6	21	7.9	39
DAYTON	1002	981.0	1018.3	42	26	33.9	4.3	69	23	3	18	0	24	23	67	0.69	- 2.49	0.31	8	0	3.6	2	6.9	22	32	SE	7	2	8	21	7.8	45
MANSFIELD	1295			38	23	30.7	3.4	63	23	0	18	0	25	22	70	0.74	- 2.48	0.38	7	0	1.4	1	9.4	24				3	7	21	7.9	
TOLEDO	676	991.5	1017.5	37	22	29.1	2.8	62	23	0	18	0	29	21	72	1.29	- 1.04	0.84	13	0	4.1	2	6.9	24	32	W	17	3	6	22	7.8	40
YOUNGSTOWN	1178	973.6	1017.5	37	22	29.5	2.2	62	25	1	18	0	25	24	77	1.26	- 1.90	0.57	13	0	8.1	5	6.5	24	27	20	7	1	7	23	8.3	
OKLAHOMA																																
OKLAHOMA CITY	1285	971.6	1018.9	55	28	41.8	4.8	79	22	11	18+	0	22	26	59	0.77	- 0.54	0.77	2	2	T	T	1.6	21	38	NW	26+	16	9	6	3.8	84
TULSA	650	994.2	1019.3	53	26	39.6	3.4	76	24	9	18	0	25	26	64	1.51	- 0.20	1.49	3	2	0.7	T	3.6	21	36	SW	24	14	9	8	4.0	77
OREGON																																
ASTORIA	8	1015.2	1016.1	49	39	43.8	3.1	54	28+	27	31	0	2	41	87	14.95	3.24	2.45	28	2	T	T	4.8	20	37	19	19	0	1	30	9.4	
BURNS U	4151	873.7	1019.7	40	23	31.1	6.3	50	15	5	23	0	28	25	78	2.15	0.53	0.72	14		15.7	10	2.6	26				3	6	22	7.9	
EUGENE	359	1005.1	1018.7	50	39	44.4	5.3	57	27	30	8	0	2	40	87	10.33	4.00	2.54	21	0	T	0	6.4	18	35	19	19	0	3	28	9.5	
MEACHAM	4050	875.0	1018.3	35	26	30.1	4.1	47	29	16	23+	0	28	25	85	6.16	1.96	1.28	24		42.0	19	2.0	22				1	0	30	9.6	
MEDFORD	1298	972.6	1021.2	46	33	39.6	4.2	57	29	24	17	0	16	34	83	5.44	2.30	1.34	16	0	1.1	1	0.7	15	26	20	19	1	4	26	9.0	
PENDLETON	1482	962.8	1017.3	49	36	42.4	10.2	63	29	30	23+	0	9	33	72	1.59	0.17	0.34	16	0	2.3	1	5.5	23	35	26	1	2	4	25	8.4	
PORTLAND	21	1016.6	1017.8	49	38	43.6	5.2	58	28	31	31	0	1	40	87	6.21	0.84	1.14	26	1	T	0	6.5	16	47	S	29	0	1	30	9.6	16
SALEM	196	1010.5	1018.0	50	38	44.1	5.6	57	28+	29	24	0	4	39	82	7.29	0.59	2.30	23	0	T	T	8.6	18	35	19	29	0	2	29	9.3	
SEXTON SUMMIT R	3836	883.8	1018.9	41	30	35.2	1.1	56	14	21	5+	0	23			5.66	0.07	1.12	20		25.9	10			58	15	19	2	2	27	8.9	
PACIFIC AREA																																
CANTON ISLAND	8			87	78	82.6	- 0.5	89	5	76	3	0	0			0.28	- 2.33	0.24	6		0.0	0						9	18	4	4.6	
ENIWETOK	13	1008.5	1009.0	86	77	81.6	0.4	87	25+	75	16+	0	0	74	79	2.28	1.26	0.85	16		0.0	0	18.2	7								
TAGUAC GUAM R	361			83	72	77.5	- 0.7	85	12	69	18+	0	0			5.26	0.63	0.77	22		0.0	0			30	E	1					49
JOHNSTON	7	1013.5	1014.0	80	74	77.0	- 0.1	83	26+	66	7	0	0	68	73	0.87	- 3.02	0.19	14	0	0.0	0	14.1	9	32	E	18+	15	14	2	4.2	75
KOROR R	94	1004.4	1008.2	85	75	80.1	- 0.2	89	16+	71	30+	0	0	75	87	18.86	7.13	4.16	26	4	0.0	0	6.5	6	24	NW	30	0	0	31	10.0	36
KWAJALEIN	8	1007.8	1008.6	86	77	81.0	0.9	88	25	74	29+	0	0	74	80	5.14	1.53	1.22	20	0	0.0	0	18.4	7	37	11	24	2	8	21	8.1	
MAJURO	10	1007.8	1008.2	85	77	81.0	0.8	87	26	74	31+	0	0	74	79	11.88	4.90	4.31	19	0	0.0	0	13.5	8	38	NE	13	1	7	23	8.6	44
MARCUS ISLAND	20	1013.5	1015.5	76	68	72.2	0.1	81	14+	55	27	0	0	63	74	2.01	- 1.75	1.25	12	0	0.0	0	4.0	2	44	NE	27	8	13	10	6.1	54
PAGO PAGO	12	1009.8	1009.9	87	74	80.4		90	11+	69	25	3	0	75	83	6.97		1.38	25	2	0.0	0	4.5	8	28	SE	5	3	6	22	7.8	60
PONAPE R	123	1002.0	1007.5	87	76	81.5	1.0	90	31	73	18+	1	0	74	79	10.21	- 0.86	3.07	23	1	0.0	0	8.8	9	21	NE	1	0	3	28	8.9	57
TRUK MOEN ISLAND	5	1007.5	1007.7	86	77	81.3	0.6	87	31+	74	30+	0	0	75	80	8.04	- 0.36	1.31	23	0	0.0	0	10.6	7	27	E	20	0	0	31	9.8	77
WAKE	11	1013.5	1013.7	82	73	77.4	0.0	83	26+	71	29+	0	0	68	75	1.17	0.03	0.48	15	0	0.0	0	13.2	8	30	6	2	8	16	7	5.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	F.	F.	F.	°F.		F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1006.1	1008.0	85	75	79.8	-0.7	87	2	72	29+	0	0	75	84	12.02	4.15	4.04	25	1	0.0	0	11.4	5	25	NE	27	0	0	31	9.9	52
PENNSYLVANIA																																
ALLENTOWN	387	1004.1	1018.6	40	23	31.3	2.3	66	24	6	19	0	26	22	70	1.76	-1.41	1.24	7	1	0.7	6	3.5	27	33	28	29	8	8	15	6.3	
ERIE	731	989.2	1016.8	39	26	32.8	5.5	64	25+	2	19	0	23	23	68	0.90	-1.77	0.26	16	0	6.0	2	9.4	23	32	17	7	2	4	25	8.7	
HARRISBURG	338	1005.4	1018.7	41	26	33.6	2.3	71	25+	11	19+	0	26	24	70	1.81	-0.95	1.34	8	1	1.6	3	3.4	29	37	W	27	7	9	15	6.5	58
PHILADELPHIA	5	1018.0	1019.0	44	28	36.0	3.7	69	24	13	19	0	23	27	71	1.67	-1.65	1.22	6	1	0.6	1	3.9	29	30	W	28+	7	10	14	6.5	52
PITTSBURGH	1137	972.9	1018.1	41	24	32.3	3.4	66	25	7	18	0	24	24	72	1.06	-1.91	0.47	9	0	4.5	4	7.2	23	30	21	7	4	7	20	7.8	29
READING U	266			44	30	37.1	4.4	73	25	12	19	0	21			1.46	-1.61	1.05	7		0.2	6			50	E	27	11	8	12	5.9	51
SCRANTON	930	982.7	1018.1	39	26	32.6	4.9	67	25	6	19	0	23	25	75	1.11	-1.18	0.76	7	1	8.3	5	3.1	24	34	E	27	4	5	22	7.7	39
WILLIAMSPORT	524	998.3	1018.1	39	24	31.4	2.6	69	25	6	19	0	26	26	80	1.35	-1.32	0.83	10	1	3.0	3	2.2	28	29	11	27	2	8	21	7.7	
RHODE ISLAND																																
BLOCK ISLAND	110			42	29	35.8	3.7	56	24	12	19	0	19			1.90	-1.94	1.25	12		0.5	T						7	8	16	6.6	
PROVIDENCE	51	1014.9	1017.2	42	26	33.7	4.5	65	24	8	19	0	24	24	70	1.60	-2.21	0.91	10	0	1.3	1	5.2	28	29	23	21	7	4	20	6.7	53
SOUTH CAROLINA																																
CHARLESTON	40	1019.3	1020.9	63	38	50.6	0.8	78	26	25	12	0	13	40	72	4.93	2.39	1.35	10	0	0.0	0	1.4	27	40Y	SW	27	10	8	13	5.8	54
CHARLESTON U	9			59	44	51.6	0.1	71	27	33	20+	0	0			4.87	2.47	1.37	11		0.0	0			31	W	27					
COLUMBIA	241	1012.5	1020.8	60	34	46.9	0.0	76	26+	21	12	0	14	37	75	2.79	-0.23	0.89	11	0	0.0	0	2.2	27	31	28	27	10	8	13	5.6	60
GNVLE-SPARTANBURG	957	985.8	1021.1	55	33	44.0	0.3	76	24	20	12	0	16	33	68	3.97	-0.31	1.90	10	1	0.5	T	2.1	26	44	SW	27	13	6	12	5.3	61
SOUTH DAKOTA																																
ABERDEEN	1296	967.8	1016.8	28	2	15.1	4.3	42	21+	-26	17	0	31	8	73	0.50	-0.16	0.21	7	0	7.9	4	2.7	33	58	34	16	4	4	23	7.8	
HURON	1282	967.8	1016.6	31	8	19.5	7.0	50	22	-14	8	0	31	13	76	0.39	-0.09	0.24	8	0	6.7	6	2.4	29	57	NW	16	7	3	21	7.4	50
RAPID CITY	3162	901.5	1015.6	39	17	27.9	5.9	59	22+	-1	18+	0	30	19	71	0.47	0.11	0.19	9	0	4.0	3	6.0	31	65	SW	22	7	7	17	6.9	47
SIOUX FALLS	1418	962.8	1016.4	29	6	17.6	2.4	45	22	-22	18	0	31	12	75	0.75	0.13	0.49	6	0	6.0	9	3.0	31	45	32	16	6	8	17	7.3	
TENNESSEE																																
BRISTOL	1507	965.1	1020.9	49	28	38.2	-0.1	72	26	14	12	0	22	29	75	2.00	-1.69	0.75	8	0	4.6	4	2.6	25	28	24	27	6	9	16	6.6	
CHATTANOOGA	665	995.9	1021.4	51	31	41.0	-0.7	71	25+	17	12	0	19	33	78	3.02	-2.59	1.65	8	2	T	T	1.3	24	29	S	6	10	7	14	6.0	53
KNOXVILLE	980	984.8	1020.7	51	32	41.9	0.5	72	26	19	12	0	18	33	74	2.67	-2.21	1.34	9	2	2.2	1	3.3	27	32	W	27	6	10	15	6.4	43
MEMPHIS	258	1010.8	1021.5	52	33	42.2	0.7	73	24+	13	18	0	20	30	64	2.23	-3.84	1.09	7	2	0.6	1	4.3	22	36	SE	6	8	7	16	6.1	57
NASHVILLE	590	998.6	1020.8	52	32	42.3	2.4	73	25+	15	18	0	21	30	65	1.62	-3.87	0.95	5	1	1.2	1	4.7	22	32	S	7	7	7	17	6.6	54
OAK RIDGE R	905			50	31	40.5	0.6	70	23	18	12	0	21			3.78	-2.16	2.25	9		4.2	3			50Y		27	9	5	17	6.7	
TEXAS																																
ABILENE	1762	956.7	1019.2	64	32	48.0	3.4	84	29	14	8	0	18	28	49	T	-0.88	T	0	0	0.0	0	4.5	22	42	N	6	16	8	7	3.8	90
AMARILLO	3604	891.0	1016.3	57	24	40.7	4.0	79	22	6	9	0	26	17	45	T	-0.65	T	0	0	T	T	6.3	26	54	NW	6	13	11	7	4.5	88
AUSTIN	597	998.6	1020.9	62	40	50.9	0.5	78	30	27	19+	0	10	36	61	0.25	-2.10	0.18	3	0	T	0	0.3	25	30	NW	26	12	4	15	5.6	56
BROWNSVILLE	19	1019.6	1020.1	68	49	58.5	-2.9	80	26	33	9+	0	0	51	79	1.69	0.34	1.10	6	0	T	0	0.5	14	30	S	6	9	6	16	6.1	43
CORPUS CHRISTI	41	1019.3	1020.8	66	46	56.1	-1.3	84	6	25	4	0	2	46	75	2.63	1.00	1.30	8	0	1.0	T	2.5	10	40	S	6	9	6	16	6.3	40
DALLAS	481	1002.4	1020.2	61	37	49.4	3.5	82	24	23	8	0	14	33	59	0.34	-1.98	0.20	3	1	0.0	0	3.3	19	33	NW	26+	15	6	10	4.8	68
DEL RIO	1026	983.7	1020.5	65	38	51.5	0.2	84	30	25	8	0	9	27	46	0.02	-0.87	0.02	1	0	0.0	0	1.6	11	23	33	17	14	6	11	4.5	
EL PASO	3918	884.5	1019.3	59	24	41.6	-1.3	74	31+	9	9	0	25	11	30	0.00	-0.46	0.00	0	0	0.0	0	1.1	33	49	W	6	23	3	5	2.6	97
FORT WORTH	537	999.3	1020.3	61	35	48.3	2.8	80	24	20	9	0	17	31	58	0.28	-1.76	0.18	2	1	0.0	0	3.2	22	31	33	26	16	5	10	4.5	
GALVESTON U	7			59	48	53.3	-1.6	69	31+	37	19+	0	0			1.60	-1.86	0.99	8		0.0	0			29	NE	7					47
HOUSTON U	41			63	47	54.8	0.2	78	24+	34	9	0	0			1.89	-1.83	1.08	7		0.0	0										
HOUSTON	50	1019.0	1021.2	66	44	54.9	1.3	83	23	26	4	0	1	41	67	2.41	-1.37	1.53	7	0	T	T	0.6	33	31	20	6	7	4	20	7.1	44
LUBBOCK	3254	904.8	1018.1	59	22	40.7	1.5	80	30	3	9+	0	25	16	43	0.00	-0.68	0.00	0	0	0.0	0	5.8	26	41	30	6	18	7	6	3.7	
MIDLAND	2851	918.4	1018.6	61	26	43.6	-0.4	80	30	7	9	0	22	18	43	0.00	-0.80	0.00	0	0	0.0	0	3.4	23	35	32	6	17	9	5	3.1	
PORT ARTHUR	16	1021.0	1021.6	62	42	51.8	-1.8	78	31	27	4	0	5	43	78	1.92	-2.31	0.94	9	0	0.0	0	1.5	6	34	NW	26+	7	7	17	6.9	43
SAN ANGELO	1903	951.9	1019.7	63	30	46.5	-0.4	83	31	14	19	0	22	24	45	0.00	-0.97	0.00	0	0	0.0	0	4.6	23	30	21	20+	20	3	8	3.5	
SAN ANTONIO	788	992.6	1021.0	63	37	50.2	-1.8	79	31	21	4	0	13	36	63	0.18	-1.56	0.07	7	0	T	0	0.8	2	28	N	17+	10	5	16	5.8	56
VICTORIA	104	1016.9	1021.2	64	45	54.5	-0.9	79	22	26	4	0	2	43	70	2.31	-0.03	1.26	3	0	T	0	0.8	6	45Y	S	6	8	4	19	7.0	
WACO	501	1002.4	1021.0	60	37	48.5	0.5	76	24	20	19	0	13	36	66	0.37	-1.90	0.17	3	1	0.0	0	3.6	20	35	18	16	10	13	8	4.9	
WICHITA FALLS	994	981.7	1019.1	62	30	45.6	2.8	82	21	13	8	0	21	26	53	0.03	-1.09	0.03	1	1	0.0	0	3.0	22	48	28	6	14	11	6	4.2	
UTAH																																
MILFORD	5028	849.0		35	7	21.1	-3.5	52	31	-13	2	0	31			1.07	0.50	0.64	8		16.0	8						9	7	15	6.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	F.		F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	874.7	1022.6	38	21	29.4	2.2	51	22+	2	11	0	29	23	75	2.05	0.70	0.66	10	0	30.4	13	4.6	14	42	S	5	1	1	29	9.2	25
WENDOVER	4237			38	22	30.1	3.1	53	21+	12	1	0	29			0.40	0.08	0.14	5		1.7	1										
VERMONT																																
BURLINGTON	332	1003.1	1016.0	32	16	23.9	7.7	49	25	-14	19	0	31	17	74	1.65	- 0.30	0.74	12	1	20.5	14	2.4	20	31	S	17	4	2	25	8.3	49
VIRGINIA																																
LYNCHBURG	916	985.1		51	30	40.5	2.9	74	23	9	20	0	19	29	66	2.18	- 1.11	1.03	7	1	4.6	4	4.0	25	30	W	27	11	10	10	5.3	58
NORFOLK	22	1019.0	1020.0	54	38	45.7	4.5	77	24	25	31	0	8	36	69	5.44	2.11	3.80	9	0	4.2	4	2.2	26	36	W	27	10	6	15	6.3	68
RICHMOND	164	1013.9	1019.9	52	30	40.9	2.2	75	25+	3	20	0	19	32	75	1.50	- 1.96	0.43	7	1	6.3	5	2.4	24	27	SW	27	9	9	13	5.8	63
ROANOKE	1149	976.3	1019.3	51	31	40.8	2.7	73	24+	13	20	0	20	26	58	1.25	- 1.87	0.56	5	1	2.7	2	4.3	28	35	30	27	12	10	9	5.3	
WALLOPS ISLAND	9	1020.0	1020.3	44	32	38.2		64	24	19	20	0	16	31	79	2.39		0.99	7	1	5.8	5	4.2	26	46	NW	29	9	8	14	6.1	
WASHINGTON																																
OLYMPIA	195	1008.5	1015.9	46	36	40.7	2.6	56	28	24	31	0	9	39	92	12.21	4.36	2.75	25	0	3.3	3	8.1	20	33	18	19	0	3	28	9.4	
QUILLAYUTE	179	1006.1	1013.7	46	38	41.9	3.3	52	10	26	31	0	4	41	94	20.62	5.35	2.50	28	3	T	T	3.6	17	29	SW	29+	0	1	30	9.6	18
SEATTLE TACOMA	400	999.0	1015.5	46	38	42.4	4.1	56	28	29	31	0	3	37	82	9.32	3.59	2.41	23	0	5.9	5	6.6	19	38	19	29	0	3	28	9.4	17
SPOKANE	2356	929.9	1015.3	39	29	33.9	8.6	53	29	19	6	0	23	28	81	2.44	0.00	0.67	14	1	6.5	2	6.9	20	44	W	15	3	7	21	7.9	30
STAMPEDE PASS R	3958	875.7		32	25	28.4	4.9	40	28	18	22	0	30			19.81	7.78	3.13	28		114.6	94						0	1	30	9.7	
WALLA WALLA U	949			51	39	44.8	11.6	65	29	32	6+	0	2			2.11	0.22	0.54	17		0.7	T			34	W	29	1	4	26	9.0	15
YAKIMA	1052	977.0	1016.4	48	30	38.6	11.1	60	13	20	22	0	24	29	72	0.60	- 0.59	0.43	4	0	1.0	1	3.3	25	32	28	15	6	5	20	7.4	
WEST INDIES																																
SAN JUAN P.R.	13	1015.2	1017.7	82	71	76.7	2.3	86	1	67	6	0	0	67	74	3.07	- 1.63	0.85	19	0	0.0	0	9.0	9	34	NE	8	9	21	1	4.7	73
SWAN ISLAND	28			83	74	78.4	0.1	85	20+	71	29+	0	0			3.58	0.14	1.40	14		0.0	0						15	8	8	5.0	
WEST VIRGINIA																																
BECKLEY	2504	928.9	1020.1	44	27	35.5		67	26	9	12	0	23	27	72	1.40		0.60	12	0	9.2	3	6.3	23	40	22	27	6	7	18	7.1	
CHARLESTON	939	984.4	1019.3	49	28	38.5	1.9	73	26	11	19	0	23	29	71	1.21	- 3.11	0.53	8	0	3.6	1	4.9	23	35	23	27	3	13	15	7.4	
ELKINS	1970	946.2	1019.3	46	22	33.7	1.2	70	26	4	19+	0	24	26	75	1.05	- 2.57	0.52	11	0	7.2	2	4.5	26	33	28	27	4	7	20	7.8	
HUNTINGTON	827	988.8	1019.6	48	31	39.3	2.7	74	26	11	18	0	21	29	69	1.43	- 2.22	0.75	7	0	3.4	1	5.0	22	23	23	27	3	14	14	6.9	
PARKERSBURG U	615			46	29	37.7	3.1	71	26+	10	18	0	22			0.93	- 2.41	0.60	5		1.0	1			29	SW	7					37
WISCONSIN																																
GREEN BAY	682	988.8	1015.4	29	11	20.1	3.3	41	24+	-25	18	0	31	15	78	2.52	1.37	0.98	12	1	16.4	10	4.4	27	35	SW	25	5	5	21	7.6	41
LA CROSSE	651	990.5	1016.2	29	10	19.4	2.9	44	23+	-31	18	0	31	13	75	2.86	1.67	1.31	11	1	18.3	11	1.3	26	35	24	16	5	6	20	7.5	
MADISON	858	983.4	1015.9	31	13	22.2	4.7	54	24	-21	18	0	30	15	72	1.63	0.23	0.66	12	1	9.4	9	3.7	26	38	SW	16	5	6	20	7.5	45
MILWAUKEE	672	989.5	1015.8	33	16	24.5	3.9	57	24	-16	18	0	29	18	75	1.49	- 0.34	0.47	15	1	13.1	9	5.2	26	45	SW	16	6	7	18	7.3	44
WYOMING																																
CASPER	5338	834.1	1016.3	36	18	26.7	3.3	51	29	- 8	7+	0	28	16	64	0.58	0.02	0.17	10	0	9.2	3	15.7	22	49	22	20	5	9	17	7.2	
CHEYENNE	6126	808.3	1015.3	42	21	31.4	6.0	56	29+	3	7	0	27	13	47	0.45	- 0.07	0.36	6	0	5.4	5	11.9	29	59	W	15	7	7	17	6.7	60
LANDER	5563	825.6	1016.4	38	16	26.6	7.3	51	15	- 2	7	0	29	15	65	0.25	- 0.21	0.21	5	0	5.2	6	2.8	24	73	SW	22	3	11	17	7.5	73
SHERIDAN	3964	875.4	1016.3	38	13	25.4	4.1	59	20+	-13	7	0	31	13	61	0.61	- 0.03	0.26	12	0	12.1	5	2.9	30	57	NW	15	3	7	21	7.9	44

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

V Sun below horizon January 1-23, inclusive.
X Sun below horizon January 1-17, inclusive.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1 6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	999.0	1022.1	12.8	0.6	6.7	-1.4	23.3	25	- 6.7	16+	0	18	1.7	73	72	- 56	29	7	1	T	0	0.6	27	12.1	W	27+	7	8	16	6.6	48
HUNTSVILLE	183	998.0	1021.6	12.2	0.6	6.4	0.3	23.9	25+	- 7.8	12	0	19	1.1	70	46	- 86	19	6	1	T	T	0.5	20	13.4	29	27	12	4	15	6.1	
MOBILE	64	1013.5	1021.6	17.2	6.1	11.7	0.0	23.9	25+	- 1.7	16	0	2	6.1	73	139	21	78	9	2	0	0	0.9	5	10.3	2	8	11	4	16	6.1	
MONTGOMERY	59	1014.6	1022.0	14.4	3.3	8.8	-0.1	23.9	25	- 2.8	17+	0	2	3.3	74	70	- 33	26	10	0	0	0	0.7	31	11.2	SW	26	7	8	16	6.5	43
ALASKA												B																				
ANCHORAGE	35	1000.3	1005.6	- 9.4	-18.3	-13.8		- 3.3	18	-26.1	15	0	31	-17.8	71	32		17	6	0	424	787	1.5	1	19.7	4	28	11	8	12	5.5	57
ANNETTE	34	1001.0	1005.2	4.4	- 1.1	1.7	0.4	9.4	9	- 6.7	27+	0	18	- 1.7	79	235	- 54	48	25	0	589	203	2.1	14	17.9	14	9	4	3	24	8.4	
BARROW	9	1011.5	1012.3	-20.0	-28.9	-24.4	2.3	- 1.7	22	-38.9	3	0	31	-28.9	72	5	0	2	5	0	61	305	1.2	13	13.0	27	25+	V	V	V		
BARTER ISLAND	12	1011.5	1013.4	-18.9	-28.3	-23.6	3.5	- 3.3	22	-37.8	14	0	31	-27.2	75	8	- 2	3	7	0	81	330	2.1	25	27.3	26	26	X	X	X		
BETHEL	38	1002.4	1008.4	- 8.9	-18.9	-13.7	2.1	3.3	17	-34.4	3	0	30	-15.6	84	22	- 6	12	7	0	224	406	1.5	8	18.3	12	17	6	5	20	7.0	
COLD BAY	29	1002.0	1005.9	- 0.6	- 5.6	- 3.1	-0.7	6.7	4	-11.1	27	0	30	- 5.0	83	41	- 18	12	14	0	290	254	1.3	23	23.2	13	16	5	11	15	6.4	
FAIRBANKS	133	994.9	1013.5	-21.7	-31.1	-26.3	-2.3	-10.6	22	-42.2	29+	0	31	-31.7	59	10	- 12	3	11	0	330	559	0.1	32	6.7	24	3+	10	7	14	6.0	
JUNEAU	4	1005.1	1005.9	- 1.7	- 8.3	- 4.9	-1.1	5.6	10	-18.9	25	0	31	- 8.3	79	103	1	30	20	0	970	229	3.4	10	16.5	12	10	9	1	21	6.8	36
KING SALMON	15	1004.4	1006.4	- 8.3	-18.9	-13.6	-3.2	2.8	16	-33.9	3	0	30	-17.2	74	24	- 4	9	11	0	196	229	1.3	5	21.0	8	17	12	3	16	5.6	
KOTZEBUE	3	1009.5	1010.1	-12.8	-21.1	-16.9	4.0	- 0.6	21	-33.9	3	0	31	-19.4	78	7	- 3	3	9	0	221	635	4.8	11	28.2	12	4	8	5	18	6.6	
MC GRATH	105	998.3	1012.1	-18.3	-29.4	-23.8	-1.0	- 6.7	22+	-41.7	15+	0	31	-27.8	70	11	- 21	10	3	0	229	508	0.0		5.4	3	28+	11	3	17	6.2	
NOME	4	1006.8	1007.7	- 6.7	-15.6	-11.1	4.2	- 0.6	21	-35.6	2	0	31	-12.8	86	11	- 15	4	9	0	157	457	3.3	8	24.1	9	4	6	4	21	7.5	26
ST. PAUL ISLAND	7	1001.7	1002.6	0.6	- 3.9	- 1.7	1.9	4.4	3	- 9.4	2+	0	28	- 4.4	80	51	5	15	19	0	259	76	2.8	16	26.8	14	9	2	10	19	7.7	
SHEMYA	37	991.2	994.9	1.7	- 2.8	- 0.6	-0.2	5.6	2	- 7.2	13	0	28	- 2.8	83	110	47	23	20	0	351	102	4.3	21	40.2	19	3	2	7	22	8.1	
YAKUTAT	9	1000.7	1001.7	- 2.8	-11.7	- 7.3	-4.7	3.3	10+	-23.3	28+	0	31	- 9.4	86	223	- 53	56	14	0	1737	1194	1.8	11	14.3	28	7	7	6	18	6.8	
ARIZONA																																
FLAGSTAFF	2131	788.0	1021.8	6.7	-10.0	- 1.6	1.0	13.9	15	-20.6	7	0	31	-10.0	58	24	- 23	18	2	0	249	229	0.4	15	11.2	21	25	13	6	12	5.1	
PHOENIX	340	979.3	1018.9	19.4	1.1	10.4	0.6	26.1	28	- 6.1	7	0	10	- 2.8	47	6	- 12	6	1	0	0	0	1.0	10	11.2Y	NE	11+	16	5	10	4.5	86
TUCSON	788	928.9	1018.0	19.4	2.2	10.8	0.9	27.2	28	- 6.7	7	0	9	- 7.2	34	1	- 20	1	1	0	0	0	1.7	14	14.3	E	11	18	5	8	3.7	90
WINSLOW	1492	855.1	1024.8	8.9	- 9.4	- 0.4	0.1	19.4	30	-20.6	2	0	28	- 9.4	60	3	- 8	3	1	0	T	25	1.2	20	19.2	20	5	14	6	11	5.1	
YUMA	59	1011.9	1019.2	20.6	5.0	12.8	0.9	26.1	30	0.0	1	0	1	- 4.4	35	6	- 4	6	1	0	0	0	2.1	1	11.6	N	2	17	8	6	3.5	85
ARKANSAS																																
FORT SMITH	136	1003.1	1020.2	13.9	- 3.9	5.0	0.7	25.6	23	-12.2	9	0	25	- 2.2	65	25	- 42	24	3	1	T	T	0.6	27	18.8	W	6	12	7	12	5.2	65
LITTLE ROCK	78	1011.2	1020.9	11.7	- 1.1	5.4	0.6	23.9	23	-11.7	18	0	21	0.6	72	54	- 78	29	7	3	41	51	0.8	23	13.9	S	6	10	8	13	5.8	62
TEXARKANA	119	1007.5	1021.1	13.9	2.2	8.1	0.8	25.0	22	- 8.3	19	0	16	1.1	65	45	- 77	17	5	3	0	0	2.0	21				10	9	12	5.7	
CALIFORNIA																																
BAKERSFIELD	145	1004.1	1022.2	13.9	2.2	8.1	-0.4	20.0	20	- 3.9	18	0	10	3.3	75	24	- 5	21	3	0	0	0	0.6	4	10.3	15	24	7	9	15	6.3	
BISHOP	1252	876.7		12.8	- 3.9	4.3	1.7	20.6	15	- 9.4	27+	0	27			42	17	14	6		193	178										
BLUE CANYON	1609			7.2	0.6	3.7	0.9	17.2	14	- 7.2	23+	0	15			510	212	184	14		1346	965			20.6	18	21	7	6	18	7.1	
EUREKA U	13			11.7	5.6	8.6	0.0	15.6	26	- 0.6	6	0	1			225	55	54	15		0	0			14.8	SW	29	0	9	22	8.5	40
FRESNO	100	1009.8	1021.9	12.8	2.8	7.8	0.0	17.8	15	- 3.3	7	0	10	3.9	81	56	5	23	6	1	0	0	0.6	12	13.0	SE	24	4	13	14	6.9	51
LONG BEACH	10	1018.6	1020.0	18.9	6.1	12.6	0.8	25.6	10	1.7	19+	0	0	5.0	67	96	45	52	3	0	0	0	0.4	26	10.3	18	22	9	14	8	5.2	
LOS ANGELES	30	1015.9	1019.4	18.3	8.9	13.7	1.2	26.1	10	5.0	8	0	0	6.7	69	69	1	37	4	0	0	0	0.5	26	16.5Y	SW	24	13	10	8	5.1	
LOS ANGELES U	82			21.1	9.4	15.1	1.9	26.7	11+	4.4	8	0	0			151	73	94	3		0	0			9.8	SW	24	16	9	6	3.7	81
MT SHASTA R	1080			6.7	- 2.2	2.2	1.4	13.3	10	-11.7	22	0	24			193	32	57	13		1394	940										
OAKLAND	2	1020.7	1021.0	13.3	7.2	10.1	1.2	17.8	17	3.3	6+	0	0	5.0	73	226	129	86	9	1	0	0	0.7	19	12.5	27	24	6	8	17	6.9	
RED BLUFF	104	1008.1	1021.1	13.3	3.3	8.4	0.9	22.8	14	- 1.1	22	0	6	2.8	74	194	85	54	12	0	T	0	0.3	27	16.1	SE	29+	5	6	20	7.5	52
SACRAMENTO	5	1020.3	1021.1	12.2	3.3	7.7	0.4	17.2	16+	- 1.7	2	0	8	4.4	84	214	133	87	11	2	0	0	0.9	15	25.9	SE	24	3	9	19	7.7	53
SANDBERG R	1377	865.2		9.4	2.2	5.9	1.5	18.9	15	- 4.4	6+	0	10			62	- 3	43	3		61	51			24.6	34	5				4.7	
SAN DIEGO	4	1018.3	1019.4	18.3	7.8	12.8	0.0	25.0	11	3.3	7	0	0	6.1	69	56	5	40	6	0	0	0	0.7	31	11.2	S	24	17	7	7	3.9	83
SAN FRANCISCO	2	1020.3	1020.9	13.9	5.6	9.6	0.3	18.9	14	2.2	17+	0	0	4.4	74	265	163	116	10	1	0	0	0.7	20	19.7	SSW	21	5	9	17	7.1	
SAN FRANCISCO U	16			14.4	8.3	11.4	1.1	19.4	13	4.4	4	0	0			241	125	73	11		0	0			17.9	SW	21					61
SANTA CATALINA	478			17.2	12.2	14.7	2.7	26.1	15	7.8	6	0	0			65	- 2	43	4	0	0	0						18	6	7	3.9	
SANTA MARIA	72			17.8	3.3	10.6	0.5	23.3	14+	- 1.7	9+	0	7			90	18	49	8		0	0						15	5	11	4.8	
STOCKTON	7	1020.7	1021.8	12.2	3.3	7.9	0.8	17.8	30+	- 2.8	9+	0	8	4.4	83	173	108	76	10	0	0	0	1.6	15	20.6	14	24	1	12	18	7.8	
COLORADO																																
ALAMOSA	2297	770.7		3.3	-17.8	- 7.3	0.8	11.7	30+	-31.1	8	0	31			2	- 5	1	5		30	51						13	10	8	4.6	
COLORADO SPRINGS	1873	808.3	1017.6	8.9	- 7.8	0.6	2.5	18.3	11	-17.2	17	0	29	-11.1	47	8	1	7	2	0	104	76	1.3	2	15.6	31	24	2	14	15	7.3	
DENVER	1610	833.4	1014.8	9.4	- 7.2	1.1	3.1	17.8	11	-17.8	17	0	28	- 8.3	56	21	7	9	4	0	251	102	1.3	21	17.9	NW	3	2	12	17	7.3	70
GRAND JUNCTION	1480	855.4	1025.2	1.1	-10.0	- 4.5	-1.2	10.6	31+	-18.9	8	0	29	- 8.3	76	6	- 10	2	7	0	71	127	0.7	9	7.2	N	5	3	10	18	7.6	56
PUEBLO	1428	854.0	1016.5	10.6	- 7.8	1.4	2.6	19.4	28	-19.4	8	0	28	-11.1	44	3	- 5	2	2	0	43	25	1.4	30	25.0	N	6	4	17	10	6.4	82

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1016.9	1017.6	4.4	-2.2	1.0	2.0	17.2	24	-12.2	19	0	22	-3.3	74	33	-61	23	9	0	46	25	2.3	30	17.0	9	27	7	9	15	6.6	
HARTFORD	52	1010.5	1017.2	4.4	-3.9	0.4	3.8	18.3	24	-14.4	19	0	23	-4.4	70	51	-40	33	9	1	76	203	1.3	31	12.5	NW	29	5	6	20	7.3	48
NEW HAVEN	2	1017.3		5.6	-2.8	1.3	2.7	18.3	24	-13.3	19	0	22			36	-65	22	11		36	25			12.1	SW	28	6	8	17	6.8	54
DELAWARE																																
WILMINGTON	24	1015.9	1018.8	6.7	-2.2	2.3	1.6	21.7	24	-9.4	19	0	23	-2.2	74	42	-44	31	6	1	15	102	1.5	28	12.1	30	29	5	8	18	6.7	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1017.3	1019.5	10.0	0.0	5.0	2.3	21.7	25+	-8.3	20	0	17	-2.2	63	34	-43	25	4	1	33	25	1.3	26	15.2	NW	29	6	12	13	6.5	61
FLORIDA																																
APALACHICOLA U	4			16.7	8.9	12.6	-0.2	21.1	19	1.7	28	0	0			64	-16	26	11	0	0	0			10.7	N	10+	12	6	13	5.3	55
DAYTONA BEACH	9	1020.0	1021.5	21.7	10.0	15.9	0.8	27.8	3	1.7	29	0	0	11.1	78	32	-18	20	9	1	0	0	0.8	33	16.5	27	27	7	10	14	6.2	
FORT MYERS	5	1020.3	1020.5	24.4	13.3	19.1	1.6	27.8	26+	1.7	29	0	0	13.3	75	29	-9	11	7	0	0	0	1.3	7	12.5	23	4	5	17	9	5.7	
JACKSONVILLE	6	1020.7	1021.6	19.4	7.2	13.3	0.1	27.2	1	0.0	6	0	1	7.8	76	77	15	37	10	0	0	0	0.8	35	14.8	W	27	9	8	14	5.7	56
KEY WEST	1	1018.6	1019.4	25.0	20.0	22.5	1.6	27.2	27	14.4	6+	0	0	18.3	79	19	-20	7	9	1	0	0	3.1	7	12.5	W	4	9	11	11	5.5	66
LAKELAND U	65			22.8	11.7	17.3	0.8	28.9	3	2.2	29	0	0			22	-30	8	7		0	0						7	16	8	5.5	72
MIAMI	2	1019.3	1019.6	26.1	17.8	21.9	2.5	30.0	3	5.6	29	0	0	16.7	75	70	18	27	10	2	0	0	1.8	10	14.3	29	4	6	9	16	6.6	
ORLANDO	33	1016.9	1021.1	23.3	11.1	17.3	1.6	30.0	3	2.8	30+	0	0	11.7	75	21	-29	8	5	2	0	0	0.7	36	9.8	27	27	7	12	12	5.8	
PENSACOLA	34	1017.6	1021.9	16.1	6.1	11.1	-0.9	21.7	1	-0.6	12	0	1	6.7	81	124	17	45	13		0	0	1.1	2	15.2	SE	6	9	8	14	5.9	53
TALLAHASSEE	17	1019.3	1021.6	19.4	5.0	12.1	-0.1	26.7	25	-2.8	29	0	10	7.8	81	162	75	60	12	1	0	0	0.5	34	10.3	32	1	11	8	12	5.5	
TAMPA	6	1020.7	1020.8	22.8	11.1	16.8	0.6	27.2	26+	-1.1	29	0	1	12.2	77	34	-21	13	4	0	0	0	1.1	7	8.9	32	28+	9	11	11	5.4	64
WEST PALM BEACH	5	1019.6	1020.2	25.0	15.6	20.2	0.8	29.4	3+	2.8	6	0	0	15.0	75	81	18	46	7	2	0	0	1.3	10	13.0	20	15	4	12	15	6.7	
GEORGIA																																
ATHENS	244	991.5	1021.0	13.3	1.1	7.4	0.4	23.9	26	-5.6	12	0	16	1.7	72	108	-16	31	11	2	0	0	1.2	28	10.7	26	27	8	12	11	6.1	
ATLANTA	308	983.7	1021.4	12.2	1.1	6.6	-0.4	22.2	24	-5.6	16	0	15	1.1	72	123	10	52	12	2	0	0	1.2	29	12.1	S	26	6	11	14	6.4	46
AUGUSTA	44	1015.6	1021.1	16.1	1.1	8.6	-0.1	25.6	26	-5.6	12+	0	16	2.2	73	86	10	22	9	0	0	0	1.1	26	10.7	29	27	11	8	12	5.6	
COLUMBUS	117			16.1	2.8	9.4	0.7	23.9	26	-4.4	17	0	11	4.4	76	88	-15	28	12		0	0	0.7	31	8.9	29	27	8	12	11	6.0	
MACON	108	1008.8	1022.0	15.6	2.2	9.0	-0.6	25.6	26	-5.0	17	0	12	2.8	70	81	-5	25	9	0	0	0	0.6	30	11.6	S	27	8	11	12	5.9	65
ROME	194			12.2	-0.6	5.8	0.2	23.3	25	-8.9	12	0	19			93	-47	43	10		T	0										
SAVANNAH	14	1020.0	1021.7	17.8	3.9	10.8	-0.2	25.0	26	-3.3	6	0	12	5.0	75	192	112	71	9	1	0	0	0.6	26	10.7	W	27+	12	6	13	5.3	58
HAWAII																																
HILO	8	1015.2	1016.3	26.7	17.8	22.2	0.6	31.7	24	14.4	13	0	0	16.7	73	204	-96	60	18	3	0	0	0.5	27	10.3	E	12	7	11	13	6.1	47
HONOLULU	2	1015.6	1016.1	26.7	18.3	22.5	0.0	28.9	29+	15.0	7	0	0	16.7	73	20	-75	9	10	0	0	0	2.6	6	15.2	NE	10	7	14	10	5.7	50
KAHULUI	15	1013.9	1016.3	25.6	17.8	21.7	-0.6	28.3	23	13.9	7+	0	0	16.1	72	98	18	55	12	1	0	0	3.5	6	13.4	NE	10	5	18	8	5.6	66
LIHUE	31	1012.2	1017.2	23.9	17.8	20.8	-0.8	26.1	28	14.4	13	0	0	16.7	78	142	2	55	20	2	0	0	2.7	4	12.1	NE	3	3	16	12	6.7	46
IDAHO																																
BOISE	865	918.1	1020.2	6.1	-1.1	2.3	3.9	13.3	29	-11.1	2	0	21	-1.7	77	38	4	12	16	0	51	76	1.9	12	14.3	E	24	1	3	27	8.9	39
IDAHO FALLS 46W R	1503			0.0	-10.6	-5.3	3.9	6.1	28	-23.3	7	0	31			35	17	19	11		211	102	2.3	23	15.2	SSW	20+					
LEWISTON	431			7.8	1.1	4.3	5.0	14.4	29	-5.0	24	0	13			33	5	10	16		33	25						2	2	27	8.8	
POCATELLO	1358	863.5	1020.3	2.8	-5.0	-1.2	4.2	11.1	28	-16.7	7	0	24	-5.6	74	27	-3	9	9	0	84	51	5.0	20	16.5	SW	15+	1	1	29	9.3	25
ILLINOIS																																
CAIRO U	96			8.9	0.0	4.4	1.4	22.8	23	-12.2	18	0	20			59	-54	47	3		T	T			15.6	S	6	9	8	14	6.0	56
CHICAGO O HARE	201	991.2	1016.6	2.2	-6.7	-2.4	1.9	16.1	24	-23.9	18	0	27	-7.2	71	56	10	34	12	1	638	533	2.0	24	17.0	2	27	3	8	20	7.5	
CHICAGO MIDWAY	185	993.2		2.2	-5.6	-1.8	1.6	18.3	24	-23.3	18	0	26	-7.2	69	82	35	52	12	1	734	610	2.8	23	18.3	NE	26	5	5	21	7.5	50
MOLINE	177	994.2	1016.8	1.7	-8.3	-3.3	1.9	17.2	24	-23.9	18	0	28	-8.3	68	51	10	30	7	1	366	330	2.3	24	17.0	SW	24+	8	4	19	6.8	46
PEORIA	199	992.6	1017.5	2.8	-7.2	-2.4	1.1	18.9	24	-23.3	18	0	28	-7.2	73	27	-20	16	6	1	254	254	2.0	24	20.6	SE	24	4	9	18	7.2	48
ROCKFORD	221	988.2	1016.2	0.6	-8.9	-4.1	1.4	15.6	24	-26.7	18	0	29	-8.3	75	36	-14	20	10	1	206	152	2.1	25	17.9	27	16	4	10	17	7.1	
SPRINGFIELD	179	994.9	1017.9	3.3	-5.6	-1.4	0.6	18.9	24+	-20.6	18	0	27	-5.6	75	61	13	34	4	1	163	127	2.6	22	22.8	SW	6	4	11	16	6.5	68
INDIANA																																
EVANSVILLE	116	1005.4	1019.8	8.3	-2.8	2.7	1.5	22.2	23	-15.0	18	0	24	-2.2	73	28	-73	16	4	1	T	T	2.0	21	13.9	S	7	8	6	17	6.5	53
FORT WAYNE	241	986.5	1017.6	2.2	-6.1	-2.2	0.6	16.1	24	-18.3	18	0	28	-6.1	76	49	-19	33	14	0	142	76	3.3	24	15.2	SW	7	1	10	20	8.0	43
INDIANAPOLIS	241	988.2	1018.3	5.0	-4.4	0.3	1.9	21.1	24	-19.4	18	0	24	-3.9	75	46	-31	30	8	0	61	25	2.4	23	13.9	SW	25	6	7	18	7.4	34
SOUTH BEND	236	987.8	1016.6	1.7	-5.0	-1.7	1.9	17.2	24	-18.9	18	0	27	-6.1	73	90	35	66	15	1	772	432	2.9	23	12.5	25	25+	3	5	23	8.3	
IOWA																																
BURLINGTON	211			2.8	-7.8	-2.8	1.4	18.3	24	-23.3	18	0	28	-7.8	70	54	12		4	1	356		2.1	27	11.6	3	26	7	8	16	6.3	
DES MOINES	286	981.4	1017.3	0.6	-10.0	-4.6	2.1	16.7	24	-25.0	18	0	30	-7.2	82	20	-13	10	9	1	102	127	1.5	29	17.4	NW	16	8	7	16	6.6	57

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C		C.				C	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DUBUQUE	322	975.3		- 1.1	-10.6	- 5.8	1.3	15.0	24	-30.6	18	0	29			46	- 1	21	7		122	203						7	5	19	7.3	
SIOUX CITY	334	975.6	1017.3	- 1.1	-12.8	- 7.0	0.4	5.6	22+	-28.3	18	0	31	- 8.3	85	10	- 9	5	11	1	99	229	1.1	32	25.0	NW	16	5	6	20	7.3	50
WATERLOO	265	983.1	1016.3	- 1.1	-11.7	- 6.6	1.3	12.2	24	-32.2	18	0	31	- 9.4	78	39	17	31	7	1	66	152	1.3	27	19.7	29	16	7	6	18	7.0	
KANSAS																																
CONCORDIA	448	963.1	1017.7	3.9	- 7.8	- 2.0	0.5	15.0	24	-20.6	9	0	29	- 5.6	79	10	- 8	5	7	1	74	254	1.4	25	15.2	NW	7+	11	7	13	5.7	59
DODGE CITY	787	924.5	1017.5	8.3	- 5.6	1.4	1.9	25.6	22	-16.7	8	0	27	- 6.7	63	8	- 6	5	5	0	104	76	1.3	25	17.0	N	2	13	7	11	5.2	69
GOODLAND	1113	886.9	1016.8	8.9	- 7.2	0.8	3.4	22.8	22	-17.8	8+	0	31	- 6.7	65	4	- 6	2	4	0	109	25	2.3	26	20.6	31	6	7	13	11	6.0	
TOPEKA	267	985.8	1018.4	6.1	- 6.7	- 0.3	1.5	22.8	23	-15.6	18	0	27	- 6.1	66	27	1	26	4	2	86	102	1.4	26	17.0	SW	24	9	5	17	6.0	67
WICHITA	403	969.2	1018.6	7.8	- 5.0	1.3	1.3	23.9	22	-14.4	8	0	27	- 5.6	66	7	- 13	7	2	1	53	102	1.0	24	17.4	SW	24	14	7	10	4.8	68
KENTUCKY																																
COVINGTON	265	986.8	1019.1	7.2	- 3.3	1.9	2.1	20.6	26+	-15.0	18	0	23	- 3.3	70	19	- 71	11	6	0	64	25	3.0	24	13.0	28	27+	4	10	17	7.2	
LEXINGTON	294	983.4	1020.0	7.8	- 1.7	2.9	1.6	21.7	24	-13.3	18	0	20	- 2.8	69	34	- 91	14	9	0	38	25	3.1	21	13.0	23	27	6	7	18	6.7	
LOUISVILLE	145	1001.4	1019.6	7.8	- 2.8	2.4	0.7	21.7	23	-15.0	18	0	23	- 3.3	65	28	- 76	17	4	0	10	T	2.5	24	13.9	SW	7+	6	11	14	6.6	55
LOUISIANA																																
ALEXANDRIA	28	1017.6	1022.0	14.4	2.2	8.2	-2.0	24.4	24	- 5.6	12	0	14	3.9	79	51	- 85	29	9	1	0	0	0.2	32	12.5	23	26	7	4	20	7.2	
BATON ROUGE	20	1019.0	1021.7	16.7	5.0	10.8	-0.8	26.7	26+	- 2.2	16+	0	7	4.4	69	72	- 52	35	8	2	0	0	0.6	5	11.2	19	26	5	7	19	7.1	
LAKE CHARLES	3	1021.0	1021.9	16.7	6.1	11.4	-0.7	25.6	31+	0.0	16+	0	3	6.7	78	43	- 70	27	7	1	0	0	0.8	7	9.4	21	26	6	7	18	7.1	
NEW ORLEANS	1	1020.7	1021.5	16.1	6.7	11.4	-1.2	25.6	26	- 0.6	29+	0	4	7.8	79	107	13	45	8	1	0	0	1.2	3	10.3	19	26	8	5	18	6.7	
SHREVEPORT	77	1011.5	1021.0	14.4	2.8	8.7	0.1	25.6	23	- 6.1	19	0	17	2.8	71	35	- 87	18	6	1	0	0	0.8	20	16.5	22	26	6	5	20	6.9	53
MAINE																																
CARIBOU	190	991.2		- 5.0	-15.0	- 9.8	2.1	3.3	26+	-28.9	19	0	31			57	3	23	19		706	686						4	4	23	8.0	
PORTLAND	14	1013.9	1016.1	1.1	- 9.4	- 4.2	1.4	7.2	26+	-21.7	19	0	31	- 7.8	74	64	- 47	34	10	0	315	178	1.4	30	13.4	NW	30	8	5	18	6.7	42
MARYLAND																																
BALTIMORE	45	1013.2	1019.0	7.8	- 1.7	3.0	1.4	23.9	25	-10.6	20	0	24	- 3.3	65	25	- 62	17	4	1	10	25	2.0	27	21.0	W	29	9	11	11	5.8	51
MASSACHUSETTS																																
BLUE HILL OBS R	192			3.9	- 3.9	0.2	2.9	16.1	23	-16.1	19	0	24			50	- 64	23	10		61	102			19.2	NE	27+					48
BOSTON	5	1015.6	1016.6	5.0	- 1.7	1.7	2.9	16.7	23	-13.9	19	0	20	- 4.4	65	58	- 42	29	11	0	13	25	3.0	28	15.2	NE	28+	7	5	19	6.9	49
NANTUCKET	13	1016.3	1016.7	6.1	- 2.2	1.8	1.2	17.2	24	-12.8	19	0	22	- 2.2	76	60	- 47	22	9	2	18	T	2.1	27	17.0	SW	28	6	8	17	6.7	46
PITTSFIELD	357			2.2	- 8.3	- 3.2	2.5	13.3	23	-20.6	19	0	27			44	- 31	16	14		318	330										
WORCESTER	301	978.7	1016.6	2.2	- 5.0	- 1.4	3.0	15.0	23	-17.2	19	0	26	- 5.6	75	60	- 34	29	12	0	64	127	2.8	27	13.0	31	18	7	5	19	6.9	
MICHIGAN																																
ALPENA	210	988.2	1014.4	- 0.6	-11.1	- 5.9	0.9	9.4	25	-27.8	30	0	30	- 9.4	71	80	30	33	17	1	828	432	1.0	24	15.6	NE	27	5	2	24	8.0	29
DETROIT	189			2.2	- 4.4	- 1.1	1.7	16.1	23	-16.7	18	0	25							0			3.0	25	13.0	23	25+					
DETROIT M WAYNE CO	193	991.2	1016.1	2.2	- 5.6	- 1.5	1.6	16.1	23	-16.7	18	0	26	- 5.0	77	59	10	44	11	0	137	102	3.0	25	16.1	W	17	4	5	22	7.6	37
DETROIT WILLOW RUN	217	987.5	1016.6	1.7	- 6.7	- 2.6	0.4	15.0	25+	-17.8	18	0	29	- 7.2	72	59	9	47	9	0	142	127	3.6	24	13.4	4	26+	4	4	23	7.7	
FLINT	235	986.8	1015.6	1.1	- 7.8	- 3.3	0.8	13.9	25+	-25.0	30	0	29	- 7.2	74	61	18	46	15	0	701	584	3.5	24	15.6	27	17	4	5	22	8.2	
GRAND RAPIDS	239	985.4	1015.4	2.2	- 6.1	- 1.9	2.6	16.7	24	-23.3	18	0	29	- 5.0	78	49	1	22	17	1	757	406	2.5	22	20.6	SW	16	4	2	25	8.5	29
HOUGHTON LAKE	350	971.2	1014.8	- 1.1	-10.6	- 5.7		10.0	25	-25.0	18	0	31	- 7.8	81	51		15	19	1	574	279	1.9	24	12.5	28	17	3	6	22	8.1	
LANSING	256	982.7	1015.4	1.7	- 7.2	- 2.8	1.4	18.9	24	-26.1	30	0	27	- 5.6	80	55	6	31	14	1	765	610	3.3	24	20.1	W	17	3	6	22	8.1	38
MARQUETTE U	206			- 2.8	-10.0	- 6.4	0.5	7.8	23	-24.4	18	0	31			69	21	21	22		757	737			15.6	NW	16	3	2	26	8.6	33
MUSKEGON	191	991.9	1015.5	2.2	- 5.6	- 1.9	1.4	15.0	24	-16.1	18	0	30	- 5.0	81	53	0	17	18	1	953	330	2.1	25	17.9	20	24	1	3	27	9.2	
SAULT STE MARIE	220	986.5	1014.0	- 3.9	-12.2	- 8.1	0.9	3.9	25+	-27.2	18	0	31	-11.1	76	77	24	13	25	1	742	610	0.4	36	15.6	NW	17	4	4	23	8.3	28
MINNESOTA																																
DULUTH	435	961.7	1015.7	- 6.1	-16.7	-11.6	1.4	2.8	23	-34.4	18	0	31	-15.0	73	79	50	29	20	1	932	787	1.3	31	21.9	E	24	8	4	19	7.0	42
INTERNATIONAL FALLS	359	971.2	1017.0	- 9.4	-22.2	-15.9	0.1	0.6	13+	-36.7	18+	0	31	-19.4	70	24	3	7	13	0	315	381	0.7	28	12.5	27	23	6	7	18	6.9	
MINNEAPOLIS	254	984.4	1016.3	- 3.9	-15.0	- 9.7	1.2	5.0	23	-35.0	18	0	31	-13.3	73	92	74	31	16	1	897	559	0.7	32	17.0	NW	16	3	8	20	7.7	33
ROCHESTER	395	966.1	1016.1	- 4.4	-13.9	- 9.2	1.1	3.9	23	-35.0	18	0	31	-11.7	81	64	41	36	15	1	315	305	1.8	25	18.3	27	16	5	5	21	7.6	
ST CLOUD	315	976.0	1015.8	- 5.0	-16.7	-11.0	1.2	2.8	22+	-35.6	18	0	31		72	51	32	14	16		663	406						5	7	19	7.3	
MISSISSIPPI																																
JACKSON	94	1009.5	1021.8	14.4	1.7	8.0	-0.8	26.1	24	- 6.7	16	0	15	3.3	78	47	- 84	27	9	1	0	0	0.4	16	11.6	NW	26+	6	7	18	7.0	44
MERIDIAN	88	1010.8	1022.2	15.0	1.7	8.3	-0.7	25.0	24	- 5.6	16	0	14	2.8	73	56	- 64	24	8	1	0	0	0.4	29	10.3	30	26	5	9	17	6.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	988.5	1017.8	6.1	- 5.0	0.6	1.6	23.9	23+	-17.8	18	0	25	- 5.6	66	49	5	32	5	4	86	76	1.7	24	23.2	SW	24	8	9	14	5.8	75
KANSAS CITY	226	990.2	1018.1	6.7	- 4.4	1.1	1.2	22.8	23	-15.0	18	0	27	- 5.0	65	53	17	46	4	3	193	203	1.7	24	18.3	SW	24	10	4	17	5.9	61
SAINT JOSEPH	247			5.0	- 8.3	- 1.9	0.8	20.0	23+	-17.8	19+	0	23	- 6.7	72	28	- 2	14	4	3	170	152	0.9	26	14.3	23	24	10	8	13	5.6	
ST LOUIS	163	997.6	1018.7	7.2	- 3.9	1.5	1.6	23.9	23	-17.2	18	0	25	- 4.4	68	73	23	55	5	2	36	25	1.7	24	17.0	SW	24	4	17	10	6.3	72
SPRINGFIELD	386	972.2	1019.0	8.9	- 5.6	1.7	0.8	23.3	22	-16.1	19	0	27	- 5.0	64	30	- 20	28	3	2	18	25	1.7	22	15.2	SW	24	13	10	8	4.5	76
MONTANA																																
BILLINGS	1087	887.9	1014.9	3.3	- 5.6	- 1.0	3.9	17.2	28	-18.9	7+	0	26	- 7.8	63	9	- 5	3	8	0	155	51	3.2	26	21.9	NW	15	5	4	22	7.9	39
GLASGOW	696	93[illegible].6		- 5.0	-16.7	-10.8	1.5	6.1	20	-36.7	17	0	31			21	9	7	11		361	203						3	6	22	7.9	
GREAT FALLS	1116	883.8	1015.1	1.7	- 7.9	- 3.2	2.3	10.0	29+	-22.2	25	0	25	- 8.3	69	28	13	9	12	0	277	76	4.1	23	22.8	SW	3	3	7	21	7.9	38
HAVRE	787	920.1	1015.7	- 2.8	-13.9	- 8.3	1.8	6.7	19	-27.8	7	0	31	-11.7	78	9	- 4	3	7	0	160	76	1.7	25	17.9	NW	15	2	8	21	7.9	41
HELENA	1167	877.8	1016.4	3.3	- 7.2	- 1.8	5.6	12.2	19+	-20.0	7	0	27	- 7.2	66	15	4	6	7	0	185	76	2.2	27	24.1	W	15	3	6	22	8.3	40
KALISPELL	904	908.6	1015.7	1.7	- 5.0	- 1.8	5.0	6.7	28	-17.8	2	0	28	- 4.4	80	44	10	8	18	0	226	152	2.1	18	14.3	31	15	4	4	23	8.3	
MILES CITY	801	919.7	1016.0	0.6	-10.0	- 4.8	3.8	8.9	11	-22.8	17	0	31	- 8.9	73	8	- 3		6	0	61		1.2	27								
MISSOULA	972	902.8	1017.3	2.2	- 3.3	- 0.6	6.6	8.3	15	-13.9	24	0	29	- 4.4	77	31	8	5	16	1	188	51	0.9	29	17.0	SW	15	2	4	25	8.5	22
NEBRASKA																																
GRAND ISLAND	561	949.2	1017.9	1.7	-10.0	- 4.2	1.0	15.6	21	-22.8	8	0	31	- 7.2	79	15	- 1	6	8	0	163	127	2.1	29	17.0	32	6	7	6	18	6.9	
LINCOLN U	351			1.1	- 8.3	- 3.8	0.1	11.7	21	-20.0	8	0	30			12	- 11	6	8		140	127			15.6	NW	16+	9	5	17	6.7	51
NORFOLK	471			0.0	-12.2	- 6.2	0.8	11.7	21	-25.0	8	0	31			12	- 8	9	5		140	203						4	9	18	7.3	
NORTH PLATTE	846	916.4	1017.7	3.3	-11.7	- 3.9	0.5	20.0	22	-25.0	8	0	31	- 8.9	73	12	1	7	7	0	236	152	1.6	32	18.3	NW	6	5	10	16	7.0	52
OMAHA	298	981.0	1017.6	2.8	-10.0	- 3.6	1.8	13.9	22	-20.6	18+	0	30	- 7.2	74	51	30	39	9	1	183	102	0.7	31	20.1	NW	16	7	11	13	6.5	46
SCOTTSBLUFF	1206	877.4	1016.5	6.7	- 7.8	- 0.6	3.2	17.8	22	-17.8	8	0	30	- 7.2	65	5	- 3	2	4	0	76	51	2.6	31	20.1	28	30+	3	9	19	7.4	
VALENTINE	789			3.3	-10.6	- 3.6	3.1	20.0	22	-23.3	8	0	30			4	- 7	3	4		38	102			23.2	NW	16	4	13	14	6.9	64
NEVADA																																
ELKO	1539	846.6	1022.7	2.2	-10.0	- 3.8	1.4	7.2	19	-20.0	9	0	30	- 6.1	81	25	- 4	16	9	0	318	178	0.7	24	10.3	15	24	2	8	21	8.1	
ELY	1906	81[illegible].0	1021.9	4.4	-11.1	- 3.2	1.9	13.3	15	-21.7	6	0	30	- 9.4	67	47	27	22	7	0	630	305	2.1	20	17.4	S	24	6	6	19	7.2	60
LAS VEGAS	659	943.1	1021.1	13.9	0.6	7.4	1.2	20.6	21	- 3.9	9+	0	15	- 4.4	47	12	- 2	12	3	0	0	0	1.0	23	19.7	NW	5	13	8	10	5.0	85
RENO	1342	868.3	1020.9	9.4	- 3.9	2.8	3.7	21.1	15	-10.6	2	0	24	- 3.9	66	54	23	22	8	0	315	229	0.8	20	31.3	SE	20	3	8	20	7.7	56
WINNEMUCCA	1310	870.3	1021.7	6.7	- 6.1	0.3	3.0	14.4	15	-15.6	2	0	26	- 4.4	72	24	- 3	7	9	0	104	76	1.2	20	14.3	SW	21	5	3	23	7.7	30
NEW HAMPSHIRE																																
CONCORD	104	1003.7	1016.9	2.2	-10.0	- 4.0	2.0	13.9	24	-22.2	19	0	30	- 8.3	73	31	- 51	18	10	0	211	229	1.4	31	15.2	W	30	5	9	17	7.0	44
MT WASHINGTON OBS	1909			- 8.9	-17.2	-12.8	1.4	2.2	25	-33.9	18	0	31			125	- 13	29	21	0	785	127			46.0Y	NW	31+	2	5	24	8.5	22
NEW JERSEY																																
ATLANTIC CITY	20	1016.6	1019.1	8.9	- 1.7	3.8	2.3	25.6	24	-12.2	20	0	21	- 1.7	71	29	- 61	19	8	1	28	25	1.9	27	11.2	31	29	11	4	16	6.1	47
ATLANTIC CITY U	3			7.2	0.6	3.8	1.6	21.1	24	- 7.8	20+	0	18			22	- 73	10	8						17.4	NW	29					
NEWARK	2	1017.3	1018.4	6.7	- 1.1	2.7	2.6	20.0	24	-10.6	19	0	20	- 3.3	67	29	- 55	18	9	1	33	25	2.2	27	14.8	29	29	8	11	12	6.2	
TRENTON U	17			6.7	- 0.6	3.2	2.6	21.1	24	-10.6	19	0	21			37	- 41	27	7		10	76			15.6	W	28	10	11	10	5.8	53
NEW MEXICO																																
ALBUQUERQUE	1619	840.2	1021.6	8.9	- 7.8	0.7	-1.0	17.8	31	-17.2	8	0	31	-12.8	39	T	- 10	T	1	0	T	0	1.6	35	18.8	NW	6	14	9	8	4.2	88
CLAYTON	1515			11.7	- 6.1	2.8	2.2	20.6	28+	-15.6	7	0	29			2	- 7	1	3		36	25						9	9	13	5.8	
RATON	1944			8.3	-10.6	- 1.1	0.6	18.9	30	-24.4	8	0	30			9	0	9	3		117	102						8	12	11	5.9	
ROSWELL	1102	893.0		16.7	- 6.7	5.1	1.8	26.7	30+	-18.9	9	0	27	-12.2	32	0	- 12	0	0	0	0	0	1.1	27	19.2	NW	6	17	10	4	3.5	90
SILVER CITY	1638			13.3	- 4.4	4.4	0.2	20.6	29	-14.4	8	0	27			0	- 16	0	0		0	0						25	3	3	2.2	
NEW YORK																																
ALBANY	84	1006.4	1017.5	2.2	- 7.8	- 2.8	2.4	11.7	24	-20.6	19	0	29	- 6.7	72	31	- 32	22	11	0	145	330	2.2	25	14.8	NW	29	4	5	22	7.5	37
BINGHAMTON	485	956.0	1016.4	1.7	- 5.0	- 1.7	2.9	17.2	25	-17.8	19	0	26	- 5.0	78	41	- 23	26	14	0	335	178	2.3	24	17.9	E	27	0	5	26	8.8	36
BUFFALO	215	983.5	1016.0	2.2	- 5.0	- 1.2	2.9	16.1	25	-15.6	19	0	26	- 4.4	79	30	- 42	9	21	0	295	76	4.4	24	16.5	W	17	2	3	26	8.9	27
NEW YORK C	40	1014.2	1017.4	6.1	0.0	3.0	2.3	20.0	24	-10.6	19	0	19	- 2.8	69	35	- 49	22	9	1	36	T	2.0	28	15.6	NE	27					48
J.F. KENNEDY	4	1017.3	1018.1	6.1	- 1.1	2.4	2.6	17.8	24	-11.7	19	0	21	- 2.2	74	37	- 45	21	8	1	71	25	2.0	29	19.7	9	27	7	10	14	6.3	
NEW YORK LA GUARDIA	3	1016.3	1018.2	6.7	0.6	3.4	2.6	20.0	24	-10.6	19	0	16	- 2.8	65	27	- 57	16	9	0	23	T	2.3	29	18.3	NE	27	8	8	15	6.4	
ROCHESTER	167	995.9	1016.8	3.3	- 4.4	- 0.5	3.3	20.0	25	-15.0	31+	0	25	- 6.1	66	24	- 37	8	15	0	323	102	3.1	24	16.5	SW	25	2	6	23	8.4	37
SYRACUSE	125	1001.0	1016.2	3.3	- 5.0	- 0.8	3.7	21.1	25	-20.6	19	0	23	- 5.6	72	37	- 43	12	15	0	465	279	2.1	25	13.9	W	17	2	4	25	8.4	28
NORTH CAROLINA																																
ASHEVILLE	652	942.4	1020.1	10.6	- 3.3	3.7	0.6	21.7	23	-10.6	12	0	27	- 1.7	76	51	- 55	26	9	2	38	25	1.6	35	13.4	35	29	9	12	10	5.6	68
CAPE HATTERAS R	2	1020.0	1020.2	13.3	5.0	9.2	1.1	21.7	27	- 1.7	12+	0	2	5.0	78	104	5	23	13	1	0	0	2.2	31	15.2	WSW	28+	10	8	13	6.1	46
CHARLOTTE	224	992.2	1020.3	12.2	0.6	6.3	0.3	23.3	24	- 6.7	12	0	18	1.1	72	70	- 20	30	10	1	T	T	0.9	24	14.3	SW	27	11	8	12	5.4	70

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	987.8	1020.3	12.2	0.0	6.1	1.8	24.4	24	- 9.4	20	0	16	1.1	74	47	- 40	15	7	1	20	25	1.4	24	15.2	W	27	10	8	13	5.9	64
RALEIGH	132	1004.1	1020.3	12.8	1.7	7.1	1.8	25.0	24	- 8.9	12	0	15	1.7	71	42	- 40	9	8	1	13	25	1.4	24	12.5	25	27	8	10	13	6.1	54
WILMINGTON	9	1019.6	1021.1	16.1	4.4	10.2	1.4	25.0	24	- 3.3	12	0	6	5.0	73	39	26	22	11	0	0	0	0.8	27	17.9	SW	27	8	10	13	6.0	58
NORTH DAKOTA																																
BISMARCK	502	954.3	1017.1	- 4.4	-18.3	-11.6	0.7	5.6	11	-40.0	17	0	31	-15.6	67	22	10	6	10	0	323	152	1.6	32	21.0	NW	16	3	5	23	7.9	47
FARGO	273	982.1	1016.9	- 6.7	-18.3	-12.6	1.1	2.8	11	-32.8	18	0	31	-16.1	75	26	13	9	13	0	384	279	1.1	34	25.0	N	16	5	5	21	7.7	49
WILLISTON	579			- 5.0	-17.8	-11.4	1.9	4.4	21+	-36.7	17	0	31			36	22	12	13		422	178			20.1	W	8	2	9	20	7.8	38
OHIO																																
AKRON	368	971.7	1017.6	4.4	- 3.9	0.3	2.2	18.9	25+	-15.6	18	0	22	- 4.4	73	29	- 44	14	9	1	124	76	3.3	23	14.3	18	7	2	8	21	8.0	
CINCINNATI OBS	232			6.7	- 2.2	2.2	1.3	21.1	24	-15.6	18	0	23			16	- 77	10	5		51	25			10.7	SE	7					39
CLEVELAND	237	987.5	1017.3	4.4	- 3.9	0.2	2.2	20.0	23	-13.9	18	0	24	- 4.4	72	25	- 43	14	12	0	51	25	3.8	23	13.4	SW	25+	0	9	22	8.3	35
COLUMBUS	247	988.2	1018.9	5.6	- 2.8	1.6	2.7	20.0	23	-13.9	18	0	23	- 2.8	72	20	- 60	11	7	0	71	51	2.8	24	15.2	SW	7	4	6	21	7.9	39
DAYTON	305	981.0	1018.3	5.6	- 3.3	1.1	2.4	20.6	23	-16.1	18	0	24	- 5.0	67	18	- 63	8	8	0	91	51	3.1	22	14.3	SE	7	2	8	21	7.8	45
MANSFIELD	395			3.3	- 5.0	- 0.7	1.9	17.2	23	-17.8	18	0	25	- 5.6	70	19	- 63	10	7	0	36	25	4.2	24				3	7	21	7.9	
TOLEDO	206	991.5	1017.5	2.8	- 5.6	- 1.6	1.6	16.7	23	-17.8	18	0	29	- 6.1	72	33	- 26	21	13	0	104	51	3.1	24	14.3	W	17	3	6	22	7.8	40
YOUNGSTOWN	359	973.6	1017.5	2.8	- 5.6	- 1.4	1.2	16.7	25	-17.2	18	0	25	- 4.4	77	32	- 48	14	13	0	206	127	2.9	24	12.1	20	7	1	7	23	8.3	
OKLAHOMA																																
OKLAHOMA CITY	392	971.6	1018.9	12.8	- 2.2	5.4	2.7	26.1	22	-11.7	18+	0	22	- 3.3	59	20	- 14	20	2	2	T	T	0.7	21	17.0	NW	26+	16	9	6	3.8	84
TULSA	198	994.2	1019.3	11.7	- 3.3	4.2	1.9	24.4	24	-12.8	18	0	25	- 3.3	64	38	- 5	38	3	2	18	T	1.6	21	16.1	SW	24	14	9	8	4.0	77
OREGON																																
ASTORIA	2	1015.2	1016.1	9.4	3.9	6.6	1.7	12.2	28+	- 2.8	31	0	2	5.0	87	380	82	62	28	2	T	T	2.1	20	16.5	19	19	0	1	30	9.4	
BURNS U	1265	873.7	1019.7	4.4	- 5.0	- 0.5	3.5	10.0	15	-15.0	23	0	28	- 3.9	78	55	13	18	14		399	254	1.2	26				3	6	22	7.9	
EUGENE	109	1005.1	1018.7	10.0	3.9	6.9	2.9	13.9	27	- 1.1	8	0	2	4.4	87	262	102	65	21	0	T	0	2.9	18	15.6	19	19	0	3	28	9.5	
MEACHAM	1234	875.0	1018.3	1.7	- 3.3	- 1.1	2.3	8.3	29	- 8.9	23+	0	28	- 3.9	85	156	50	33	24		1067	483	0.9	22				1	0	30	9.6	
MEDFORD	396	972.6	1021.2	7.8	0.6	4.2	2.3	13.9	29	- 4.4	17	0	16	1.1	83	138	58	34	16	0	28	25	0.3	15	11.6	20	19	1	4	26	9.0	
PENDLETON	452	962.8	1017.3	9.4	2.2	5.8	5.7	17.2	29	- 1.1	23+	0	9	0.6	72	40	4	9	16	0	58	25	2.5	23	15.6	26	1	2	4	25	9.4	
PORTLAND	6	1016.6	1017.8	9.4	3.3	6.4	2.9	14.4	28	- 0.6	31	0	1	4.4	87	158	+ 21	29	26	1	T	0	2.9	16	21.0	S	29	0	1	30	9.6	16
SALEM	60	1010.5	1018.0	10.0	3.3	6.7	3.1	13.9	28+	- 1.7	24	0	4	3.9	82	185	15	58	23	0	T	T	3.8	18	15.6	18	29	0	2	29	9.3	
SEXTON SUMMIT R	1169	883.8	1018.9	5.0	- 1.1	1.8	0.6	13.3	14	- 6.1	5+	0	23			144	2	28	20		658	254			25.9	15	19	2	2	27	8.9	
PACIFIC AREA																																
CANTON ISLAND	2			30.6	25.6	28.1	-0.3	31.7	5	24.4	3	0	0			7	- 59	6	6		0	0						9	18	4	4.6	
ENIWETOK	4	1008.5	1009.0	30.0	25.0	27.6	0.2	30.6	25+	23.9	16+	0	0	23.3	79	58	32	22	16		0	0	8.1	7								
TAGUAC GUAM R	110			28.3	22.2	25.3	-0.4	29.4	12	20.6	18+	0	0			134	16	20	22		0	0			13.4	E	1					49
JOHNSTON	2	1013.5	1014.0	26.7	23.3	25.0	-0.1	28.3	26+	18.9	7	0	0	20.0	73	22	- 77	5	14	0	0	0	6.3	9	14.3	E	18+	15	14	2	4.2	75
KOROR R	29	1004.4	1008.2	29.4	23.9	26.7	-0.1	31.7	16+	21.7	30+	0	0	23.9	87	479	181	106	26	4	0	0	2.9	6	10.7	NW	30	0	0	31	10.0	36
KWAJALEIN	2	1007.8	1008.6	30.0	25.0	27.2	0.5	31.1	25	23.3	29+	0	0	23.3	80	131	39	31	20	0	0	0	8.2	7	16.5	11	24	2	8	21	8.1	
MAJURO	3	1007.8	1008.2	29.4	25.0	27.2	0.4	30.6	26	23.3	31+	0	0	23.3	79	302	124	109	19	0	0	0	6.0	8	17.0	NE	13	1	7	23	8.6	44
MARCUS ISLAND	6	1013.5	1015.5	24.4	20.0	22.3	0.1	27.2	14+	12.8	27	0	0	17.2	74	51	- 44	32	12	0	0	0	1.8	2	19.7	NE	27	8	13	10	6.1	54
PAGO PAGO	4	1009.8	1009.9	30.6	23.3	26.9		32.2	11+	20.6	25	3	0	23.9	83	177		35	25	2	0	0	2.0	8	12.5	SE	5	3	6	22	7.8	60
PONAPE P	37	1002.0	1007.5	30.6	24.4	27.5	0.6	32.2	31	22.8	18+	1	0	23.3	79	259	- 22	78	23	1	0	0	3.9	9	9.4	NE	1	0	3	28	8.9	57
TRUK MOEN ISLAND	2	1007.5	1007.7	30.0	25.0	27.4	0.3	30.6	31+	23.3	30+	0	0	23.9	80	204	- 9	33	23	0	0	0	4.7	7	12.1	E	20	0	0	31	9.8	77
WAKE	3	1013.5	1013.7	27.8	22.8	25.2	0.0	28.3	26+	21.7	29+	0	0	20.0	75	30	1	12	15	0	0	0	5.9	8	13.4	6	2	8	16	7	5.3	
YAP R	19	1006.1	1008.0	29.4	23.9	26.6	-0.4	30.6	2	22.2	29+	0	0	23.9	84	305	105	103	25	1	0	0	5.1	5	11.2	NE	27	0	0	31	9.9	52
PENNSYLVANIA																																
ALLENTOWN	118	1004.1	1018.6	4.4	- 5.0	- 0.4	1.3	18.9	24	-14.4	19	0	26	- 5.6	70	45	- 36	31	7	1	18	152	1.6	27	14.8	28	29	8	8	15	6.3	
ERIE	223	989.2	1016.8	3.9	- 3.3	0.4	3.1	17.8	25+	-16.7	19	0	23	- 5.0	68	23	- 45	7	16	0	152	51	4.2	23	14.3	17	7	2	4	25	8.7	
HARRISBURG	103	1005.4	1018.7	5.0	- 3.3	0.9	1.3	21.7	25+	-11.7	19+	0	26	- 4.4	70	46	- 24	34	8	1	41	76	1.5	29	16.5	W	27	7	9	15	6.5	58
PHILADELPHIA	2	1018.0	1019.0	6.7	- 2.2	2.2	2.1	20.6	24	-10.6	19	0	23	- 2.8	71	42	- 42	31	6	1	15	25	1.7	29	13.4	W	28+	7	10	14	6.5	52
PITTSBURGH	347	972.9	1018.1	5.0	- 4.4	0.2	1.9	18.9	25	-13.9	18	0	24	- 4.4	72	27	- 49	12	9	0	114	102	3.2	23	13.4	21	7	4	7	20	7.8	29
READING U	81			6.7	- 1.1	2.8	2.4	22.8	25	-11.1	19	0	21			37	- 41	27	7		5	152			22.4	E	27	11	8	12	5.9	51
SCRANTON	283	982.7	1018.1	3.9	- 3.3	0.3	2.7	19.4	25	-14.4	19	0	23	- 3.9	75	28	- 30	19	7	1	211	127	1.4	24	15.2	E	27	4	5	22	7.7	39
WILLIAMSPORT	160	998.3	1018.1	3.9	- 4.4	- 0.3	1.4	20.6	25	-14.4	19	0	26	- 3.3	80	34	- 34	21	10	1	76	76	1.0	28	13.0	11	27	2	8	21	7.7	
RHODE ISLAND																																
BLOCK ISLAND	34			5.6	- 1.7	2.1	2.1	13.3	24	-11.1	19	0	19			48	- 49	32	12		13	T						7	8	16	6.6	
PROVIDENCE	16	1014.9	1017.2	5.6	- 3.3	0.9	2.5	18.3	24	-13.3	19	0	24	- 4.4	70	41	- 56	23	10	0	33	25	2.3	28	13.0	23	21	7	4	20	6.7	53

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1019.3	1020.9	17.2	3.3	10.3	0.4	25.6	26	- 3.9	12	0	13	4.4	72	125	61	34	10	0	0	0	0.6	27	17.9Y	SW	27	10	8	13	5.8	54
CHARLESTON U	3			15.0	6.7	10.9	0.1	21.7	27	0.6	20+	0	0			124	63	35	11		0	0			13.9	W	27					
COLUMBIA	73	1012.5	1020.8	15.6	1.1	8.3	0.0	24.4	26+	- 6.1	12	0	14	2.8	75	71	- 6	23	11	0	0	0	1.0	27	13.9	28	27	10	8	13	5.6	60
GNVLE SPARTANBURG	292	985.8	1021.1	12.8	0.6	6.7	0.2	24.4	24	- 6.7	12	0	16	0.6	68	101	- 8	48	10	1	13	T	0.9	26	19.7	SW	27	13	6	12	5.3	61
SOUTH DAKOTA																																
ABERDEEN	395	967.8	1016.8	- 2.2	-16.7	- 9.4	2.4	5.6	21+	-32.2	17	0	31	-13.3	73	13	- 4	5	7	0	201	102	1.2	33	25.9	34	16	4	4	23	7.8	
HURON	391	967.8	1016.6	- 0.6	-13.3	- 6.9	3.9	10.0	22	-25.6	8	0	31	-10.6	76	10	- 2	6	8	0	170	152	1.1	29	25.5	NW	16	7	3	21	7.4	50
RAPID CITY	964	901.5	1015.6	3.9	- 8.3	- 2.3	3.3	15.0	22+	-18.3	18+	0	30	- 7.2	71	12	3	5	9	0	102	76	2.7	31	29.1	SW	22	7	7	17	6.9	47
SIOUX FALLS	432	962.8	1016.4	- 1.7	-14.4	- 8.0	1.3	7.2	22	-30.0	18	0	31	-11.1	75	19	3	12	6	0	152	229	1.3	31	20.1	32	16	6	8	17	7.3	
TENNESSEE																																
BRISTOL	459	965.1	1020.3	9.4	- 2.2	3.4	-0.1	22.2	26	-10.0	12	0	22	- 1.7	75	51	- 43	19	8	0	117	102	1.2	25	12.5	24	27	6	9	16	6.6	
CHATTANOOGA	203	995.9	1021.4	10.6	- 0.6	5.0	-0.4	21.7	25+	- 8.3	12	0	19	0.6	78	77	- 66	42	8	2	T	T	0.6	24	13.0	S	6	10	7	14	6.0	53
KNOXVILLE	299	984.8	1020.7	10.6	0.0	5.5	0.3	22.2	26	- 7.2	12	0	18	0.6	74	68	- 56	34	9	2	56	25	1.5	27	14.3	W	27	6	10	15	6.4	43
MEMPHIS	79	1010.8	1021.5	11.1	0.6	5.7	0.4	22.8	24+	-10.6	18	0	20	- 1.1	64	57	- 98	28	7	2	15	25	1.9	22	16.1	SE	6	8	7	16	6.1	57
NASHVILLE	180	998.6	1020.8	11.1	0.0	5.7	1.3	22.8	25+	- 9.4	18	0	21	- 1.1	65	41	- 98	24	5	1	30	25	2.1	22	14.3	S	7	7	7	17	6.6	54
OAK RIDGE R	276			10.0	- 0.6	4.7	0.3	21.1	23	- 7.8	12	0	21			96	- 55	57	9		107	76			22.4Y		27	9	5	17	6.7	
TEXAS																																
ABILENE	537	956.7	1019.2	17.8	0.0	8.9	1.9	28.9	29	-10.0	8	0	18	- 2.2	49	T	- 22	T	0	0	0	0	2.0	22	18.8	N	6	16	8	7	3.8	90
AMARILLO	1098	891.0	1016.3	13.9	- 4.4	4.8	2.2	26.1	22	-14.4	9	0	26	- 8.3	45	T	- 17	T	0	0	T	T	2.8	26	24.1	NW	6	13	11	7	4.5	88
AUSTIN	182	998.6	1020.9	16.7	4.4	10.5	0.3	25.6	30	- 2.8	19+	0	10	2.2	61	6	- 53	5	3	0	T	0	0.1	25	13.4	NW	26	12	4	15	5.6	56
BROWNSVILLE	6	1019.6	1020.1	20.0	9.4	14.7	-1.6	26.7	26	0.6	9+	0	0	10.6	79	43	9	28	6	0	T	0	0.2	14	13.4	S	6	9	6	16	6.1	43
CORPUS CHRISTI	12	1019.3	1020.8	18.9	7.8	13.4	-0.7	28.9	6	- 3.9	4	0	2	7.8	75	67	25	33	8	0	25	T	1.1	10	17.9	S	6	9	6	16	6.3	40
DALLAS	147	1002.4	1020.2	16.1	2.8	9.7	1.9	27.8	24	- 5.0	8	0	14	0.6	59	9	- 50	5	3	1	0	0	1.5	19	14.8	NW	26+	15	6	10	4.8	68
DEL RIO	313	983.7	1020.5	18.3	3.3	10.8	0.1	28.9	30	- 3.9	8	0	9	- 2.8	46	1	- 22	1	1	0	0	0	0.7	11	10.3	33	17	14	6	11	4.5	
EL PASO	1194	884.5	1019.3	15.0	- 4.4	5.3	-0.7	23.3	31+	-12.8	9	0	25	-11.7	30	0	- 12	0	0	0	0	0	0.5	33	21.9	W	6	23	3	5	2.6	97
FORT WORTH	164	999.3	1020.3	16.1	1.7	9.1	1.6	26.7	24	- 6.7	9	0	17	- 0.6	58	7	- 45	5	2	1	0	0	1.4	22	13.9	33	26	16	5	10	4.5	
GALVESTON U	2			15.0	8.9	11.8	-0.9	20.6	21+	2.8	19+	0	0			41	- 47	25	8		0	0			13.0	NE	7					47
HOUSTON U	12			17.2	8.3	12.7	0.1	25.6	24+	1.1	9	0	0			48	- 46	27	7		0	0										
HOUSTON	15	1019.0	1021.2	18.9	6.7	12.7	0.7	28.3	23	- 3.3	4	0	1	5.0	67	61	- 35	39	7	0	T	T	0.3	33	13.9	20	6	7	4	20	7.1	44
LUBBOCK	992	904.8	1018.1	15.0	- 5.6	4.8	0.8	26.7	30	-16.1	9+	0	25	- 8.9	43	0	- 17	0	0	0	0	0	2.6	26	18.3	30	6	18	7	6	3.7	
MIDLAND	869	918.4	1018.6	16.1	- 3.3	6.4	-0.2	26.7	30	-13.9	9	0	22	- 7.8	43	0	- 20	0	0	0	0	0	1.5	23	15.6	32	6	17	9	5	3.1	
PORT ARTHUR	5	1021.0	1021.6	16.7	5.6	11.0	-1.0	25.6	31	- 2.8	4	0	5	6.1	78	49	- 59	24	9	0	0	0	0.7	6	15.2	NW	26+	7	7	17	6.9	43
SAN ANGELO	580	951.9	1019.7	17.2	- 1.1	8.1	-0.2	28.3	31	-10.0	19	0	22	- 4.4	45	0	- 25	0	0	0	0	0	2.1	23	13.4	21	20+	20	3	8	3.5	
SAN ANTONIO	240	992.6	1021.0	17.2	2.8	10.1	-1.0	26.1	31	- 6.1	4	0	13	2.2	63	5	- 40	2	7	0	T	0	0.4	2	12.5	N	17+	10	5	16	5.8	56
VICTORIA	32	1016.9	1021.2	17.8	7.2	12.5	-0.5	26.1	22	- 3.3	4	0	2	6.1	70	59	- 1	32	3	0	T	0	0.4	6	20.1Y	S	6	8	4	19	7.0	
WACO	153	1002.4	1021.0	15.6	2.9	9.2	0.3	24.4	24	- 6.7	19	0	13	2.2	66	9	- 48	4	3	1	0	0	1.6	20	15.6	18	16	10	13	8	4.9	
WICHITA FALLS	303	981.7	1019.1	16.7	- 1.1	7.6	1.6	27.8	21	-10.6	8	0	21	- 3.3	53	1	- 28	1	1	1	0	0	1.3	22	21.5	28	6	14	11	6	4.2	
UTAH																																
MILFORD	1533	849.0		1.7	-13.9	- 6.1	-1.9	11.1	31	-25.0	2	0	31			27	13	16	8		406	203						9	7	15	6.2	
SALT LAKE CITY	1286	874.7	1022.6	3.3	- 6.1	- 1.4	1.2	10.6	22+	-16.7	11	0	29	- 5.0	75	52	18	17	10	0	772	330	2.1	14	18.8	S	5	1	1	29	9.2	25
WENDOVER	1291			3.3	- 5.6	- 1.1	1.7	11.7	21+	-11.1	1	0	29			10	2	4	5		43	25										
VERMONT																																
BURLINGTON	101	1003.1	1016.0	0.0	- 8.9	- 4.5	4.3	9.4	25	-25.6	19	0	31	- 8.3	74	42	- 8	19	12	1	521	356	1.1	20	13.9	S	17	4	2	25	8.3	49
VIRGINIA																																
LYNCHBURG	279	985.1		10.6	- 1.1	4.7	1.6	23.3	23	-12.8	20	0	19	- 1.7	66	55	- 28	26	7	1	117	102	1.8	25	13.4	W	27	11	10	10	5.3	58
NORFOLK	7	1019.0	1020.0	12.2	3.3	7.6	2.5	25.0	24	- 3.9	31	0	8	2.2	69	138	54	97	9	0	107	102	1.0	26	16.1	W	27	10	6	15	6.3	68
RICHMOND	50	1013.9	1019.9	11.1	- 1.1	4.9	1.2	23.9	25+	-16.1	20	0	19	0.0	75	38	- 50	11	7	1	160	127	1.1	24	12.1	SW	27	9	9	13	5.8	63
ROANOKE	350	976.3	1019.3	10.6	- 0.6	4.9	1.5	22.8	24+	-10.6	20	0	20	- 3.3	58	32	- 47	14	5	1	69	51	1.9	28	15.6	30	27	12	10	9	5.3	
WALLOPS ISLAND	3	1020.0	1020.3	6.7	0.0	3.4		17.8	24	- 7.2	20	0	16	- 0.6	79	61		25	7	1	147	127	1.9	26	20.6	NW	29	9	8	14	6.1	
WASHINGTON																																
OLYMPIA	59	1008.5	1015.9	7.8	2.2	4.8	1.4	13.3	28	- 4.4	31	0	9	3.9	92	310	111	70	25	0	84	76	3.6	20	14.8	18	19	0	3	28	9.4	
QUILLAYUTE	55	1006.1	1013.7	7.8	3.3	5.5	1.8	11.1	10	- 3.3	31	0	4	5.0	94	524	136	64	28	3	T	T	1.6	17	13.0	SW	29+	0	1	30	9.6	18
SEATTLE TACOMA	122	999.0	1015.5	7.8	3.3	5.8	2.3	13.3	28	- 1.7	31	0	3	2.8	82	237	91	61	23	0	150	127	3.0	19	17.0	19	29	0	3	28	9.4	17
SPOKANE	718	929.9	1015.3	3.9	- 1.7	1.1	4.8	11.7	29	- 7.2	6	0	23	- 2.2	81	62	0	17	14	1	165	51	3.1	20	19.7	W	15	3	7	21	7.9	30
STAMPEDE PASS R	1206	875.7		0.0	- 3.9	- 2.0	2.7	4.4	28	- 7.8	22	0	30			503	198	80	28		2911	2388						0	1	30	9.7	
WALLA WALLA U	289			10.6	3.9	7.1	6.4	18.3	29	0.0	6+	0	2			54	6	14	17		18	T			15.2	W	29	1	4	26	9.0	15

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C	C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	977.0	1016.4	8.9	- 1.1	3.7	6.2	15.6	13	- 6.7	22	0	24	- 1.7	72	15	- 15	11	4	0	25	25	1.5	25	14.3	28	15	6	5	20	7.4	
WEST INDIES																																
SAN JUAN P.R.	4	1015.2	1017.7	27.8	21.7	24.8	1.3	30.0	1	19.4	6	0	0	19.4	74	78	- 41	22	19	0	0	0	4.0	9	15.2	NE	8	9	21	1	4.7	73
SWAN ISLAND	9			28.3	23.3	25.8	0.1	29.4	20+	21.7	29+	0	0			91	4	36	14		0	0						15	8	8	5.0	
WEST VIRGINIA																																
BECKLEY	763	928.9	1020.1	6.7	- 2.8	1.9		19.4	26	-12.8	12	0	23	- 2.8	72	36		15	12	0	234	76	2.8	23	17.9	22	27	6	7	18	7.1	
CHARLESTON	286	984.4	1019.3	9.4	- 2.2	3.6	1.1	22.8	26	-11.7	19	0	23	- 1.7	71	31	- 79	13	8	0	91	25	2.2	23	15.6	23	27	3	13	15	7.4	
ELKINS	600	946.2	1019.3	7.8	- 5.6	0.9	0.7	21.1	26	-15.6	19+	0	24	- 3.3	75	27	- 65	13	11	0	183	51	2.0	26	14.8	28	27	4	7	20	7.8	
HUNTINGTON	252	988.8	1019.6	8.8	- 0.6	4.1	1.5	23.3	26	-11.7	18	0	21	- 1.7	69	36	- 56	19	7	0	86	25	2.2	22	10.3	23	27	3	14	14	6.9	
PARKERSBURG U	187			7.8	- 1.7	3.2	1.7	21.7	26+	-12.2	18	0	22			24	- 61	15	5		25	25			13.0	SW	7					37
WISCONSIN																																
GREEN BAY	208	988.8	1015.4	- 1.7	-11.7	- 6.6	1.8	5.0	24+	-31.7	18	0	31	- 9.4	78	64	35	25	12	1	417	254	2.0	27	15.6	SW	25	5	5	21	7.6	41
LA CROSSE	198	990.5	1016.2	- 1.7	-12.2	- 7.0	1.6	6.7	23+	-35.0	18	0	31	-10.6	75	73	42	33	11	1	465	279	0.6	26	15.6	24	16	5	6	20	7.5	
MADISON	262	983.4	1015.9	- 0.6	-10.6	- 5.4	2.6	12.2	24	-29.4	18	0	30	- 9.4	72	41	6	17	12	1	239	229	1.7	26	17.0	SW	16	5	6	20	7.5	45
MILWAUKEE	205	989.5	1015.8	0.6	- 8.9	- 4.2	2.2	13.9	24	-26.7	19	0	29	- 7.8	75	38	- 9	12	15	1	333	229	2.3	26	20.1	SW	16	6	7	18	7.3	44
WYOMING																																
CASPER	1627	834.1	1016.3	2.2	- 7.8	- 2.9	1.8	10.6	29	-22.2	7+	0	28	- 8.9	64	15	1	4	10	0	234	76	7.0	22	21.9	22	20	5	9	17	7.2	
CHEYENNE	1867	808.3	1015.3	5.6	- 6.1	- 0.3	3.3	13.3	29+	-16.1	7	0	27	-10.6	47	11	- 2	9	6	0	137	127	5.3	29	26.4	W	15	7	7	17	6.7	60
LANDER	1696	825.6	1016.4	3.3	- 8.9	- 3.0	4.1	10.6	15	-18.9	7	0	29	- 9.4	65	6	- 5	5	5	0	132	152	1.3	24	32.6	SW	22	3	11	17	7.5	73
SHERIDAN	1208	875.4	1016.3	3.3	-10.6	- 3.7	2.3	15.0	20+	-25.0	7	0	31	-10.6	61	15	- 1	7	12	0	307	127	1.3	30	25.5	NW	15	3	7	21	7.9	44

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

V Sun below horizon January 1-23, inclusive.
X Sun below horizon January 1-17, inclusive.

HEATING DEGREE DAYS

(Base 65°F.)

JANUARY 1967

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	643	1815	1609
HUNTSVILLE	660	1943	1922
MOBILE	370	949	1007
MONTGOMERY	521	1379	1468
ALASKA			
ANCHORAGE	1791	6983	
ANNETTE	921	3793	3930
BARROW	2395	10776	11028
BARTER ISLAND	2347	10390	10796
BETHEL	1783	7552	7570
COLD BAY	1185	5864	5389
FAIRBANKS	2496	9103	8794
JUNEAU	1291	5595	5140
KING SALMON	1777	7374	6552
KOTZEBUE	1967	8490	8846
MC GRATH	2350	9038	8680
NOME	1639	7857	7918
ST. PAUL ISLAND	1113	5868	6006
SHEMYA	1051	5251	5300
YAKUTAT	1423	6164	5124
ARIZONA			
FLAGSTAFF	1111	3744	3982
PHOENIX	437	981	1145
TUCSON	416	948	1133
WINSLOW	1038	2858	3024
YUMA	299	630	830
ARKANSAS			
FORT SMITH	735	2045	2074
LITTLE ROCK	717	1906	2073
TEXARKANA	574	1546	1610
CALIFORNIA			
BAKERSFIELD	566	1393	1367
BISHOP	772	2331	2537
BLUE CANYON	808	2696	2761
EUREKA U	541	2477	2573
FRESNO	579	1489	1561
LONG BEACH	315	715	871
LOS ANGELES	254	581	906
LOS ANGELES U	179	412	708
MT SHASTA R	896	3078	3169
OAKLAND	452	1361	1592
RED BLUFF	548	1351	1531
SACRAMENTO	584	1532	1647
SANDBERG U	685	2126	2181
SAN DIEGO	302	655	745
SAN FRANCISCO	483	1702	1638
SAN FRANCISCO U	375	1606	1648
SANTA CATALINA	221	769	872
SANTA MARIA	424	1507	1554
STOCKTON	576	1456	1658
COLORADO			
ALAMOSA	1423	4726	5043
COLORADO SPRINGS	981	3441	3607
DENVER	954	3132	3546
GRAND JUNCTION	1268	3262	3451
PUEBLO	937	3144	3201
CONNECTICUT			
BRIDGEPORT	960	2833	3053
HARTFORD	993	3062	3516
NEW HAVEN	940	2966	3202
DELAWARE			
WILMINGTON	888	2794	2816
DIST.OF COLUMBIA			
WASH NATL AP	735	2327	2474
FLORIDA			
APALACHICOLA U	312	813	835
DAYTONA BEACH	168	476	534
FORT MYERS	70	219	279
JACKSONVILLE	281	820	798
KEY WEST	5	12	68
LAKELAND U	117	366	416
MIAMI	28	96	139
ORLANDO	119	360	490
PENSACOLA	402	1023	967
TALLAHASSEE	344	972	961
TAMPA	129	419	433
WEST PALM BEACH	56	177	158
GEORGIA			
ATHENS	605	1762	1806
ATLANTA	645	1869	1824
AUGUSTA	537	1590	1512
COLUMBUS	489	1334	1515
MACON	514	1442	1375
ROME	692	2066	2070
SAVANNAH	413	1202	1167
IDAHO			
BOISE	885	3147	3469
IDAHO FALLS 46W R	1311	4706	4907
LEWISTON	776	2635	3278
POCATELLO	1083	3942	4055
ILLINOIS			
CAIRO U	770	2300	2360
CHICAGO O HARE	1148	3547	3748
CHICAGO MIDWAY	1113	3332	3482
MOLINE	1202	3542	3712
PEORIA	1151	3455	3509
ROCKFORD	1244	3801	3920
SPRINGFIELD	1091	3267	3217
INDIANA			
EVANSVILLE	864	2739	2743
FORT WAYNE	1139	3724	3688
INDIANAPOLIS	997	3102	3293
SOUTH BEND	1109	3421	3612
IOWA			
BURLINGTON	1168	3447	3577
DES MOINES	1276	3828	3937
DUBUQUE	1341	4053	4262
SIOUX CITY	1410	4129	4028
WATERLOO	1384	4182	4262
KANSAS			
CONCORDIA	1129	3326	3224
DODGE CITY	938	3031	2940
GOODLAND	970	3374	3517
TOPEKA	1032	3087	31[illegible]1
WICHITA	945	2720	2808
KENTUCKY			
COVINGTON	910	2979	[illegible]
LEXINGTON	851	2734	2750
LOUISVILLE	882	2679	2731
LOUISIANA			
ALEXANDRIA	566	1412	1231
BATON ROUGE	426	1014	1025
LAKE CHARLES	395	897	951
NEW ORLEANS	[illegible]	949	896
SHREVEPORT	553	1403	1373
MAINE			
CARIBOU	1567	5066	5480
PORTLAND	1254	4006	4129
MARYLAND			
BALTIMORE	846	2727	2738
MASSACHUSETTS			
BLUE HILL OBS R	1109	3227	3464
BOSTON	921	2817	3059
NANTUCKET	919	2988	[illegible]
PITTSFIELD	1192	4023	4228
WORCESTER	1097	3617	3854
MICHIGAN			
ALPENA	1346	4522	4610
DETROIT	1077	3372	3454
DETROIT M WAYNE CO	1097	3480	3469
DETROIT WILLOW RUN	1157	3818	3491
FLINT	1204	4032	3806
GRAND RAPIDS	1110	3486	3885
HOUGHTON LAKE	1335	4497	
LANSING	1174	3866	3835
MARQUETTE U	1375	4496	4522
MUSKEGON	1120	3592	3619
SAULT STE MARIE	1473	4980	4903
MINNESOTA			
DULUTH	1662	5593	5599
INTERNATIONAL FALLS	1912	6263	6126
MINNEAPOLIS	1556	4805	4846
ROCHESTER	1531	4724	4755
ST CLOUD	1634	5201	5116
MISSISSIPPI			
JACKSON	570	1576	1398
MERIDIAN	555	1474	1481
MISSOURI			
COLUMBIA	979	2796	2999
KANSAS CITY	956	2599	2808
ST JOSEPH	1123	3107	3270
ST LOUIS	932	2811	2900
SPRINGFIELD	922	2746	2718
MONTANA			
BILLINGS	1069	3666	4022
GLASGOW	1624	5078	5237
GREAT FALLS	1190	4138	4321
HAVRE	1480	5007	4998
HELENA	1120	3953	4690
KALISPELL	1118	4393	4785
MILES CITY	1284	4478	4460
MISSOULA	1045	3871	4804
NEBRASKA			
GRAND ISLAND	1252	3724	3815
LINCOLN U	1232	3572	3411
NORFOLK	1362	4117	4038
NORTH PLATTE	1240	3965	3891
OMAHA	1216	3563	3670
SCOTTSBLUFF	1049	3652	3832
VALENTINE	1221	4092	4253
NEVADA			
ELKO	1227	4168	4264
ELY	1193	3976	[illegible]
LAS VEGAS	[illegible]	1517	1770
RENO	859	3272	3724
WINNEMUCCA	996	3495	3919
NEW HAMPSHIRE			
CONCORD	1241	3909	4158
MT WASHINGTON	1738	7480	7709
NEW JERSEY			
ATLANTIC CITY	[illegible]	[illegible]	2655
ATLANTIC CITY U	800	2478	2502
NEWARK	864	2569	2856
TRENTON U	836	2590	2810
NEW MEXICO			
ALBUQUERQUE	980	2725	2681
CLAYTON	859	2869	2966
RATON	1076	3418	3583
ROSWELL	731	2211	2439
SILVER CITY	772	2235	2234
NEW YORK			
ALBANY	1169	3731	3879
BINGHAMTON	1107	3830	4030
BUFFALO	1086	3630	3826
NEW YORK U	849	2558	2691
J.F. KENNEDY	883	2655	2810
NEW YORK LA GUARDIA	823	2453	2638
ROCHESTER	1046	3402	3687
SYRACUSE	1059	3487	3749
NORTH CAROLINA			
ASHEVILLE	810	2735	2670
CAPE HATTERAS R	535	1440	1452
CHARLOTTE	664	2058	1950
GREENSBORO	676	2116	2300
RALEIGH	623	1984	2076
WILMINGTON	[illegible]	[illegible]	1432
NORTH DAKOTA			
BISMARCK	1664	5390	5115
FARGO	1723	5576	5323
WILLISTON	1649	5278	5329
OHIO			
AKRON	1006	3346	[illegible]
CINCINNATI CRS	894	2875	2805
CLEVELAND	1000	3353	3397
COLUMBUS	929	3151	3278
DAYTON	[illegible]	3128	3232
MANSFIELD	[illegible]	3587	3589
TOLEDO	1105	3598	3669
YOUNGSTOWN	1093	3680	3601
OKLAHOMA			
OKLAHOMA CITY	713	2060	2311
TULSA	776	2226	2378
OREGON			
ASTORIA	651	2636	2854
BURNS U	[illegible]	3759	4000
EUGENE	633	2222	2670
MEACHAM	1077	4228	4294
MEDFORD	781	2543	2917
PENDLETON	691	2427	3073
PORTLAND	655	2265	2659
SALEM	642	[illegible]	2662
SEXTON SUMMIT R	916	3354	3274
PENNSYLVANIA			
ALLENTOWN	[illegible]	3347	3297
ERIE	993	3229	3464
HARRISBURG	966	2963	3046
PHILADELPHIA	[illegible]	2784	2950
PITTSBURGH	[illegible]	[illegible]	3397
PITTSBURGH U	895	2976	3076
READING U	858	2718	2848
SCRANTON	998	3325	[illegible]
WILLIAMSPORT	1035	3549	3407
RHODE ISLAND			
BLOCK ISLAND	898	2776	2917
PROVIDENCE	963	3088	3277
SOUTH CAROLINA			
CHARLESTON	442	1271	1299
CHARLESTON U	409	1096	1112
COLUMBIA	554	1628	1576
GNVLE-SPARTANBURG	643	1920	1878
SOUTH DAKOTA			
ABERDEEN	1544	4966	4941
HURON	1403	4653	4768
RAPID CITY	1143	3973	4082
SIOUX FALLS	1462	4621	4551
TENNESSEE			
BRISTOL	821	2523	2516
CHATTANOOGA	737	2211	2049
KNOXVILLE	709	2189	2147
MEMPHIS	707	2019	2022
NASHVILLE	697	2151	2193
OAK RIDGE	754	2388	2312
TEXAS			
ABILENE	532	1482	1493
AMARILLO	743	2341	2467
AUSTIN	446	1039	[illegible]
BROWNSVILLE	238	475	420
CORPUS CHRISTI	304	644	631
DALLAS	491	[illegible]	1508
DEL RIO	417	970	1081
EL PASO	718	1848	1831
FORT WORTH	514	1402	1539
GALVESTON U	356	733	758
HOUSTON U	334	787	816
HOUSTON	342	827	882
LUBBOCK	748	2039	2249
MIDLAND	654	1725	1711
PORT ARTHUR	417	961	942
SAN ANGELO	568	1501	1489
SAN ANTONIO	470	1114	[illegible]
VICTORIA	350	777	770
WACO	511	1246	1315
WICHITA FALLS	593	1684	[illegible]
UTAH			
MILFORD	1354	3819	[illegible]
SALT LAKE CITY	1097	3368	3603
WENDOVER	1076	3488	3511
VERMONT			
BURLINGTON	1269	4153	4592
VIRGINIA			
LYNCHBURG	752	2432	2485
NORFOLK	588	1963	1980
RICHMOND	738	2377	2344
ROANOKE	740	2472	2488
WALLOPS ISLAND	826	2466	
WASHINGTON			
OLYMPIA	745	2943	2982
QUILLAYUTE	709	3049	3158
SEATTLE TACOMA	695	2607	2882
SPOKANE	956	3452	3887
STAMPEDE PASS R	1130	4837	5171
WALLA WALLA U	619	2235	2907
YAKIMA	814	2786	3636
WEST VIRGINIA			
BECKLEY	905	3196	
CHARLESTON	815	2592	2653
ELKINS	963	3451	3298
HUNTINGTON	790	2646	2641
PARKERSBURG U	839	2809	2777
WISCONSIN			
GREEN BAY	1386	4548	4487
LA CROSSE	1406	4231	4388
MADISON	1321	4309	4446
MILWAUKEE	1249	4041	4239
WYOMING			
CASPER	1180	4045	4139
CHEYENNE	1036	3609	4056
LANDER	1188	4226	[illegible]
SHERIDAN	1221	4296	4317

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

JANUARY 1967

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS
Alabama *																													
Alaska *																													
Arizona *																													
Arkansas *																													
California	W2	1	0	0	0					1	4	5	4													0	0	5	3
Colorado										0	1	5	0																
Connecticut *																													
Delaware	1	1	0	7	5																								
Florida *																													
Georgia *																													
Hawaii																										0	0	°4	C
Idaho *																													
Illinois	8	1	1	3	5					1	4	6	0					0	?	6	0	0	0	6	0				
Indiana																		2	?	7	0	0	?	7	0				
Iowa	13	1	1	12	6	0	0	3	0																				
Kansas						0	0	4	0	1	0	5	5	0	0	5	0	0	0	4	0	0	0	5	0				
Kentucky *																													
Louisiana	1	1	0	0	3									1	0	0	0												
Maine *																													
Maryland	1	1	0	0	3					1	1	3	0	0	0	5	0												
Massachusetts														0	0	3	0												
Michigan										0	0	4	0					7	6	6	0								
Minnesota														0	0	3	0	14	14	6	0	0	0	6	0				
Mississippi	1	1	0	7	5					0	0	4	0									2	5	5	0				
Missouri	10	1	5	239	8					0	0	4										0	0	6	0				
Montana										0	1	5	0																
Nebraska *																													
Nevada *																													
New Hampshire														0	0	3	0												
New Jersey *																													
New Mexico										0	0	?	0																
New York												4											1	3					
North Carolina										0	0	4	0	0	0	4	0					0	0	4	0				
North Dakota																		2	0	4	0								
Ohio																						1	?	6					
Oklahoma	3	1	0	6	5	0	0	4	3	0	6	5	0													0	0	3	0
Oregon										0	5-10	5	3					1	S	4	2								
Pacific Area *																													
Pennsylvania										0	1	4	0	0	0	4	0												
Puerto Rico *																													
Rhode Island *																													
South Carolina *																													
South Dakota										1	0	4	0																
Tennessee																										F3	N		
Texas										0	1	5	0																
Utah *																													
Vermont *																													
U. S. Virgin Is.*																													
Virginia										2	2	4	0																
Washington												5																	
West Virginia										0	0	2	0	0	0	2	0												
Wisconsin	1	1	0	0	5					0	5	6	0									0	0	6	0				
Wyoming *																													

° Includes crop damage
C Crop damage
W Waterspouts
S Several
F Fog
N Numerous

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JANUARY 1967

Elmer R. Nelson, Office of Hydrology

The most important flooding during January occurred in California in the San Francisco Bay region, along the Russian and Napa Rivers. Severe flooding along the Russian River was confined to the area from Healdsburg downstream through the Guerneville resort area. The high water necessitated the evacuation of about 100 persons. The damages were estimated at $1.5 million.

ATLANTIC SLOPE DRAINAGE

Rainfall over eastern North Carolina during January averaged 1/2 inch below normal. Precipitation ranged from near 1 inch above normal in the extreme lower portion to some 2 inches below normal over the upper reaches of the Neuse and Cape Fear Rivers. A new low water record of 2.5 feet was established on the Little River at Ft. Bragg, N. C., which was 1.0 feet lower than the previous low of 3.5 feet recorded in 1965.

The Lumber River at Lumberton, N. C., exceeded flood stage on December 30 and continued in flood until January 28. There were three crests; the first of 9.5 feet (flood stage 8 feet), occurred on the 6-7th; the second and third crests of 9.8 feet occurred on the 11th and 17th. A survey during the peak of the overflow indicated that low areas within the city were under 1 to 2 feet of water. A few low approach roads to recreational areas along the river were impassable.

Minor flooding occurred on the Ogeechee River in Georgia between the 13th and 21st. The Altamaha River at Charlotte, Ga., was out of its banks from the 9th to the 20th. It crested on the 13th, 2 feet above flood stage. The Satilla River at Waycross, Ga., was in minor flood from the 7th to the 12th. Farther downstream, at Atkinson, Ga., the stream overflowed from the 8th through the end of the month, cresting nearly 4 feet above flood stage on the 15th.

EAST GULF OF MEXICO DRAINAGE

Heavy rains (2 to 5 inches) on the 1st to the 3d caused minor flooding on the Flint River at Albany, Ga., from the 4th to the 6th. It crested on the 5th, nearly 1 foot above flood stage. The Apalachicola River at Blountstown, Fla., rose rapidly, exceeding flood stage on January 1, and remained out of its banks through the 22d. After cresting on the 6th, 6.2 feet above flood stage, it receded slowly due to the added inflow from the second period of heavy rains on the 8th to the 10th. The prolonged period of flooding at Blountstown retarded lumbering and other interests at least 2 weeks. Damages from the high water are estimated at $117,500.

Minor flooding occurred on the Choctawhatchee River at Newton, Ala., and Caryville, Fla., between the 3d and 10th. This overflow was due to general rains on December 31 to January 2. Damage was negligible and the overflow was confined to woodlands and pasture land.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Excessive rainfall over southeastern Minnesota streams and the Kickapoo River in west-central Wisconsin produced bankfull stages in local areas. An ice jam on the Root River below Houston and Hokah, Minn., produced up to 1.5 feet of overflow on the 26-27th. Damage was negligible.

Precipitation over the Upper Mississippi Basin above Guttenberg, Iowa, averaged normal for January, except 1.5 to 3.0 inches above normal over east-central and southeastern Minnesota and northwest and west-central Wisconsin. At Minneapolis-St. Paul, Minn., a total snowfall of 35.3 inches was recorded during January. This was the greatest January snowfall on record since 1917, when 28.8 inches was recorded. This was the third greatest monthly snowfall since March 1951, when 40.0 inches was recorded.

A comparison of snow depths in the Upper Mississippi Basin on January 31, with that of other years is given in the following table:

COMPARATIVE SNOW DEPTHS (INCHES)

STATION	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956
(Minnesota)												
Bemidji	24	22	12	11	2	13	4	8	8	5	11	26
International Falls	15	32	16	14	4	16	11	8	20	8	11	22
Duluth	27	17	18	9	6	15	9	16	11	11	14	29
Alexandria	17	9	5	2	2	9	0	5	0	5	2	16
New Ulm	3	5	T	T	4	2	T	1	2	3	T	6
Minneapolis	19	6	4	3	4	6	2	2	0	2	2	11
Rochester	2	5	3	0	6	3	T	2	3	2	1	10
(Wisconsin)												
Park Falls	24	18	15	5	10	19	2	14	12	12	13	21
Wausau	12	5	8	3	6	9	T	4	6	5	7	12
Portage	1	9	10	0	9	7	1	2	10	4	4	2

The Turkey River at Garber, Iowa, overflowed its banks by 5.1 feet on the 25th. The Pecatonica River at Martintown, Wis., exceeded flood stage on the 29th and 30th, cresting on the 29th, 3.6 feet above flood stage. This flooding was due to heavy rains and mild temperatures, which softened the ice and caused local ice jams. Damage was negligible. Only vacant farmland and pastures were flooded.

Heavy precipitation from the 24th to the 27th produced rapid rises on the Sangamon and Kaskaskia Rivers in Illinois to above flood stage. The Sangamon River at Riverton, Ill., continued in flood from January 29 through February 10, cresting on February 5, 4.9 feet above flood stage. Minor flooding occurred on the Kaskaskia River at Vandalia, Ill., on January 28 and 29. It continued rising down stream and exceeded flood stage at Carlyle

Dam, Ill., on January 31. It crested on February 8 nearly 4 feet above flood stage. The extent of flooding was limited to farmland adjacent to the rivers.

Missouri Basin.--The Missouri River, below Gavins Point dam at Yankton, S. Dak., was generally open during January with floating ice. Temporary ice blockage developed briefly during subzero weather. Tributaries above Yankton were frozen throughout the month and stages were at low winter-time levels.

Ohio Basin.--This was one of the driest Januarys of record in the middle Ohio Basin. At Columbus, Ohio, this was the third driest January of record.

Minor flooding occurred on the Cumberland River at Barbourville, Ky., on the 28th. No damage was reported.

White Basin.--Heavy rains (2 to 3 inches) on December 27 and 28 caused the Cache River at Patterson, Ark., to exceed flood stage on December 29. It crested on January 4, nearly 2 feet above flood stage. It receded within its banks on January 16. Damages were light. Approximately 4,000 acres were inundated.

Great Basin.--Local runoff on the 28th, due to heavy precipitation and snowmelt, caused minor flooding on the Truckee River at Reno, Nev.

Snowpack is heavy and wet with 10 to 12 feet on Mt. Rose and as high as 16 feet near Donner Summit. Snowfall at Reno during January (12.4 inches) was the heaviest since February 1959.

PACIFIC SLOPE DRAINAGE

The overflow of the Sacramento River at all fixed-sill weirs was due to a series of storms during the latter part of the month, which deposited 150% to 300% of the monthly normal precipitation. No major damage occurred, but some marinas, built below the maximum capacity elevation line inside the levees, were flooded briefly with minor damage. Some marinas were put to the expense of re-launching docks that had been pulled up on the levees for safety during the high water and which were stranded upon recession.

Snow depth at Norden, Calif., 7,000 feet elevation, increased from 27 inches at the start of the storm to 149 inches at the end of the stormy period on February 1. At Blue Canyon, at the 5,200 feet level, snow increased from 3 inches to 26 inches during the same period. The cutting off of a portion of the heavier contributing area of the Sierra Basins by snow effectively reduced stages below those that could have resulted had the precipitation been all rainfall.

Heavy rains on the 20th and 21st caused minor floods in the lower Russian and Napa Rivers in California. Widespread lowland flooding resulted in sections of the San Francisco Bay region, particularly in Marin County and Redwood City, Calif. Water reached depths as much as 6 feet in low areas and on roads, particularly in sections of Marin County. On the San Francisco Peninsula, particularly Redwood City and San Mateo, numerous homes and basements were flooded in areas adjacent to creeks or where drainage systems were overtaxed. On hillsides of the Bay Area many landslides occurred with scores of homes either badly damaged or completely destroyed by mud slides. The flooding along the Russian River on the 21st and 22d was confined to the area from Healdsburg downstream through the Guerneville resort area. The Russian River at Guerneville, Calif., crested 10.6 feet above flood stage on the 22d. Recurring rains during the remainder of the month kept the river at a high level and caused another rise to slightly above flood stage on the 29th. Preliminary estimates of flood damage, along the Russian and Napa Rivers, were placed at $1.5 million by the Army Corps of Engineers.

Moderate to heavy rain during the last 10 days of January caused the Eel River at Fernbridge, Calif., to rise to bankfull stage on the 29th. Some minor flooding was reported in low places near the mouth of the river during high tide. A few head of cattle were moved from lower pastures to higher ground, but otherwise no damage resulted.

Three to 6 inches of rain on the 26th to the 29th caused 2 to 3 feet of overflow along the south and north Forks of the Coquille River at Myrtle Point, Oreg. Freezing levels were 8 to 9 thousand feet during the period of heavy rain. Low-level snowmelt contributed to the runoff. Damage was limited to bank erosion and pastures.

Local flash flooding occurred on the 20th-22d through the flat areas of the upper Snake River Valley from American Falls to Rigby, Idaho, and on the Little Wood River in the Richfield, Idaho, area. The most severe flooding was along Crow Creek and Willow Creek in the Idaho Falls area. Considerable local flooding occurred in the Blackfoot and Aberdeen areas. Flood damage was limited to flooded basements, washed out road and railroad fills, and weakened bridge approaches. Flooding developed on the Weiser River from Council to Weiser, Idaho, from the 27th to the 30th due to heavy rain on melting snow and ice. The rainfall ranged from 2 to over 3 inches. Some damage resulted to roads, fields, and a few basements in the lowlands.

Significant rises occurred on the 26th to the 30th in the Willamette Basin, and along coastal and north-central Oregon streams from heavy rainfall. Rainfall during this period ranged from 3 inches at valley locations to 6 inches in the Coast and Cascade Ranges. East of the Cascades, precipitation amounts varied from 1.5 to 2.5 inches. Freezing levels fluctuated from 7,000 to 5,000 feet over western Oregon to near 5,500 feet over eastern Oregon. All Coast Range Willamette tributaries exceeded flood stage by up to 3.5 feet in the Yamhill and Tualatin drainages. Johnson Creek in the Portland local area crested 0.4 foot above flood stage. The Willamette crested near bankfull at Harrisburg, Wilsonville, and Oregon City, Oreg., and generally 5 feet below flood stage along the remainder of the main stem. Preliminary estimates of flood damage were placed at $534,000 by the Corps of Engineers.

Two minor floods occurred on the Chehalis River at Centralia, Wash., during the last decade of the month. These two rises were due to heavy rains and mild temperatures. Preliminary estimates of flood damage was placed at $168,000 by the Corps of Engineers.

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

JANUARY 1967

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest * Stage	Crest * Date
	Ft.			Ft.	
ATLANTIC SLOPE DRAINAGE					
Lumber: Lumberton, N. C.	8	Dec. 30	28	(9.5 (9.8	6-7 11,17
Ogeechee: Dover, Ga.	7	13	15	7.0	14
Eden, Ga.	9	10	21	9.7	17
Altamaha: Charlotte, Ga.	15	9	20	17.05	13
Satilla: Waycross, Ga.	16	7	12	16.75	9
Atkinson, Ga.	13	8	Feb. 1	16.75	15
EAST GULF OF MEXICO DRAINAGE					
Flint: Albany, Ga.	20	4	6	20.95	5
Apalachicola: Blountstown, Fla.	15	1	22	21.2	6
Choctawhatchee: Newton, Ala.	19	3	4	22.6	3
Caryville, Fla.	12	5	10	13.2	6
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Root: Houston, Minn.	15	26	27	16.5	27
Hokah, Minn.	47	26	27	48.2	27
Kickapoo: Steuben, Wis.	8	25	30	8.7	29
Turkey: Garber, Iowa	17	25	25	22.1	25
Pecatonica: Martintown, Wis.	11	29	30	14.6	29
Sangamon: Riverton, Ill.	13	29	Feb. 10	17.9	Feb. 5
Kaskaskia: Vandalia, Ill.	18	28	29	18.2	29
Carlyle Dam, Ill.	423	31	Feb. 15	426.7	Feb. 8
Ohio Basin					
Cumberland: Barbourville, Ky.	27	28	28	27.2	28
MISSISSIPPI SYSTEM	Ft.			Ft.	
White Basin					
Cache: Patterson, Ark.	7	Dec. 29	16	8.9	4
PACIFIC SLOPE DRAINAGE					
Sacramento: Moulton Weir, Calif.	76.8	22 29	23 Feb. 5	78.3 81.0	23 Feb. 1
Colusa Weir, Calif.	61.8	22 25 27	24 26 Feb. 10	65.7 63.7 67.1	23 25 Feb. 1
Tisdale Weir, Calif.	45.5	22	Feb. 14	(48.3 (49.1	23 Feb. 1
Fremont Weir, Calif.	33.5	22	Feb. 12	(35.7 (37.3	23 31
Russian: Guerneville, Calif.	29	(21 (29	22 29	39.6 29.3	22 29
Eel: Fernbridge, Calif.	17	29	29	17.0	29
South Fork Coquille: Myrtle Point, Oreg.	35	28	29	36.8	28
North Fork Coquille: Myrtle Point, Oreg.	28	27	31	30.8	28
Weiser: Weiser, Idaho	8	29	30	9.3	29
Marys: Philomath, Oreg.	20	28	29	20.4	28
Luckiamute: Suver, Oreg.	27	28	30	29.2	28
South Yamhill: Whiteson, Oreg.	38	28	31	41.6	28
Pudding: Aurora, Oreg.	20	29	Feb. 2	22.6	20
Tualatin: Farmington, Oreg.	29	29	Feb. 4	32.6	31
Johnson Creek: Sycamore, Oreg.	8	27	28	8.4	28
Chehalis: Centralia, Wash.	63	20 28	22 30	65.25 63.60	21 29

* Provisional

RAWINSONDE DATA

Average monthly values

JANUARY 1967

ALBANY, N. Y. — 1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	86	-2.9	-6.4	26	2.2
1000	31	140			24	3.0
950	31	546	-3.0	-7.3	26	5.9
900	31	974	-4.4	-9.2	27	9.4
850	31	1,424	-5.4	-11.7	27	12.0
800	31	1,898	-7.2	-14.9	27	13.3
750	31	2,399	-9.2	-16.7	27	15.6
700	31	2,932	-11.0	-18.3	27	17.6
650	31	3,498	-13.8	-22.5	27	20.6
600	31	4,103	-16.8	-25.9	27	23.2
550	31	4,748	-20.8	-29.5	27	24.7
500	31	5,451	-25.0	-33.9	26	28.4
450	31	6,205	-29.8	-38.2	27	30.4
400	31	7,041	-35.1	-42.3	27	33.6
350	31	7,961	-41.2	-44.5	27	35.9
300	31	8,993	-47.3		27	35.3
250	31	10,183	-53.4		27	36.8
200	31	11,603	-57.2		27	34.6
175	31	12,449	-56.3		27	32.7
150	31	13,429	-56.0		27	28.9
125	31	14,586	-57.1		27	26.0
100	31	15,993	-58.9		27	24.8
80	31	17,388	-60.0		27	17.9
70	31	18,220	-60.0		28	16.8
60	31	19,184	-59.6		28	14.7
50	30	20,320	-59.8		29	12.9
40	29	21,715	-59.8		28	12.6
30	29	23,514	-59.3		29	13.5
25	29	24,657	-58.8		29	14.7
20	29	26,057	-58.8		29	16.7
15	28	27,866	-58.5		29	17.3
10	22	30,418	-56.5		27	23.8
7	9	32,661	-55.7			

ALBUQUERQUE, N. MEX. — 840 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	1,619	-4.3	-13.7	01	1.5
1000	31	222				
950	31	631				
900	31	1,072				
850	31	1,527				
800	31	2,010	-.3	-13.2	31	4.6
750	31	2,524	-2.0	-14.7	30	7.5
700	31	3,072	-4.2	-17.4	30	9.4
650	31	3,651	-6.7	-21.1	30	11.2
600	31	4,276	-9.4	-23.7	30	13.5
550	31	4,939	-13.1	-27.8	30	15.5
500	31	5,664	-18.0	-31.4	30	18.3
450	31	6,439	-23.2	-36.0	30	19.0
400	31	7,296	-29.7	-41.6	29	20.1
350	31	8,235	-37.2	-47.4	30	20.9
300	31	9,282	-45.3		30	22.9
250	31	10,475	-54.1		30	23.5
200	31	11,884	-59.6		28	23.9
175	31	12,719	-59.7		28	23.9
150	31	13,691	-60.7		28	23.3
125	31	14,811	-62.6		28	20.4
100	31	16,177	-65.5		28	18.2
80	31	17,534	-64.9		28	12.7
70	30	18,350	-63.9		29	9.8
60	30	19,296	-62.5		29	6.5
50	30	20,424	-60.4		32	4.8
40	30	21,817	-59.4		35	3.5
30	29	23,625	-56.9		03	5.3
25	29	24,792	-55.9		03	6.4
20	27	26,202	-55.1		03	7.1
15	25	28,042	-53.8		02	8.1
10	10	30,617	-53.7			
7						

AMARILLO, TEXAS — 891 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	[illegible]	-1.5	-9.6	26	3.6
1000	31	165				
950	31	595				
900	31	1,023				
850	31	1,478	5.0	-8.3	27	7.2
800	31	1,971	3.4	-10.5	29	7.4
750	31	2,491	.8	-12.9	28	8.8
700	31	3,043	-2.4	-15.4	28	9.6
650	31	3,627	-5.5	-19.0	28	12.7
600	31	4,251	-9.5	-23.2	28	13.3
550	31	4,915	-13.9	-28.0	28	15.5
500	31	5,635	-18.6	-32.2	28	17.4
450	31	6,407	-24.1	-36.8	28	18.6
400	31	7,260	-30.5	-42.0	29	20.0
350	31	8,194	-37.2	-46.8	29	21.9
300	31	9,244	-44.7		29	23.8
250	31	10,441	-52.8		28	25.7
200	31	11,658	-58.4		28	27.2
175	31	12,701	-58.1		28	29.[illegible]
150	30	13,671	-59.0		28	26.4
125	30	14,846	-62.0		27	24.2
100	29	16,183	-64.0		27	20.7
80	29	17,544	-64.5		28	15.5
70	28	18,361	-63.6		27	12.0
60	28	19,309	-62.4		28	7.7
50	26	20,439	-61.2		29	5.1
40	25	21,828	-59.1		31	3.2
30	25	23,637	-57.3		35	3.8
25	24	24,789	-56.6		01	4.8
20	23	26,214	-55.5		36	6.3
15	20	28,058	-54.0		34	8.9
10	12	30,668	-51.7			
7						

ANCHORAGE, ALASKA — 1001 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	45	-14.2	-18.2	01	1.4
1000	31	49			01	2.5
950	31	448	-7.5	-13.8	01	4.4
900	31	866	-7.4	-14.7	03	4.0
850	31	1,310	-7.0	-16.2	05	4.1
800	31	1,777	-11.0	-18.3	07	3.4
750	31	2,270	-13.5	-21.2	07	1.7
700	31	2,7[illegible]3	-16.2	-24.1	06	.3
650	31	3,344	-19.6	-27.4	01	1.1
600	31	3,937	-23.5	-31.3	34	.8
550	31	4,564	-28.0	-35.3	31	.6
500	31	5,246	-32.9	-37.9	29	.5
450	31	5,977	-38.2	-44.5	27	.8
400	31	6,781	-43.8	-42.[illegible]	27	1.3
350	31	7,665	-49.9		29	1.9
300	31	8,662	-54.4		26	3.1
250	31	9,821	-56.7		27	6.0
200	31	11,243	-53.9		26	10.6
175	31	12,104	-52.5		26	11.7
150	31	13,102	-51.5		26	13.1
125	31	14,295	-51.2		26	15.3
100	31	15,739	-50.1		27	16.4
80	31	17,199	-49.3		27	19.3
70	31	18,074	-48.9		27	20.7
60	31	19,090	-47.6		27	21.9
50	31	20,293	-47.5		28	23.1
40	31	21,769	-47.1		28	26.3
30	30	23,677	-46.4		28	29.0
25	30	24,888	-46.2		29	31.0
20	29	26,363	-46.5		29	34.1
15	23	28,252	-47.9		30	34.2
10	14	31,012	-45.6			
7						

* ANNETTE, ALASKA — 1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	37	1.5	-3.0	13	2.3
1000	31	51			14	2.3
950	31	461	-1.4	-5.1	15	5.1
900	31	891	-4.1	-7.1	17	6.9
850	31	1,340	-6.6	-9.3	19	8.2
800	31	1,812	-9.3	-11.8	20	8.8
750	31	2,307	-12.4	-16.5	21	7.6
700	31	2,832	-15.8	-21.0	22	8.7
650	31	3,388	-19.3	-25.2	22	8.9
600	31	3,979	-22.8	-29.4	23	9.3
550	31	4,611	-27.0	-33.7	24	9.7
500	31	5,294	-31.8	-38.5	25	10.8
450	31	6,030	-36.8	-41.3	26	12.4
400	31	6,839	-42.2	-43.6	26	14.5
350	31	7,732	-47.4		26	11.6
300	31	8,740	-51.9		28	13.5
250	31	9,915	-53.7		29	15.1
200	31	11,350	-52.6		29	16.1
175	31	12,214	-51.7		28	16.0
150	31	13,214	-51.5		28	16.0
125	30	14,394	-51.4		29	15.1
100	30	15,842	-51.2		29	15.5
80	29	17,291	-50.8		29	16.5
70	29	18,160	-5[illegible].4		30	16.1
60	28	19,166	-49.7		29	15.4
50	28	20,359	-49.5		30	15.8
40	27	21,819	-49.2		30	17.2
30	26	23,706	-49.3		31	18.0
25	25	24,896	-49.8		31	20.0
20	25	26,355	-50.1		32	22.2
15	22	28,231	-50.9		33	23.0
10	16	30,887	-49.9		33	24.6
7	8	33,307	-49.0			

ATHENS, GEORGIA — 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	246	3.1	.8	30	1.3
1000	31	172				
950	31	589	6.2	-1.0	26	4.3
900	31	1,034	5.8	-4.6	27	7.1
850	30	1,506	4.6	-5.5	27	9.7
800	30	1,999	2.7	-7.0	26	11.2
750	30	2,518	.8	-10.7	26	13.5
700	30	3,071	-1.6	-14.4	26	15.2
650	30	3,654	-4.2	-17.4	26	16.8
600	30	4,286	-7.9	-20.2	26	20.2
550	30	4,952	-12.2	-24.4	26	23.7
500	30	5,679	-16.9	-29.5	26	26.1
450	30	6,450	-22.4	-33.7	26	27.3
400	30	7,317	-28.7	-39.4	26	30.3
350	30	8,258	-35.8	-44.4	26	33.5
300	30	9,313	-43.3		26	38.3
250	30	10,516	-51.7		26	42.5
200	30	11,938	-58.2		26	44.9
175	30	12,776	-58.9		26	44.9
150	30	13,740	-60.7		26	41.8
125	29	14,863	-63.3		26	35.3
100	29	16,226	-66.0		26	31.3
80	29	17,575	-67.0		26	25.0
70	29	18,380	-66.4		26	18.9
60	28	19,318	-65.3		27	15.2
50	28	20,432	-63.4		27	12.9
40	28	21,812	-60.6		28	8.1
30	28	23,616	-57.6		29	7.5
25	28	24,770	-55.8		28	7.5
20	23	26,210	-53.9		29	7.9
15	12	28,108	-50.3			
10						
7						

* BARROW, ALASKA — 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	8	-24.6	-28.6	14	1.3
1000	31	90			17	1.3
950	31	476	-16.6	-19.1	21	2.0
900	31	879	-15.7	-18.6	24	2.8
850	31	1,309	-16.3	-20.0	24	3.8
800	31	1,765	-17.7	-23.0	25	5.0
750	31	2,247	-19.5	-25.6	26	5.4
700	31	2,757	-22.4	-28.6	27	5.8
650	31	3,295	-25.5	-32.2	26	6.7
600	31	3,875	-29.2	-35.6	26	7.3
550	31	4,489	-33.4	-39.7	26	8.2
500	31	5,155	-37.8	-40.[illegible]	27	9.1
450	31	5,873	-42.5	-40.1	27	9.7
400	31	6,662	-47.7		27	11.0
350	31	7,534	-53.0		27	11.4
300	31	8,516	-58.0		27	12.1
250	31	9,656	-60.7		26	12.2
200	30	11,046	-59.3		26	13.7
175	30	11,884	-58.4		26	15.2
150	30	12,855	-57.9		26	16.4
125	30	14,003	-58.0		26	19.1
100	30	15,409	-58.2		27	23.9
80	30	16,814	-58.0		27	27.6
70	30	17,654	-58.0		27	31.2
60	30	18,625	-57.9		27	35.5
50	27	19,797	-57.3		27	39.7
40	26	21,201	-56.8		27	45.6
30	26	23,026	-55.8		28	54.7
25	22	24,234	-53.9		28	59.4
20	19	25,661	-51.4		28	66.7
15	13	27,623	-46.3		28	73.8
10	8	30,342	-41.7			
7						

BARTER IS., ALASKA — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	30	15	-23.9	-26.8	25	1.8
1000	30	97			26	2.7
950	30	486	-16.5	-18.[illegible]	27	5.[illegible]
900	30	866	-15.[illegible]	-19.1	28	6.0
850	30	1,318	-15.6	-20.2	28	5.7
800	30	1,774	-17.1	-21.7	29	5.4
750	30	2,26[illegible]	-19.3	-24.5	29	4.8
700	30	2,767	-21.9	-27.[illegible]	29	4.7
650	30	3,3[illegible]8	-24.6	-31.5	29	6.2
600	30	3,8[illegible]9	-28.4	-34.9	30	7.1
550	30	4,5[illegible]3	-32.6	-38.6	30	8.2
500	30	5,173	-37.2	-40.[illegible]	30	9.1
450	30	5,832	-41.7	-42.8	30	10.4
400	30	6,686	-46.9		30	11.0
350	30	7,561	-52.0		30	13.3
300	30	8,548	-56.8		29	13.1
250	30	9,635	-59.3		29	14.0
200	30	11,035	-58.6		28	14.3
175	30	11,935	-57.5		28	15.3
150	30	12,910	-56.9		28	16.8
125	30	14,065	-56.7		28	19.7
100	30	15,478	-57.3		28	23.0
80	30	16,88[illegible]	-57.3		29	26.5
70	30	17,732	-57.3		29	29.4
60	29	18,716	-57.2		29	33.[illegible]
50	29	19,869	-57.2		28	37.3
40	29	21,280	-57.2		29	41.4
30	29	23,103	-56.4		28	47.1
25	26	24,293	-55.1		29	52.[illegible]
20	22	25,769	-53.4		29	58.8
15	16	27,694	-50.2			
10						
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BETHEL, ALASKA — 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	29	39	-13.4	-15.5	08	1.4
1000	29	65			31	1.4
950	29	463	-8.2	-11.5	07	.9
900	29	881	-9.8	-14.[illegible]	24	.6
850	29	1,324	-10.1	-17.1	27	3.1
800	29	1,790	-12.0	-20.8	27	3.8
750	29	2,290	-14.8	-23.2	25	3.9
700	29	2,800	-18.0	-26.5	25	4.1
650	29	3,346	-21.4	-30.1	25	4.1
600	29	3,936	-25.3	-34.1	23	3.5
550	29	4,570	-29.4	-38.8	24	3.3
500	29	5,237	-34.2	-42.2	25	4.2
450	29	5,962	-39.4	-44.[illegible]	24	5.0
400	29	6,764	-44.7		23	5.8
350	29	7,646	-50.4		22	6.5
300	29	8,640	-55.7		24	6.4
250	27	9,797	-58.1		25	8.3
200	27	11,213	-54.2		24	10.8
175	27	12,073	-52.7		24	12.2
150	27	13,072	-51.3		24	14.1
125	27	14,259	-50.4		24	15.1
100	27	15,719	-49.2		24	17.4
80	27	17,188	-49.0		25	19.4
70	27	18,069	-47.2		25	1[illegible].4
60	27	19,091	-46.7		25	[illegible]
50	27	20,302	-45.6		26	23.6
40	26	21,791	-44.3		26	24.[illegible]
30	26	23,723	-43.5		27	27.3
25	26	24,950	-43.4		27	28.[illegible]
20	26	26,450	-43.9		27	28.[illegible]
15	25	28,390	-44.2		28	32.4
10	22	31,126	-42.7		28	34.9
7	10	33,579	-42.0			

BISMARCK, N. DAK. — 954 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	535	-12.4	-17.0	33	1.6
1000	31	143				
950	31	539			29	2.4
900	31	955	-7.5	-11.2	29	5.3
850	31	1,401	-6.0	-12.1	30	7.7
800	31	1,875	-7.6	-14.9	30	9.6
750	31	2,370	-1[illegible].0	-17.5	31	11.3
700	31	2,904	-12.5	-19.5	30	13.0
650	31	3,461	-15.2	-22.1	30	15.2
600	31	4,069	-18.6	-24.5	30	16.9
550	31	4,705	-22.3	-27.9	30	19.2
500	31	5,406	-26.9	-32.3	30	20.8
450	31	6,151	-32.1	-36.3	30	23.6
400	31	6,990	-38.4	-41.4	30	26.7
350	31	7,886	-44.8		29	28.5
300	31	8,901	-51.8		29	31.3
250	31	10,070	-56.3		29	31.6
200	31	11,485	-55.8		29	28.4
175	31	12,338	-54.4		29	28.4
150	31	13,327	-54.1		29	24.8
125	30	14,498	-54.8		29	22.3
100	30	15,921	-55.8		29	22.4
80	26	17,350	-56.4		29	17.4
70	28	18,136	-56.2		30	14.8
60	28	19,175	-56.4		30	14.2
50	28	20,332	-56.2		30	14.0
40	27	21,754	-56.3		31	13.0
30	25	23,574	-56.3		32	13.9
25	22	24,729	-56.6		33	15.7
20	19	26,159	-57.1		33	17.4
15	14	29,023	-57.2		33	16.8
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BOISE, IDAHO — 918 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	868	1.2	-2.1	12	2.6
1000	31	177				
950	31	594			14	2.2
900	31	1,031	2.5	-3.2	14	2.2
850	31	1,492	.6	-5.2	25	3.6
800	31	1,976	-2.5	-7.2	27	7.4
750	31	2,496	-5.8	-9.4	27	10.0
700	31	3,024	-8.7	-12.8	28	11.6
650	31	3,593	-11.6	-16.7	29	13.0
600	31	4,206	-14.6	-20.3	29	15.7
550	31	4,855	-18.6	-25.0	28	17.8
500	31	5,566	-23.2	-29.1	28	20.1
450	31	6,323	-28.5	-34.4	28	22.7
400	31	7,164	-34.6	-39.7	28	25.0
350	31	8,084	-41.4	-42.7	29	28.6
300	31	9,115	-48.6		29	32.2
250	31	10,295	-55.5		29	35.3
200	31	11,705	-58.4		29	33.3
175	30	12,546	-57.1		29	28.9
150	30	13,524	-56.7		29	24.6
125	30	14,677	-58.2		29	21.8
100	30	16,078	-59.3		29	18.2
80	30	17,475	-58.9		29	13.[illegible]
70	30	18,312	-58.9		30	10.2
60	29	19,279	-57.8		31	9.0
50	28	20,435	-56.0		33	7.7
40	28	21,856	-55.1		34	7.5
30	26	23,698	-54.4		36	9.4
25	24	24,870	-53.6		01	11.1
20	22	26,306	-52.5		01	15.6
15	19	28,162	-51.3		01	17.4
10	8	30,837	-45.8			
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* BOOTHVILLE, LA. — 1020 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	1	10.7	9.3	01	1.7
1000	31	169	12.1	8.6	06	1.8
950	31	595	10.6	5.1	14	1.1
900	31	1,048	9.6	1.8	24	2.3
850	31	1,522	9.0	-1.3	26	5.6
800	31	2,023	7.0	-2.6	26	7.4
750	31	2,550	4.4	-7.3	26	8.4
700	31	3,110	1.7	-12.1	26	9.7
650	31	3,710	-1.4	-15.8	26	11.6
600	31	4,338	-4.9	-19.0	26	13.3
550	31	5,007	-9.1	-23.6	26	15.3
500	31	5,748	-13.9	-28.3	26	16.6
450	31	6,531	-19.6	-33.3	26	18.1
400	31	7,404	-25.9	-37.8	26	21.2
350	31	8,357	-33.1	-43.0	26	23.4
300	31	9,423	-41.1	-47.5	26	26.7
250	31	10,639	-49.6		26	29.5
200	31	12,070	-58.0		26	33.8
175	31	12,906	-60.6		26	34.1
150	31	13,860	-62.9		26	32.6
125	31	14,974	-66.1		26	29.8
100	29	16,319	-69.3		26	25.3
80	29	17,643	-70.9		26	19.3
70	27	18,431	-70.4		26	14.1
60	26	19,338	-68.7		27	9.9
50	25	20,447	-66.6		26	7.2
40	24	21,813	-61.6		29	6.2
30	23	23,661	-58.3		[illegible]	3.9
25	23	24,755	-55.7		28	5.7
20	23	26,165	-53.3		27	6.4
15	23	28,048	-50.6		27	11.1
10	20	30,728	-43.9		26	24.1
7	14	33,151	-38.5		26	34.8
5	6	35,476	-36.3			

* BROWNSVILLE, TEXAS — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	7	11.7	9.4	32	.8
1000	31	143	13.0	9.6	01	.2
950	31	593	11.9	8.2	16	3.7
900	31	1,047	10.7	3.9	17	4.6
850	31	1,523	10.0	-.6	18	4.2
800	31	2,026	9.1	-4.2	21	3.7
750	31	2,557	6.9	-7.8	23	5.1
700	31	3,124	4.0	-11.0	24	6.3
650	31	3,718	.2	-14.7	25	8.1
600	31	4,361	-3.6	-19.2	25	8.9
550	31	5,038	-7.8	-22.9	24	11.1
500	31	5,778	-12.8	-28.7	24	13.3
450	31	6,565	-18.3	-33.1	25	15.9
400	31	7,443	-25.8	-39.4	25	18.9
350	31	8,398	-32.5	-44.3	24	21.9
300	31	9,466	-40.8	-50.[illegible]	24	24.9
250	31	10,683	-49.6		25	30.0
200	30	12,115	-57.9		25	36.0
175	30	12,950	-60.9		25	32.7
150	30	13,902	-63.3		25	29.9
125	30	15,014	-66.8		25	27.2
100	30	16,390	-70.6		25	23.7
80	30	17,677	-71.6		25	18.7
70	29	18,457	-70.[illegible]		25	14.4
60	29	19,373	-69.5		26	9.6
50	27	20,472	-66.4		26	7.[illegible]
40	27	21,834	-63.[illegible]		26	4.[illegible]
30	26	23,628	-58.[illegible]		27	3.5
25	24	24,753	-55.4		26	4.[illegible]
20	16	26,215	-52.5		26	4.7
15	15	28,0[illegible]	-49.4		27	8.3
10	14	30,776	-44.[illegible]		26	18.6
7	11	33,201	-41.3		25	12.6
5	9	35,404	-37.5			

BUFFALO, N. Y. — 98[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	218	-2.3	-5.2	23	4.0
1000	31	131				
950	31	538	-3.1	-7.[illegible]	24	7.3
900	31	965	-5.1	-8.7	25	10.2
850	31	1,413	-6.5	-11.3	26	12.3
800	31	1,846	-8.1	-14.6	26	13.7
750	31	2,386	-9.4	-17.2	27	14.6
700	31	2,917	-11.7	-21.3	27	16.7
650	31	3,481	-14.1	-23.5	27	18.2
600	31	4,087	-17.1	-26.[illegible]	27	19.2
550	31	4,735	-2[illegible].7	-29.6	27	20.8
500	31	5,435	-25.0	-34.4	27	23.2
450	31	6,189	-30.1	-39.4	27	26.6
400	31	7,023	-36.1	-43.7	27	28.2
350	31	7,938	-42.2	-47.6	27	28.9
300	31	8,966	-48.6		26	31.8
250	31	10,151	-53.6		27	34.7
200	31	11,577	-55.8		27	38.5
175	22	12,427	-55.5		27	28.5
150	22	13,410	-55.5		27	25.7
125	28	14,566	-56.9		27	22.8
100	28	15,975	-58.1		27	22.0
80	27	17,377	-55.[illegible]		27	12.2
70	26	18,212	-59.7		27	13.5
60	26	19,173	-60.2		27	14.4
50	26	20,312	-57.5		28	12.8
40	24	21,706	-59.8		29	11.1
30	22	23,504	-57.0		29	10.[illegible]
25	22	24,646	-59.2		30	1[illegible].2
20	21	26,091	-59.1		30	15.6
15	17	27,857	-58.2			
10	12	30,468	-52.7			
7	5	32,770	-51.[illegible]			
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* + CANTON ISLAND — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point +	Wind Direction	Wind Speed
SURFACE	31	4	2[illegible].9	22.7	08	7.6
1000	31	75	27.9	20.4	08	8.6
950	31	515	22.3	16.4	08	11.2
900	31	995	19.4	12.6	08	14.1
850	31	1,455	17.1	7.5	08	14.2
800	31	2,001	16.0	-.2	08	11.6
750	31	2,541	14.1	-4.0	09	7.9
700	31	3,126	11.1	-8.0	10	5.0
650	31	3,734	7.4	-9.5	09	3.7
600	31	4,394	3.3	-13.9	07	2.4
550	31	5,089	-.7	-19.2	10	1.8
500	31	5,8[illegible]	-4.6	-22.4	16	2.8
450	31	6,672	-8.7	-26.8	19	3.6
400	31	7,578	-14.6	-32.0	24	3.5
350	31	8,575	-21.[illegible]	-38.[illegible]	24	5.0
300	31	9,601	-30.5	-45.5	22	5.3
250	31	10,960	-40.5	-53.6	22	8.6
200	31	12,439	-5[illegible]		23	11.8
175	31	13,298	-59.7		24	12.1
150	31	14,21[illegible]	-67.[illegible]		27	13.1
125	31	15,315	-74.9		29	15.6
100	31	16,6[illegible]	-82.[illegible]		29	11.2
80	31	17,84[illegible]	-77.[illegible]		27	6.8
70	31	18,671	-70.[illegible]		26	8.0
60	31	19,563	-6[illegible].7		27	8.7
50	31	20,655	-63.3		27	10.4
40	31	22,03[illegible]	-59.5		27	1[illegible].4
30	31	23,664	-56.1		27	15.1
25	31	25,01[illegible]	-54.1		27	13.7
20	31	26,4[illegible]	-51.3		28	7.6
15	30	28,337	-47.6		09	9.6
10	25	31,029	-43.8		09	30.3
7	17	33,446	-39.1		09	38.[illegible]
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NOTE: Beginning with this January 1967 publication the Dew Point temperature replaces Relative Humidity in the above table; wind direction is in tens of degrees and wind speed in meters per second.

+ Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Also, see reference notes at end of table.

RAWINSONDE DATA

Average monthly values

• CAPE HATTERAS, N. C. — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	4	7.5	4.8	32	2.8
1000	30	159	9.3	4.1	31	3.3
950	30	579	7.6	1.5	29	4.3
900	30	1,028	5.4	-.5	26	6.4
850	30	1,494	3.7	-3.3	26	9.2
800	30	1,985	2.0	-7.4	26	11.6
750	30	2,507	.0	-11.4	26	14.3
700	30	3,056	-2.1	-15.1	26	17.5
650	30	3,637	-4.8	-17.9	26	19.3
600	30	4,268	-8.2	-21.7	26	21.7
550	30	4,929	-12.3	-25.2	26	24.1
500	30	5,661	-17.1	-29.3	26	26.5
450	29	6,433	-22.6	-34.3	26	29.8
400	29	7,293	-28.8	-39.5	26	30.4
350	29	8,236	-35.3	-43.8	26	33.5
300	29	9,294	-42.6		26	35.2
250	29	10,502	-51.3		27	37.3
200	29	11,927	-58.1		27	38.5
175	29	12,767	-58.7		27	35.9
150	29	13,732	-60.2		27	35.8
125	28	14,862	-62.6		27	35.4
100	28	16,230	-64.6		27	29.9
80	27	17,534	-66.0		26	22.1
70	26	18,305	-65.1		27	19.5
60	25	19,332	-64.3		27	16.7
50	25	20,451	-62.4		27	14.4
40	25	21,836	-60.3		28	9.5
30	24	23,640	-57.7		29	7.1
25	24	24,703	-56.4		28	7.0
20	21	26,215	-54.2		28	9.9
15	20	28,073	-51.3		27	15.8
10	17	30,745	-46.4		26	28.8
7	12	33,170	-41.0			
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• CARIBOU, MAINE — 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	191	-11.4	-14.0	29	2.0
1000	31	124				
950	31	519	-10.7	-13.0	27	4.4
900	31	935	-11.2	-13.3	28	7.1
850	31	1,373	-11.6	-14.3	28	8.3
800	31	1,837	-12.4	-16.1	28	10.2
750	31	2,333	-13.8	-19.7	28	12.1
700	31	2,852	-15.3	-21.1	27	15.1
650	31	3,406	-17.4	-23.9	27	16.7
600	31	4,007	-20.5	-27.7	27	19.6
550	31	4,642	-24.2	-30.9	26	22.7
500	31	5,335	-28.8	-34.4	26	25.3
450	31	6,075	-33.8	-38.8	26	28.7
400	31	6,900	-39.2	-43.9	27	33.4
350	31	7,803	-45.2		26	35.6
300	30	8,824	-49.8		26	40.6
250	30	10,006	-52.5		26	37.1
200	30	11,439	-54.7		26	35.7
175	29	12,289	-54.2		26	32.0
150	27	13,274	-53.8		26	29.3
125	27	14,442	-55.0		26	25.0
100	27	15,862	-56.4		26	21.9
80	24	17,267	-57.8		26	20.9
70	24	18,107	-58.3		26	19.4
60	23	19,074	-59.6		26	17.9
50	23	20,213	-59.8		27	18.3
40	22	21,602	-60.4		26	16.2
30	21	23,392	-61.3		26	19.6
25	21	24,521	-61.9		27	19.9
20	21	25,808	-62.9		27	23.9
15	18	27,664	-62.6		27	25.1
10	17	30,169	-59.0		27	33.0
7	11	32,415	-56.0			
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CHARLESTON, S. C. — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	13	5.7	3.1	30	.9
1000	31	170	9.5	5.2	28	1.2
950	31	595	9.3	2.3	26	3.5
900	31	1,044	8.1	-1.6	26	6.4
850	31	1,514	6.5	-3.7	26	8.8
800	31	2,011	4.7	-6.7	25	11.1
750	31	2,533	2.6	-10.5	26	12.6
700	31	3,091	-.1	-14.1	26	15.4
650	31	3,677	-3.1	-17.8	26	17.3
600	31	4,311	-6.8	-20.1	26	19.1
550	31	4,979	-11.1	-23.9	26	21.2
500	31	5,711	-15.9	-28.5	26	23.1
450	31	6,489	-21.6	-34.3	26	25.8
400	31	7,357	-27.8	-39.5	26	29.5
350	31	8,303	-34.6	-44.6	26	32.6
300	31	9,363	-42.3	-46.7	26	37.4
250	31	10,572	-51.0		26	39.6
200	31	11,996	-57.8		26	44.0
175	31	12,835	-59.3		26	44.5
150	31	13,794	-61.7		26	42.1
125	31	14,916	-64.5		26	37.0
100	31	16,268	-67.6		26	31.6
80	31	17,606	-68.7		26	24.0
70	31	18,405	-68.4		26	19.7
60	30	19,332	-66.2		27	14.6
50	30	20,442	-64.1		27	10.2
40	30	21,819	-60.9		28	7.0
30	29	23,625	-57.5		28	6.2
25	29	24,781	-55.7		28	7.6
20	28	26,205	-53.6		27	11.4
15	26	28,064	-50.7		27	16.5
10	20	30,736	-46.6		26	26.0
7	8	33,062	-42.2			
5						

• COLD BAY, ALASKA — 1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	30	-3.0	-5.5	28	1.2
1000	30	55			34	3.4
950	30	463	-2.8	-8.0	29	3.2
900	30	890	-5.3	-10.2	29	3.2
850	30	1,337	-7.6	-14.5	29	3.4
800	30	1,806	-10.1	-18.2	32	3.5
750	30	2,297	-12.7	-21.8	31	3.9
700	30	2,825	-16.0	-25.2	31	5.5
650	30	3,376	-19.4	-27.5	30	4.4
600	30	3,970	-23.2	-30.7	29	4.5
550	30	4,594	-27.8	-34.8	28	5.4
500	30	5,279	-32.6	-39.2	28	4.7
450	30	6,006	-37.9	-42.6	27	6.2
400	30	6,815	-43.6		26	3.5
350	30	7,701	-49.2		25	3.9
300	30	8,701	-53.8		26	6.6
250	30	9,867	-54.6		25	10.3
200	30	11,308	-50.9		25	12.0
175	30	12,179	-50.1		25	13.6
150	30	13,187	-49.3		24	14.4
125	30	14,384	-48.9		25	15.3
100	30	15,854	-48.3		25	14.5
80	30	17,326	-47.2		25	14.7
70	28	18,219	-46.8		25	13.4
60	28	19,244	-45.1		25	12.4
50	28	20,443	-44.4		25	12.7
40	27	21,962	-43.6		26	11.4
30	27	23,894	-43.6		27	10.8
25	26	25,116	-43.7		28	8.5
20	26	26,614	-44.3		28	8.3
15	21	28,528	-44.1		30	8.7
10	17	31,272	-42.9		31	8.7
7	12	33,619	-43.6		32	12.4
5	5	35,938	-41.5			

COLUMBIA, MO. — 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	238	-2.3	-6.3	24	1.8
1000	31	143				
950	31	552	-1.4	-7.3	25	6.5
900	31	984	-.1	-10.0	27	9.3
850	31	1,442	-.5	-11.4	28	10.8
800	31	1,925	-2.0	-13.9	28	12.3
750	31	2,437	-3.9	-16.8	28	12.9
700	31	2,979	-6.7	-19.4	28	14.7
650	31	3,551	-9.8	-23.1	28	16.7
600	31	4,169	-13.4	-26.5	28	18.1
550	31	4,818	-17.5	-29.7	28	19.2
500	31	5,534	-22.3	-33.4	27	21.3
450	31	6,294	-27.5	-38.1	27	24.9
400	31	7,138	-33.5	-43.4	27	27.6
350	31	8,064	-39.7	-46.9	27	30.4
300	31	9,103	-46.6		27	33.1
250	31	10,293	-53.8		27	35.0
200	31	11,711	-57.5		27	33.3
175	31	12,656	-56.9		27	32.5
150	31	13,532	-57.3		27	31.3
125	31	14,682	-58.4		27	27.5
100	31	16,078	-60.8		27	22.8
80	31	17,464	-61.4		28	17.7
70	31	18,291	-61.4		28	14.9
60	31	19,246	-61.2		28	12.1
50	29	20,382	-60.3		28	9.8
40	28	21,775	-59.5		31	7.3
30	28	23,581	-58.0		30	7.7
25	27	24,728	-57.7		31	8.8
20	24	26,139	-57.4		32	9.8
15	15	27,985	-56.2		30	13.1
10	7	30,644	-50.8			

DAYTON, OHIO — 982 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	297	-1.1	-4.2	22	3.2
1000	31	148				
950	31	565	-1.7	-4.4	23	6.2
900	31	987	-2.3	-6.2	25	9.6
850	31	1,441	-2.8	-9.0	26	11.6
800	31	1,921	-4.4	-11.9	26	14.0
750	31	2,426	-6.0	-16.0	26	16.1
700	31	2,966	-8.3	-19.4	26	18.4
650	31	3,534	-11.5	-22.4	26	19.8
600	31	4,148	-14.8	-24.9	26	22.5
550	31	4,797	-18.3	-28.6	26	24.8
500	31	5,508	-22.9	-33.2	26	26.2
450	31	6,266	-28.0	-38.1	26	29.4
400	31	7,109	-33.6	-42.3	26	32.9
350	31	8,034	-40.0	-46.8	26	37.7
300	31	9,071	-47.1		26	40.6
250	31	10,259	-54.0		26	45.1
200	31	11,679	-56.9		26	42.2
175	31	12,524	-57.0		26	38.8
150	31	13,501	-57.2		26	36.4
125	31	14,650	-58.5		26	30.5
100	30	16,046	-60.3		26	25.2
80	30	17,434	-61.0		26	21.6
70	30	18,263	-61.0		27	18.7
60	30	19,219	-60.9		27	15.9
50	29	20,354	-60.6		27	13.3
40	28	21,744	-60.3		28	11.3
30	28	23,541	-59.2		28	11.3
25	25	24,691	-58.6		28	11.6
20	24	26,094	-57.7		28	13.8
15	19	27,905	-57.5		28	17.5
10	12	30,522	-51.7			

DEL RIO, TEXAS — 983 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	314	5.9	-2.2	08	1.1
1000	31	175				
950	31	600	8.6	-.6	15	2.6
900	31	1,044	8.2	-3.6	19	2.1
850	31	1,517	8.5	-7.4	25	2.6
800	31	2,016	6.8	-10.2	27	4.1
750	31	2,547	4.5	-12.0	27	6.7
700	31	3,104	1.7	-14.2	26	8.0
650	31	3,692	-1.8	-17.8	26	10.9
600	31	4,330	-5.5	-22.3	26	12.9
550	31	4,997	-9.9	-26.8	26	15.2
500	31	5,737	-15.0	-31.1	26	17.1
450	31	6,517	-20.7	-35.4	26	16.3
400	31	7,385	-27.8	-41.0	26	18.0
350	31	8,331	-35.0	-46.7	25	20.8
300	31	9,390	-42.6		25	24.3
250	31	10,527	-51.1		26	27.6
200	31	12,024	-58.0		26	28.2
175	31	12,862	-59.3		26	28.0
150	31	13,823	-61.7		26	26.8
125	31	14,942	-64.9		26	25.0
100	31	16,291	-68.3		26	21.2
80	31	17,626	-69.0		26	16.9
70	31	18,425	-68.0		26	12.6
60	31	19,354	-66.1		27	9.1
50	28	20,464	-64.2		27	7.5
40	28	21,839	-61.0		29	2.9
30	27	23,642	-57.4		33	1.9
25	24	24,791	-56.2		34	1.8
20	23	26,212	-54.1		30	3.0
15	22	28,066	-51.8		28	6.4
10	14	30,732	-47.2		27	10.1

DENVER, COLO. — 834 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,611	-2.9	-9.5	20	2.0
1000	31	152				
950	31	568				
900	31	1,007				
850	31	1,443				
800	31	1,949	1.6	-11.1	27	4.1
750	31	2,468	-.9	-13.8	29	7.6
700	31	3,014	-4.5	-16.2	29	10.4
650	31	3,590	-8.5	-18.7	30	13.5
600	31	4,210	-12.5	-21.5	30	16.5
550	31	4,867	-16.4	-26.1	30	17.3
500	31	5,580	-21.4	-30.4	30	17.5
450	31	6,345	-26.9	-36.0	30	17.6
400	31	7,187	-33.2	-40.6	30	19.2
350	31	8,113	-40.1	-45.1	30	22.5
300	31	9,150	-46.9		30	24.9
250	31	10,339	-54.2		30	29.5
200	31	11,751	-58.5		29	26.9
175	31	12,593	-57.7		29	26.6
150	31	13,565	-59.0		28	26.2
125	30	14,717	-58.3		28	24.4
100	30	16,116	-60.7		28	15.2
80	30	17,501	-60.9		29	12.0
70	30	18,330	-60.9		29	10.6
60	3[illegible]	19,294	-59.5		29	6.4
50	30	20,440	-58.3		31	6.4
40	28	21,846	-57.3		33	6.6
30	27	23,669	-55.7		35	6.4
25	26	24,833	-55.1		35	8.4
20	25	26,265	-54.1		36	11.8
15	21	28,120	-53.2		36	15.1
10	7	30,733	-49.0			

DODGE CITY, KANS. — 924 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	731	-3.1	-7.7	27	2.0
1000	31	157				
950	31	569			29	3.3
900	31	1,000	3.1	-7.1	29	3.3
850	31	1,465	3.8	-9.7	29	5.2
800	31	1,955	1.8	-12.7	29	7.2
750	31	2,473	-1.4	-15.3	29	8.2
700	31	3,019	-4.9	-17.7	28	9.6
650	31	3,597	-8.3	-20.3	28	11.6
600	31	4,215	-12.0	-24.0	29	13.5
550	31	4,871	-16.3	-28.4	28	14.5
500	31	5,586	-21.2	-32.7	28	15.9
450	31	6,350	-26.8	-37.4	28	18.0
400	31	7,195	-33.1	-43.1	28	20.1
350	31	8,121	-39.8	-46.0	29	22.2
300	31	9,159	-46.7		28	24.0
250	31	10,348	-53.7		28	27.4
200	31	11,766	-57.6		27	29.8
175	31	12,609	-57.5		27	28.9
150	31	13,581	-58.4		28	27.9
125	31	14,722	-60.1		27	23.6
100	30	16,109	-62.3		28	19.1
80	29	17,482	-62.9		28	14.3
70	29	18,395	-62.3		27	10.2
60	28	19,254	-61.4		28	8.7
50	28	20,386	-60.3		28	5.9
40	28	21,779	-59.3		32	5.2
30	28	23,585	-57.9		34	6.0
25	27	24,736	-56.7		34	6.1
20	26	26,149	-56.1		35	7.2
15	17	27,977	-55.7		34	8.7
10	9	30,560	-53.8			

EL PASO, TEXAS — 885 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,193	-.7	-13.7	34	1.4
1000	31	198				
950	31	618				
900	31	1,057				
850	31	1,519	5.8	-9.8	32	2.6
800	31	2,014	4.5	-11.3	29	4.9
750	31	2,535	2.5	-13.6	29	6.8
700	31	3,094	.0	-16.5	28	8.4
650	31	3,681	-3.0	-20.4	29	9.5
600	31	4,315	-6.7	-23.6	29	9.9
550	31	4,982	-10.9	-27.6	29	11.5
500	31	5,717	-15.9	-31.9	29	13.8
450	31	6,498	-21.9	-36.4	30	14.4
400	31	7,360	-28.7	-41.7	29	15.3
350	31	8,303	-36.0	-46.7	30	16.1
300	31	9,355	-44.3		30	17.4
250	31	10,555	-52.9		29	19.6
200	31	11,975	-58.1		28	21.0
175	31	12,813	-59.5		28	22.3
150	31	13,776	-60.8		28	21.9
125	31	14,902	-63.9		27	20.8
100	31	16,260	-66.3		27	17.0
80	31	17,607	-67.4		27	13.4
70	31	18,414	-65.6		28	10.6
60	31	19,354	-64.2		28	8.5
50	31	20,475	-62.3		29	4.9
40	29	21,857	-60.1		35	2.0
30	27	23,665	-57.2		01	2.4
25	23	24,820	-55.8		36	3.4
20	20	26,252	-53.8		02	3.1
15	16	28,105	-51.5		01	3.6

ELY, NEV. — 810 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,908	-6.6	-10.9	19	4.0
1000	31	231				
950	31	642				
900	31	1,076				
850	31	1,527				
800	31	2,004	-2.7	-8.5	21	3.5
750	31	2,515	-3.0	-11.3	23	2.4
700	31	3,062	-5.4	-14.8	28	6.8
650	31	3,637	-7.8	-18.2	28	11.2
600	31	4,261	-11.0	-20.9	29	14.1
550	31	4,920	-15.1	-24.3	29	16.4
500	31	5,640	-19.7	-28.3	29	18.2
450	31	6,409	-25.1	-33.3	29	19.4
400	31	7,262	-31.0	-38.6	29	22.9
350	30	8,202	-38.0	-43.6	29	24.2
300	30	9,245	-46.4		29	26.4
250	30	10,431	-55.7		29	29.4
200	30	11,829	-61.5		29	28.6
175	29	12,658	-60.1		29	27.0
150	29	13,619	-60.0		29	23.3
125	29	14,753	-61.7		29	19.9
100	29	16,127	-63.4		29	15.5
80	29	17,498	-62.9		31	10.4
70	29	18,322	-62.1		31	7.4
60	29	19,276	-60.9		31	5.5
50	29	20,413	-59.3		35	5.5
40	28	21,817	-57.8		01	5.7
30	25	23,644	-56.0		03	8.7
25	24	24,8[illegible]7	-55.[illegible]		03	10.1
20	24	26,237	-53.7		03	12.4
15	24	28,0[illegible]	-53.0		03	14.4
10	17	30,713	-51.1		02	15.6
7	9	32,960	-50.6			
5	6	35,204	-47.8			

EMPALME, MEXICO — 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	12	10.2	1.6	33	2.6
1000	31	144	15.1	1.4	34	3.3
950	31	578	16.8	-2.5	01	3.8
900	31	1,039	14.9	-5.7	02	2.1
850	31	1,521	12.6	-8.3	31	.6
800	31	2,027	10.0	-11.2	26	1.4
750	31	2,556	7.0	-13.4	27	1.6
700	31	3,123	3.7	-16.1	30	2.7
650	31	3,717	.3	-19.5	31	4.3
600	31	4,358	-4.0	-22.8	30	5.8
550	31	5,032	-8.8	-26.7	30	7.1
500	31	5,768	-14.3	-31.1	30	8.2
450	31	6,552	-20.7	-35.8	30	8.2
400	31	7,418	-27.4	-40.9	31	10.1
350	31	8,364	-34.7	-47.1	31	11.6
300	31	9,422	-42.8		30	12.7
250	31	10,627	-51.5		29	15.3
200	30	12,056	-58.0		28	19.9
175	30	12,842	-60.3		28	19.9
150	30	13,849	-62.5		28	19.1
125	30	14,964	-65.9		27	17.7
100	30	16,308	-69.1		27	17.3
80	30	17,638	-67.5		27	12.5
70	29	18,436	-68.1		27	10.4
60	29	19,368	-65.7		28	7.7
50	29	20,478	-64.1		28	5.4
40	29	21,855	-61.1		31	3.8
30	28	23,657	-57.6		35	2.6
25	28	24,813	-55.6		36	2.2
20	28	26,241	-53.3		34	2.7
15	27	28,107	-50.7		30	4.1
10	19	30,773	-46.8		27	14.2

* FAIRBANKS, ALASKA — 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	135	-25.3	-29.8	31	.3
1000	31	1[illegible]4			[illegible]	.4
950	31	460	-16.4	-18.5	08	2.4
900	31	892	-14.0	-18.1	11	2.4
850	31	1,327	-13.2	-18.7	07	1.0
800	31	1,788	-14.7	-21.1	04	1.0
750	31	2,273	-16.6	-23.6	32	1.6
700	31	2,792	-18.8	-26.9	29	2.1
650	31	3,338	-21.6	-30.1	28	2.6
600	31	3,926	-25.6	-33.6	30	2.8
550	31	4,550	-29.9	-37.7	30	3.9
500	31	5,225	-34.5	-41.6	30	5.7
450	31	5,954	-39.1	-44.4	31	5.3
400	31	6,754	-44.3		30	6.3
350	31	7,637	-50.4		28	6.4
300	31	8,630	-56.1		27	8.1
250	31	9,780	-58.4		27	9.1
200	31	11,190	-56.1		27	12.4
175	31	12,043	-54.3		27	14.0
150	31	13,035	-53.4		27	15.4
125	31	14,268	-53.1		27	17.3
100	31	15,[illegible]	-52.3		27	20.3
80	31	17,[illegible]4	-51.8		27	23.9
70	31	17,959	-51.6		27	26.4
60	31	18,960	-51.2		28	29.1
50	31	20,147	-50.7		28	32.6
40	[illegible]	21,[illegible]6	-50.[illegible]		28	35.2
30	[illegible]	23,444	-49.3		29	41.0
25	26	24,721	-48.5		29	44.8
20	23	26,196	-47.4		29	48.5
15	21	28,[illegible]4	-46.6		30	51.8
10	12	30,[illegible]	-43.7			

FLINT, MICH. — 986 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	234	-3.9	-7.5	23	2.9
1000	31	124				
950	31	530	-4.5	-8.1	24	6.2
900	31	954	-6.1	-9.6	26	8.3
850	31	1,401	-6.7	-12.6	27	9.3
800	31	1,874	-7.5	-14.5	26	12.0
750	31	2,374	-9.0	-16.9	26	14.5
700	31	2,907	-11.6	-19.5	27	16.0
650	31	3,473	-14.2	-21.4	27	17.7
600	31	4,076	-17.7	-24.7	27	19.9
550	31	4,719	-21.5	-29.3	27	21.4
500	31	5,419	-25.9	-33.7	27	23.0
450	31	6,167	-31.2	-38.0	27	26.1
400	31	6,999	-37.0	-42.4	26	29.3
350	31	7,911	-43.0	-45.5	26	33.6
300	31	8,936	-49.2		26	37.1
250	31	10,117	-53.9		26	38.1
200	31	11,542	-55.2		26	35.0
175	31	12,395	-54.9		26	33.7
150	31	13,380	-55.0		26	29.4
125	31	14,541	-56.4		27	27.6
100	31	15,950	-58.2		27	22.7
80	31	17,351	-59.0		27	18.6
70	31	18,188	-59.2		27	17.7
60	31	19,144	-59.3		27	16.5
50	30	20,294	-59.3		28	14.8
40	30	21,691	-59.3		28	15.6
30	29	23,491	-59.1		29	14.1
25	26	24,636	-58.8		29	15.6
20	26	26,043	-58.2		30	14.4
15	24	27,941	-58.[illegible]		29	15.9
10	14	30,472	-5[illegible].7			
7	6	32,993	-4[illegible].1			

FORT WORTH, TEXAS — 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	180	4.5	-2.3	23	1.4
1000	31	172			30	1.4
950	31	596	6.7	-3.4	24	4.2
900	31	1,036	6.7	-7.0	26	5.5
850	31	1,505	6.0	-10.2	28	6.0
800	31	2,001	4.6	-12.7	28	6.7
750	31	2,528	2.2	-14.3	27	9.2
700	31	3,079	-.8	-16.3	27	11.7
650	31	3,667	-3.8	-18.7	26	13.9
600	31	4,296	-8.0	-22.6	26	15.2
550	31	4,962	-12.4	-26.4	26	16.9
500	31	5,689	-17.3	-30.7	26	19.2
450	31	6,466	-22.8	-35.5	26	21.2
400	31	7,324	-29.6	-40.4	26	24.2
350	31	8,262	-36.8	-46.6	26	27.6
300	31	9,312	-44.6		26	27.8
250	31	10,511	-52.8		26	31.1
200	31	11,929	-58.7		26	32.4
175	31	12,767	-59.1		26	31.6
150	31	13,731	-60.6		26	29.3
125	31	14,858	-63.6		26	24.6
100	30	16,219	-65.8		26	20.4
80	26	17,573	-65.9		27	15.8
70	26	18,384	-65.6		27	12.4
60	26	19,324	-64.1		27	8.3
50	26	20,443	-62.6		28	5.1
40	26	21,826	-60.2		31	3.4
30	26	23,631	-57.5		34	2.7
25	24	24,791	-56.3		35	3.7
20	23	26,212	-55.0		32	3.9
15	20	28,064	-53.5		30	5.8
10	11	30,705	-48.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT. 931 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	696	-11.8	-15.5	08	1.3
1000	31	140				
950	31	538			27	3.7
900	31	954	-6.4	-10.6	28	3.6
850	31	1,403	-4.7	-10.6	29	8.9
800	31	1,878	-6.5	-12.2	29	10.6
750	31	2,381	-9.3	-14.2	30	13.6
700	31	2,912	-12.1	-17.7	30	15.2
650	31	3,477	-15.6	-21.3	30	16.8
600	31	4,075	-19.2	-25.4	29	17.5
550	31	4,719	-23.0	-30.2	29	19.5
500	31	5,410	-27.4	-34.9	29	20.9
450	31	6,155	-32.5	-38.2	29	24.3
400	31	6,980	-38.4	-42.2	29	26.5
350	31	7,884	-45.3		29	28.4
300	31	8,898	-51.8		29	31.9
250	31	10,063	-56.9		30	32.9
200	31	11,476	-56.0		30	28.6
175	30	12,333	-54.8		30	26.9
150	30	13,318	-54.7		30	23.8
125	29	14,489	-54.5		29	22.2
100	28	15,914	-55.6		30	19.7
80	26	17,337	-56.3		30	16.9
70	26	18,183	-56.7		30	16.5
60	26	19,160	-56.2		31	13.2
50	26	20,319	-55.8		31	13.1
40	26	21,741	-55.2		32	14.2
30	26	23,572	-55.9		33	16.1
25	26	24,731	-55.7		33	19.4
20	24	26,150	-55.4		33	21.4
15	22	27,997	-55.4		34	25.0
10	14	30,630	-53.4			
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* GRAND JUNCTION, COLO. 856 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,474	-6.6	-9.5	11	1.1
1000	31	240				
950	31	645				
900	31	1,076				
850	31	1,525			12	1.5
800	31	2,004	-3.7	-10.5	17	2.4
750	31	2,511	-4.5	-11.5	23	3.9
700	31	3,054	-7.1	-14.2	27	7.4
650	31	3,626	-9.7	-17.3	28	10.2
600	31	4,244	-13.1	-21.3	29	12.4
550	31	4,896	-17.1	-24.8	29	15.1
500	31	5,612	-21.2	-28.9	30	18.1
450	31	6,379	-26.5	-33.4	30	20.5
400	31	7,223	-32.3	-38.8	30	23.5
350	31	8,152	-39.0	-43.9	30	26.1
300	31	9,192	-46.7		30	30.2
250	30	10,381	-54.4		30	32.0
200	28	11,781	-59.0		30	29.0
175	27	12,617	-58.4		29	25.0
150	26	13,588	-58.0		29	22.3
125	26	14,732	-59.9		29	19.7
100	26	16,119	-62.2		29	14.5
80	26	17,492	-63.1		29	12.6
70	26	18,317	-61.1		29	9.5
60	25	19,278	-60.4		30	6.8
50	25	20,416	-59.2		31	5.7
40	24	21,821	-57.6		36	4.7
30	21	23,639	-56.3		01	7.1
25	20	24,799	-55.6		02	8.8
20	18	26,219	-54.6		02	11.2
15	16	28,064	-54.0		02	13.5
10	13	30,700	-50.1		02	18.9
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* GREAT FALLS, MONT. 882 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,123	-3.5	-8.4	23	3.9
1000	31	120				
950	31	534				
900	31	967				
850	31	1,417	-1.7	-10.4	24	10.4
800	31	1,897	-3.8	-11.0	26	10.8
750	31	2,403	-6.8	-12.6	27	13.1
700	31	2,940	-10.2	-15.5	28	16.0
650	31	3,507	-13.5	-19.0	28	17.4
600	31	4,113	-17.3	-22.5	29	18.6
550	31	4,759	-21.6	-26.9	29	19.9
500	31	5,457	-26.0	-32.2	29	21.7
450	31	6,207	-31.2	-36.7	29	23.8
400	31	7,037	-37.3	-40.8	29	26.4
350	31	7,946	-44.1		29	28.6
300	31	8,965	-51.0		28	32.5
250	31	10,134	-56.6		29	35.1
200	30	11,548	-56.5		29	30.5
175	29	12,396	-55.7		29	26.8
150	27	13,377	-54.9		29	25.2
125	26	14,542	-54.0		28	23.7
100	23	15,969	-55.8		29	18.9
80	23	17,387	-56.4		29	17.6
70	22	18,224	-56.5		30	15.6
60	22	19,203	-55.5		30	13.9
50	22	20,365	-56.1		31	13.9
40	22	21,788	-54.6		32	12.9
30	21	23,634	-54.3		33	13.1
25	20	24,805	-54.2		34	15.0
20	19	26,247	-53.9		35	16.1
15	16	28,106	-52.6		34	21.2
10	13	30,777	-49.3		36	25.9
7	7	33,156	-45.9			
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GREEN BAY, WIS. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	210	-7.8	-10.6	29	2.3
1000	31	118				
950	31	518	-7.3	-9.3	28	4.4
900	31	937	-7.9	-12.1	29	5.1
850	31	1,383	-7.2	-13.7	29	6.5
800	31	1,854	-8.7	-15.3	28	8.6
750	31	2,351	-10.4	-18.1	28	10.8
700	31	2,882	-12.7	-20.8	28	12.7
650	31	3,443	-15.5	-23.8	28	14.0
600	31	4,045	-18.7	-26.9	28	15.8
550	31	4,687	-22.8	-30.4	28	17.5
500	31	5,381	-27.4	-35.4	27	19.4
450	31	6,127	-32.6	-38.5	27	21.8
400	31	6,952	-38.8	-43.2	27	22.9
350	31	7,856	-45.1		27	25.1
300	31	8,875	-49.9		27	28.7
250	31	10,058	-53.0		27	28.8
200	31	11,492	-54.3		27	28.8
175	31	12,350	-53.6		27	26.6
150	31	13,342	-53.6		27	25.0
125	31	14,511	-55.0		27	23.0
100	30	15,939	-57.0		28	21.3
80	30	17,350	-57.9		28	18.3
70	30	18,189	-58.5		28	16.8
60	30	19,160	-58.1		28	16.1
50	29	20,310	-58.3		28	14.5
40	29	21,711	-59.0		29	13.7
30	28	23,519	-58.6		30	13.6
25	28	24,665	-58.9		30	16.5
20	27	26,063	-59.5		30	16.9
15	21	27,873	-60.3		30	18.9
10	8	30,443	-53.8			
7						
5						

GREENSBORO, N. C. 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	273	1.8	.2	24	1.0
1000	31	170				
950	31	588	4.7	-1.4	26	5.1
900	31	1,027	3.6	-4.3	26	8.0
850	31	1,499	1.8	-7.0	27	10.2
800	31	1,978	.9	-11.1	27	11.8
750	31	2,495	-.7	-13.1	27	14.3
700	31	3,045	-3.2	-15.7	26	16.3
650	31	3,624	-6.1	-18.7	27	18.5
600	31	4,252	-9.3	-22.6	27	20.3
550	31	4,914	-13.8	-25.9	27	22.8
500	31	5,637	-18.7	-30.7	27	25.3
450	31	6,410	-24.0	-35.9	26	29.1
400	31	7,265	-29.8	-40.2	26	31.3
350	31	8,204	-36.7	-45.3	26	34.3
300	31	9,255	-44.3		26	36.6
250	31	10,455	-52.6		27	35.2
200	31	11,875	-58.6		27	32.8
175	31	12,712	-58.8		27	33.7
150	31	13,678	-60.0		27	33.0
125	31	14,810	-62.0		27	31.7
100	31	16,180	-64.3		27	26.3
80	30	17,539	-65.8		27	22.1
70	29	18,350	-65.1		27	20.9
60	29	19,293	-63.5		27	13.9
50	29	20,414	-62.2		28	10.8
40	29	21,799	-60.3		28	10.4
30	29	23,600	-58.3		29	9.3
25	29	24,750	-56.7		28	11.1
20	29	26,169	-55.2		28	14.4
15	29	28,013	-53.2		28	18.8
10	26	30,639	-50.2		27	26.2
7	13	32,972	-47.1		27	38.5
5	9	35,207	-43.6			

GUAM, MARIANA IS. 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	111	24.8	22.5	07	4.5
1000	31	98				
950	31	549	22.1	20.1	07	11.4
900	31	1,016	19.3	17.0	08	11.4
850	31	1,508	17.3	11.4	09	10.4
800	31	2,025	15.6	4.5	09	10.2
750	31	2,572	13.5	-1.9	09	10.2
700	31	3,148	10.6	-6.6	09	9.0
650	31	3,764	7.5	-12.1	09	9.6
600	31	4,417	3.9	-16.2	09	9.9
550	31	5,117	.1	-20.5	08	9.2
500	31	5,877	-4.5	-24.4	09	9.3
450	31	6,696	-9.6	-27.9	09	9.5
400	31	7,599	-15.3	-32.8	09	8.3
350	31	8,594	-22.2	-38.3	10	8.1
300	31	9,708	-30.6	-44.9	09	6.7
250	31	10,975	-40.7	-53.5	10	4.8
200	31	12,453	-53.1		13	5.6
175	31	13,299	-60.2		13	5.6
150	31	14,242	-67.9		13	6.5
125	31	15,314	-76.3		13	8.8
100	30	16,572	-84.0		12	11.2
80	27	17,812	-82.1		11	8.4
70	27	18,567	-77.0		10	3.5
60	27	19,469	-70.6		25	1.3
50	26	20,564	-65.7		26	4.4
40	25	21,930	-62.0		27	5.0
30	23	23,730	-57.5		28	5.0
25	23	24,887	-54.9		27	3.1
20	23	26,324	-51.6		07	1.3
15	22	28,203	-48.6		07	5.4
10	20	30,893	-45.4		09	14.8
7	13	33,254	-44.2			
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HILO, HAWAII 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	11	18.9	16.0	26	1.4
1000	31	141	20.1	15.9	30	2.1
950	31	586	17.1	13.8	02	1.9
900	31	1,042	14.1	10.9	04	1.6
850	31	1,524	11.2	8.3	06	2.0
800	31	2,029	9.3	1.3	07	2.0
750	31	2,567	7.9	-5.5	06	1.8
700	31	3,131	5.5	-10.2	07	1.8
650	31	3,733	2.5	-14.4	05	2.1
600	31	4,377	-1.0	-17.5	03	1.5
550	31	5,061	-5.4	-21.5	36	1.3
500	31	5,808	-10.1	-25.2	36	2.3
450	31	6,607	-15.6	-29.9	33	3.2
400	31	7,491	-22.0	-35.2	32	4.4
350	31	8,460	-28.9	-41.2	31	4.9
300	31	9,545	-36.7	-47.9	30	6.2
250	31	10,785	-45.2		32	9.0
200	31	12,247	-54.0		32	12.3
175	31	13,094	-58.9		33	13.1
150	30	14,048	-64.2		33	13.8
125	30	15,147	-70.1		34	12.8
100	28	16,456	-74.1		34	9.5
80	28	17,748	-75.5		35	6.3
70	28	18,522	-74.1		01	4.3
60	28	19,430	-69.2		03	1.9
50	28	20,531	-64.6		06	.6
40	28	21,908	-60.5		11	1.0
30	28	23,720	-56.1		36	1.8
25	26	24,883	-54.3		01	1.8
20	25	26,320	-51.9		02	2.5
15	23	28,195	-48.9		11	1.5
10	21	30,874	-45.5		09	3.0
7	15	33,248	-43.1			
5	5	35,479	-41.9			

HUNTINGTON, W. VA. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	246	1.3	-2.3	20	1.8
1000	31	162				
950	31	574	1.2	-3.1	23	6.9
900	31	1,010	-.3	-4.5	25	10.6
850	31	1,466	-1.6	-6.8	26	12.4
800	31	1,948	-2.8	-9.1	26	14.0
750	31	2,455	-4.5	-12.5	26	15.7
700	31	3,001	-6.4	-16.3	26	17.6
650	31	3,574	-9.6	-19.3	26	19.6
600	31	4,193	-12.6	-23.6	26	22.8
550	31	4,851	-16.5	-27.3	26	25.0
500	31	5,564	-21.2	-31.3	26	27.6
450	31	6,332	-26.0	-36.4	26	30.1
400	31	7,179	-32.0	-40.7	26	33.8
350	31	8,110	-38.4	-46.3	26	36.3
300	31	9,153	-46.0		26	38.2
250	31	10,347	-53.0		26	41.5
200	31	11,767	-58.2		26	42.3
175	30	12,606	-57.6		26	39.9
150	30	13,579	-58.2		26	37.6
125	30	14,723	-59.8		26	32.3
100	30	16,110	-62.0		26	26.9
80	30	17,487	-62.6		27	22.1
70	30	18,311	-62.2		27	18.8
60	30	19,265	-61.8		27	14.2
50	29	20,395	-61.0		27	11.4
40	28	21,785	-59.8		28	10.0
30	27	23,587	-58.3		28	9.3
25	25	24,742	-56.9		29	9.7
20	25	26,158	-56.1		28	11.5
15	20	27,990	-54.9		29	12.5
10	9	30,627	-52.7			
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* INTERNATIONAL FALLS, MINN. 971 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	360	-17.4	-21.9	30	.9
1000	31	137				
950	31	525	-15.3	-18.1	29	1.1
900	31	933	-12.4	-14.7	29	3.0
850	31	1,370	-11.7	-15.8	30	5.4
800	31	1,834	-12.3	-17.4	30	7.1
750	31	2,320	-14.3	-20.5	30	8.5
700	31	2,847	-16.9	-23.2	29	10.7
650	31	3,395	-19.6	-26.1	29	12.1
600	31	3,992	-22.7	-29.6	29	13.8
550	31	4,619	-26.2	-33.1	29	15.3
500	31	5,310	-30.9	-37.6	29	17.0
450	31	6,044	-36.1	-40.3	29	20.0
400	31	6,860	-41.6	-41.9	29	21.8
350	31	7,753	-47.5		29	24.3
300	31	8,760	-52.4		29	27.5
250	31	9,932	-54.6		29	27.3
200	31	11,359	-54.6		29	27.9
175	31	12,215	-53.6		29	26.6
150	30	13,204	-53.5		28	24.6
125	30	14,374	-54.1		28	24.1
100	30	15,803	-55.3		29	22.5
80	28	17,232	-56.0		29	20.0
70	28	18,081	-56.2		29	20.1
60	28	19,059	-56.5		29	18.4
50	27	20,211	-57.7		30	17.0
40	25	21,632	-57.8		30	18.5
30	25	23,442	-58.9		30	19.9
25	23	24,581	-59.2		30	21.4
20	21	25,989	-59.8		31	20.4
15	18	27,773	-60.4		31	24.3
10	10	30,261	-61.4			
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JACKSON, MISS. 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	94	5.3	2.8	26	.4
1000	31	177	5.9	2.2	24	.7
950	31	599	6.4	-.6	25	3.6
900	31	1,042	6.1	-2.8	26	5.7
850	31	1,510	5.7	-5.1	26	8.0
800	31	2,005	4.0	-7.1	27	10.2
750	31	2,526	2.1	-10.8	27	11.8
700	31	3,082	-.4	-13.9	27	13.5
650	31	3,667	-3.7	-18.1	27	15.3
600	31	4,299	-7.1	-22.0	26	17.0
550	31	4,965	-11.3	-25.4	26	18.9
500	31	5,697	-16.3	-29.9	26	21.8
450	31	6,476	-21.8	-34.9	26	25.6
400	31	7,339	-28.1	-39.6	26	28.3
350	31	8,284	-35.1	-45.8	26	32.1
300	31	9,339	-43.3		26	34.2
250	31	10,544	-51.8		26	38.4
200	31	11,964	-58.6		26	41.5
175	31	12,800	-59.8		26	41.3
150	31	13,758	-61.9		26	39.8
125	31	14,880	-64.1		26	35.4
100	30	16,236	-67.3		26	28.9
80	30	17,577	-67.6		26	21.7
70	30	18,380	-67.4		26	16.6
60	30	19,311	-65.9		27	12.3
50	28	20,421	-64.3		28	8.1
40	28	21,794	-61.6		29	4.0
30	28	23,589	-58.5		30	4.2
25	28	24,737	-57.3		31	4.0
20	26	26,161	-54.8		29	5.3
15	24	28,007	-52.5		28	8.5
10	21	30,644	-48.0		27	16.2
7	6	32,993	-44.3			
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* JACKSONVILLE, FLA. 1022 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	9.2	7.4	32	1.1
1000	31	197	12.6	8.5	01	1.1
950	31	616	11.7	5.4	23	2.8
900	31	1,069	10.4	2.8	24	5.7
850	31	1,544	8.7	-1.1	25	7.3
800	31	2,044	6.5	-5.1	25	9.0
750	31	2,569	4.6	-8.3	26	11.1
700	31	3,132	1.8	-11.6	26	12.6
650	31	3,721	-1.5	-16.0	26	14.8
600	31	4,359	-5.0	-20.2	26	16.9
550	31	5,031	-9.1	-23.3	26	18.6
500	31	5,769	-14.1	-28.6	26	20.8
450	31	6,554	-19.5	-33.3	26	23.8
400	31	7,426	-25.6	-39.0	26	28.3
350	31	8,381	-32.5	-43.8	26	32.1
300	31	9,448	-40.8	-49.1	26	36.0
250	31	10,666	-49.4		26	37.6
200	31	12,100	-57.3		26	41.7
175	31	12,939	-59.7		26	43.9
150	31	13,898	-62.0		26	40.3
125	31	15,017	-65.3		26	35.9
100	31	16,362	-69.4		26	32.8
80	31	17,687	-70.7		26	21.9
70	31	18,478	-70.4		26	16.4
60	29	19,398	-68.5		26	12.0
50	29	20,497	-65.9		27	8.8
40	28	21,866	-61.1		27	6.4
30	27	23,669	-57.0		27	5.3
25	27	24,827	-55.1		28	5.0
20	25	26,266	-52.2		27	7.5
15	23	28,145	-48.4		26	13.1
10	21	30,837	-44.2		25	23.8
7	11	33,213	-41.0			
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JOHN F. KENNEDY INT. AP., NY 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	1.3	-3.9	29	2.7
1000	31	150	1.5	-4.2	29	4.0
950	31	567	.2	-5.6	29	7.7
900	31	996	-1.2	-8.4	28	9.6
850	31	1,451	-2.6	-12.3	28	10.4
800	31	1,931	-3.9	-14.8	27	12.0
750	31	2,438	-6.2	-17.5	27	14.6
700	30	2,977	-8.7	-19.2	27	16.6
650	30	3,550	-11.4	-22.4	27	20.6
600	30	4,159	-14.7	-24.7	27	23.5
550	30	4,813	-18.1	-27.7	27	27.4
500	30	5,520	-22.4	-31.2	27	30.2
450	30	6,283	-27.5	-36.1	27	33.2
400	30	7,126	-33.2	-41.4	27	36.1
350	30	8,052	-39.9	-44.9	27	40.7
300	30	9,091	-46.5		27	43.6
250	30	10,283	-53.2		27	44.9
200	30	11,704	-57.5		27	41.4
175	30	12,548	-57.2		27	36.8
150	30	13,521	-57.9		27	34.5
125	29	14,672	-59.1		27	31.1
100	29	16,065	-60.8		27	28.0
80	28	17,451	-61.1		27	24.1
70	27	18,277	-61.0		27	21.8
60	27	19,235	-61.1		27	19.3
50	27	20,369	-60.6		27	15.7
40	25	21,762	-60.1		27	11.8
30	22	23,566	-59.0		29	8.9
25	22	24,710	-58.5		30	8.9
20	21	26,117	-57.6		30	8.8
15	18	27,943	-56.5		29	10.2
10	14	30,536	-52.5			
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JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	3	24.3	19.7	09	6.3
1000	31	125	23.4	19.3	08	7.7
950	31	569	19.7	17.3	08	9.3
900	31	1,036	16.4	13.1	08	9.7
850	31	1,521	13.5	8.8	08	8.3
800	31	2,031	12.3	-.6	08	6.9
750	31	2,567	10.3	-6.0	08	6.6
700	31	3,142	7.8	-11.1	08	6.3
650	31	3,745	4.6	-13.5	07	5.5
600	31	4,397	.8	-17.3	06	6.4
550	31	5,083	-3.4	-21.4	05	7.3
500	31	5,838	-7.9	-25.8	04	7.4
450	31	6,642	-12.5	-30.4	02	7.3
400	31	7,541	-18.4	-35.8	01	9.6
350	31	8,526	-24.7	-41.8	36	10.5
300	31	9,630	-32.7	-48.5	35	12.4
250	31	10,889	-42.0		34	13.1
200	31	12,364	-53.1		32	11.6
175	30	13,211	-59.4		32	12.4
150	30	14,161	-66.2		33	11.5
125	30	15,248	-72.7		34	9.8
100	29	16,536	-78.9		35	7.7
80	26	17,795	-80.4		01	4.5
70	26	18,553	-77.3		02	3.1
60	26	19,449	-71.9		36	1.7
50	26	20,538	-66.2		31	1.7
40	26	21,908	-60.9		27	2.8
30	26	23,718	-56.0		30	3.4
25	26	24,882	-53.7		32	3.2
20	26	26,324	-51.4		01	2.3
15	24	28,205	-48.9		05	2.9
10	22	30,873	-45.8		10	8.0
7	15	33,261	-44.2		10	11.3
5	6	35,586	-40.5			

KEY WEST, FLA. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	24	3	20.4	17.9	07	2.7
1000	24	169	19.5	17.1	08	3.8
950	24	603	16.8	13.8	11	4.6
900	24	1,069	14.4	9.9	14	3.4
850	24	1,552	12.6	6.6	17	2.9
800	24	2,059	9.9	2.4	21	2.5
750	24	2,592	7.6	-2.2	23	2.9
700	24	3,159	5.2	-6.9	24	3.8
650	24	3,755	1.9	-11.2	25	6.6
600	24	4,402	-2.0	-13.9	26	7.4
550	24	5,083	-5.7	-18.6	26	9.7
500	24	5,831	-10.1	-22.8	26	11.1
450	24	6,624	-15.7	-27.9	26	12.7
400	24	7,511	-22.6	-33.7	26	15.6
350	24	8,476	-30.3	-39.8	26	19.0
300	24	9,553	-38.5	-47.2	26	21.2
250	24	10,782	-47.8		26	23.2
200	24	12,222	-56.7		26	29.0
175	23	13,062	-59.8		26	30.6
150	23	14,018	-63.0		26	29.5
125	22	15,130	-67.4		26	26.1
100	22	16,458	-72.5		25	19.9
80	22	17,760	-74.6		26	11.5
70	22	18,538	-73.8		27	8.2
60	22	19,442	-70.9		26	6.3
50	22	20,533	-67.1		27	5.1
40	22	21,896	-62.0		28	4.7
30	22	23,706	-56.2		30	4.5
25	22	24,872	-53.6		29	5.4
20	21	26,318	-50.2		27	7.5
15	20	28,212	-45.7		25	10.3
10	11	30,923	-42.1			
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KING SALMON, ALASKA 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	15	-14.0	-17.6	07	1.4
1000	31	46			02	2.3
950	31	445	-7.3	-11.8	02	3.0
900	31	865	-7.7	-14.3	01	2.7
850	31	1,310	-8.7	-16.9	36	2.6
800	31	1,778	-11.0	-20.0	34	2.4
750	31	2,268	-13.4	-23.7	32	2.7
700	31	2,794	-16.5	-26.9	32	3.2
650	31	3,343	-19.9	-29.9	33	3.6
600	31	3,938	-23.9	-33.6	33	3.6
550	31	4,564	-28.1	-37.2	33	3.8
500	31	5,245	-33.0	-42.0	33	4.4
450	31	5,974	-38.0	-44.9	32	4.9
400	31	6,782	-43.6		31	4.6
350	31	7,669	-49.0		31	4.1
300	31	8,669	-53.8		29	5.1
250	31	9,833	-55.6		27	8.2
200	31	11,264	-52.7		26	11.0
175	31	12,129	-51.2		26	12.6
150	31	13,132	-50.3		26	13.9
125	31	14,324	-49.4		26	14.2
100	31	15,790	-48.4		26	16.3
80	31	17,259	-48.3		26	16.5
70	31	18,138	-48.0		26	16.6
60	31	19,157	-47.0		27	17.9
50	30	20,373	-45.8		27	18.0
40	28	21,865	-44.5		27	18.3
30	28	23,705	-44.5		28	20.7
25	28	25,015	-45.0		28	20.2
20	24	26,508	-45.0		29	21.6
15	18	28,448	-44.5		30	21.2
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

+ KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	30	26.3	24.0	06	3.0
1000	31	81	25.9	23.6	06	3.9
950	31	527	22.9	20.4	06	8.4
900	31	1,004	20.3	16.8	07	9.1
850	31	1,497	17.8	12.6	07	9.1
800	31	2,015	15.3	8.9	07	8.8
750	31	2,557	12.8	4.2	07	8.8
700	31	3,138	9.7	.0	07	9.0
650	31	3,746	6.2	-3.3	07	9.7
600	31	4,403	2.5	-6.2	08	10.9
550	31	5,098	-1.1	-10.5	08	11.1
500	31	5,859	-5.2	-16.1	09	11.5
450	31	6,677	-9.9	-21.5	09	12.4
400	31	7,581	-15.5	-27.5	10	11.8
350	31	8,575	-22.3	-34.0	10	11.6
300	31	9,689	-30.7	-42.1	10	11.1
250	31	10,956	-41.1		11	11.0
200	31	12,432	-53.5		11	13.8
175	31	13,276	-60.8		11	15.4
150	31	14,217	-68.5		10	17.6
125	31	15,287	-76.8		10	20.2
100	31	16,547	-81.7		10	18.1
80	30	17,808	-76.8		08	3.5
70	30	18,584	-72.5		29	3.4
60	30	19,500	-67.6		28	6.8
50	30	20,610	-62.8		27	9.0
40	30	21,994	-59.8		27	9.3
30	29	23,805	-56.3		27	8.9
25	29	24,966	-54.6		26	6.6
20	27	26,404	-51.8		24	1.9
15	24	28,279	-50.1		09	9.2
10	18	30,951	-44.3		09	20.4
7	10	33,339	-41.6			
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KOTZEBUE, ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	5	-16.5	-19.7	10	4.2
1000	29	81			11	3.0
950	29	478	-11.3	-14.7	13	3.5
900	29	887	-11.8	-15.3	17	3.0
850	29	1,324	-13.2	-17.7	20	2.1
800	29	1,784	-15.0	-20.0	22	1.9
750	29	2,272	-17.4	-23.3	26	2.9
700	29	2,784	-20.5	-26.7	25	4.4
650	29	3,332	-23.5	-30.7	25	5.8
600	29	3,910	-27.5	-34.9	25	7.1
550	29	4,526	-31.9	-39.0	26	8.2
500	29	5,197	-36.6	-42.7	25	9.2
450	29	5,918	-41.7	-45.0	25	10.0
400	29	6,710	-47.0		26	12.2
350	29	7,583	-52.7		25	13.9
300	29	8,565	-58.0		26	15.2
250	29	9,705	-60.5		25	15.2
200	29	11,107	-56.8		25	13.7
175	29	11,956	-55.5		25	14.9
150	29	12,940	-54.6		25	16.3
125	29	14,108	-54.3		25	17.3
100	29	15,540	-53.8		25	21.8
80	29	16,975	-53.1		26	26.0
70	29	17,837	-52.3		26	28.5
60	28	18,824	-51.9		26	31.2
50	28	20,006	-51.7		26	34.8
40	28	21,458	-50.6		27	39.3
30	28	23,340	-49.2		27	46.1
25	28	24,538	-48.5		27	50.8
20	27	26,036	-46.8		27	54.6
15	20	27,907	-45.4		27	59.8
10	12	30,543	-44.6			
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KWAJALEIN, MARSHALL IS. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	4	26.5	23.3	07	8.3
1000	30	85	26.0	22.9	08	8.9
950	30	537	22.7	20.8	08	10.5
900	30	1,007	19.6	17.3	08	11.0
850	30	1,499	17.2	12.4	08	9.7
800	30	2,015	15.4	7.2	08	8.1
750	30	2,560	13.2	2.1	09	7.2
700	30	3,139	10.5	-3.5	09	7.7
650	30	3,750	7.2	-6.8	09	7.1
600	30	4,404	3.5	-10.8	09	7.1
550	30	5,105	-.4	-14.4	08	8.2
500	30	5,865	-4.4	-19.7	08	9.3
450	30	6,683	-9.3	-24.4	08	8.8
400	30	7,589	-15.0	-30.7	08	7.8
350	30	8,581	-21.7	-37.4	06	4.5
300	30	9,702	-30.2	-44.3	06	2.3
250	30	10,972	-40.7	-55.5	30	.3
200	30	12,450	-53.0		22	1.6
175	30	13,291	-60.1		22	2.1
150	30	14,241	-68.1		24	.9
125	29	15,306	-76.2		03	2.3
100	29	16,573	-83.7		07	7.8
80	26	17,809	-79.7		10	6.6
70	25	18,579	-74.2		25	2.3
60	24	19,486	-69.7		27	7.3
50	23	20,588	-65.3		27	9.3
40	23	21,956	-61.0		28	9.8
30	23	23,765	-57.5		28	7.6
25	23	24,925	-54.7		26	6.5
20	23	26,361	-51.6		07	1.6
15	21	28,235	-49.8		08	11.6
10	20	30,917	-45.2		09	20.6
7	20	33,314	-41.9		09	23.7
5	12	35,609	-38.9		10	22.6
4	6	37,121	-37.5			

LAKE CHARLES, LA. 1021 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	7.9	5.7	05	1.4
1000	31	175	9.4	4.8	07	1.2
950	31	605	8.9	3.0	21	1.6
900	31	1,049	8.1	.7	24	4.0
850	31	1,521	7.3	-2.0	25	5.8
800	31	2,019	5.9	-6.1	25	7.7
750	31	2,547	3.7	-9.9	26	8.6
700	31	3,103	1.1	-15.3	26	10.7
650	31	3,694	-2.0	-18.8	26	11.9
600	31	4,329	-5.5	-22.4	26	14.4
550	31	5,000	-9.6	-26.3	26	16.8
500	31	5,737	-14.5	-30.0	25	18.8
450	31	6,520	-20.3	-34.8	25	20.9
400	31	7,390	-26.9	-39.9	25	23.6
350	31	8,339	-34.2	-45.3	25	26.3
300	31	9,401	-42.1		25	28.6
250	31	10,610	-50.9		25	33.8
200	31	12,035	-58.5		25	37.4
175	31	12,871	-60.1		25	35.9
150	30	13,827	-61.9		26	34.0
125	29	14,944	-64.9		26	32.0
100	29	16,296	-67.9		26	25.2
80	27	17,629	-69.3		26	21.0
70	27	18,428	-68.1		26	17.4
60	27	19,358	-66.3		26	11.8
50	27	20,466	-64.6		26	7.4
40	27	21,839	-61.6		28	4.9
30	27	23,636	-57.9		28	4.3
25	27	24,791	-55.9		28	5.2
20	27	26,216	-54.1		27	7.3
15	26	28,078	-51.5		27	11.0
10	21	30,744	-46.4		27	18.4
7	5	33,111	-41.2			
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4						

LANDER, WYO. 825 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,696	-5.5	-10.6	23	2.4
1000	31	164				
950	31	572				
900	31	1,010				
850	31	1,462				
800	31	1,942	-1.6	-10.3	23	2.4
750	31	2,451	-3.9	-13.5	27	5.2
700	31	2,996	-7.0	-15.6	28	9.6
650	31	3,563	-10.5	-18.6	29	12.7
600	31	4,183	-14.3	-22.4	29	16.5
550	31	4,832	-18.3	-26.9	29	17.3
500	31	5,545	-22.9	-32.6	30	17.8
450	31	6,301	-28.8	-36.9	30	19.5
400	31	7,142	-35.0	-40.9	29	22.6
350	31	8,060	-41.8	-45.6	30	27.0
300	31	9,088	-49.1		30	31.8
250	31	10,265	-56.0		30	33.0
200	31	11,670	-58.9		30	33.5
175	31	12,510	-57.8		30	30.6
150	31	13,484	-57.3		29	25.6
125	31	14,636	-57.8		29	23.0
100	31	16,039	-59.3		29	16.1
80	31	17,436	-59.3		29	14.3
70	31	18,271	-58.9		29	10.7
60	30	19,243	-58.7		30	6.1
50	29	20,387	-57.6		32	4.7
40	28	21,803	-56.6		34	5.3
30	28	23,633	-55.7		36	6.4
25	27	24,794	-55.3		01	10.3
20	25	26,227	-53.4		01	13.7
15	18	28,077	-53.0		36	15.5
10						
7						
5						
4						

* LIHUE KAUAI, HAWAII 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	36	19.5	16.1	04	2.7
1000	31	151	20.4	16.8	04	4.3
950	31	588	17.3	14.9	05	5.4
900	31	1,053	14.0	11.5	05	5.0
850	31	1,534	11.1	8.3	05	4.0
800	31	2,039	9.7	-1.5	06	4.7
750	31	2,570	8.3	-8.7	05	3.3
700	31	3,142	6.1	-11.5	05	2.7
650	31	3,740	3.0	-15.3	02	2.0
600	31	4,390	-.7	-19.5	36	2.5
550	31	5,072	-5.1	-23.3	34	2.5
500	31	5,822	-10.2	-27.1	35	2.5
450	31	6,619	-15.8	-31.6	34	4.2
400	31	7,503	-22.3	-37.2	34	5.1
350	31	8,471	-29.0	-43.9	34	8.5
300	31	9,556	-36.6	-50.0	33	12.5
250	31	10,797	-44.8		34	16.0
200	31	12,259	-53.9		33	17.3
175	31	13,106	-59.0		32	16.9
150	31	14,060	-64.5		32	16.1
125	31	15,156	-70.9		32	13.8
100	31	16,459	-75.6		33	10.0
80	26	17,743	-76.7		33	6.8
70	25	18,515	-73.9		36	3.8
60	25	19,424	-69.8		07	2.2
50	25	20,522	-65.7		06	2.2
40	24	21,893	-60.5		07	3.0
30	24	23,703	-56.3		06	2.9
25	24	24,867	-53.9		06	4.6
20	24	26,305	-52.4		06	5.7
15	23	28,181	-48.7		08	6.2
10	23	30,870	-45.1		11	6.6
7	20	33,270	-40.9		11	5.7
5	19	35,571	-38.3		14	5.2
4	11	37,145	-37.6			

LITTLE ROCK, ARK. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	79	2.5	-.4	23	1.5
1000	31	167	2.9	-2.2	24	2.2
950	31	586	4.0	-2.9	26	6.3
900	31	1,026	4.3	-5.2	26	8.2
850	31	1,491	3.2	-8.7	26	9.3
800	31	1,981	2.0	-11.7	27	10.4
750	31	2,497	-.1	-13.7	27	12.3
700	31	3,051	-2.4	-16.6	27	14.7
650	31	3,635	-5.1	-18.8	27	17.2
600	31	4,262	-8.6	-22.8	27	18.5
550	31	4,926	-13.2	-27.3	27	20.8
500	31	5,651	-18.2	-31.8	26	22.7
450	31	6,419	-23.8	-36.7	26	25.2
400	31	7,278	-30.3	-41.4	26	27.0
350	31	8,215	-37.4	-47.1	26	30.3
300	31	9,264	-44.6		26	34.4
250	31	10,463	-52.6		26	39.1
200	31	11,883	-58.4		26	40.5
175	31	12,723	-58.4		26	39.2
150	31	13,690	-59.4		26	36.8
125	30	14,826	-61.8		26	31.2
100	30	16,197	-64.6		26	25.9
80	29	17,556	-65.1		26	20.1
70	28	18,372	-64.4		27	15.5
60	28	19,315	-63.8		26	11.4
50	27	20,436	-62.1		27	8.3
40	27	21,819	-60.7		29	4.7
30	27	23,619	-57.9		31	4.5
25	24	24,776	-56.5		31	5.4
20	23	26,198	-55.2		31	4.9
15	15	28,057	-52.8		30	5.7
10	7	30,710	-49.1			
7						
5						
4						

MCGRATH, ALASKA 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	103	-24.1	-25.1	07	.1
1000	31	91			04	.8
950	31	476	-15.1	-16.7	06	3.7
900	31	886	-11.2	-15.0	07	5.1
850	31	1,326	-10.9	-16.8	07	3.6
800	31	1,791	-12.4	-18.9	05	2.7
750	31	2,278	-14.5	-21.2	03	2.0
700	31	2,803	-17.3	-23.9	33	1.9
650	31	3,351	-20.8	-27.0	32	2.6
600	31	3,942	-24.7	-30.7	31	2.7
550	31	4,563	-29.1	-35.0	29	3.1
500	31	5,246	-33.5	-38.2	26	3.5
450	31	5,972	-38.4	-41.6	24	4.8
400	31	6,779	-44.1		24	5.6
350	31	7,664	-50.0		23	6.2
300	31	8,658	-55.5		24	7.9
250	31	9,810	-58.2		24	9.3
200	31	11,225	-54.6		25	12.7
175	31	12,083	-53.1		25	13.0
150	30	13,081	-52.3		26	14.2
125	29	14,260	-51.3		26	16.8
100	29	15,712	-50.9		26	19.7
80	29	17,166	-50.0		26	22.4
70	29	18,040	-49.1		26	23.5
60	29	19,054	-48.3		27	26.0
50	28	20,256	-48.2		27	28.1
40	28	21,729	-47.1		27	31.0
30	27	23,629	-46.9		28	33.5
25	25	24,836	-46.9		28	33.7
20	23	26,308	-46.9		28	36.6
15	17	28,195	-47.0		28	39.5
10	7	30,899	-47.7			
7						
5						
4						

* MAJURO, MARSHALL IS. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	3	28.2	23.9	07	6.1
1000	31	82	27.1	22.0	08	7.2
950	31	530	22.9	17.5	08	10.5
900	31	1,004	20.0	14.1	09	11.4
850	31	1,496	17.4	10.7	09	10.2
800	31	2,013	15.4	5.6	09	8.9
750	31	2,558	13.3	-.1	09	7.8
700	31	3,138	10.6	-3.9	09	7.1
650	31	3,750	7.3	-7.0	09	6.7
600	31	4,407	3.4	-10.8	09	6.9
550	31	5,103	-.6	-13.9	09	7.7
500	31	5,865	-4.4	-19.3	08	7.7
450	31	6,689	-8.8	-24.7	07	8.4
400	31	7,594	-14.6	-29.6	07	6.3
350	31	8,593	-21.2	-36.2	05	2.7
300	31	9,713	-29.6	-43.5	29	1.1
250	31	10,988	-39.7	-52.1	24	3.5
200	31	12,473	-52.4		26	4.8
175	30	13,322	-59.5		26	4.1
150	30	14,270	-67.1		29	3.1
125	30	15,349	-75.0		36	4.3
100	30	16,618	-82.7		06	8.1
80	30	17,865	-78.9		08	5.5
70	30	18,639	-72.2		28	3.1
60	30	19,556	-67.3		27	9.6
50	30	20,669	-62.3		27	11.6
40	30	22,060	-58.7		26	11.7
30	30	23,878	-56.2		27	11.4
25	28	25,041	-53.7		27	9.7
20	26	26,484	-51.1		28	2.5
15	26	28,365	-49.1		09	8.6
10	20	31,057	-44.2		09	18.3
7	9	33,465	-41.5			
5	5	35,718	-39.0			
4						

+ MARCUS IS., N. PACIFIC 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	9	22.9	17.9	03	1.8
1000	31	139	21.1	15.0	04	2.2
950	31	581	17.2	11.4	06	.9
900	31	1,040	14.1	8.5	23	1.3
850	31	1,521	11.6	5.1	23	3.6
800	31	2,027	10.4	-1.7	24	6.2
750	31	2,565	9.0	-6.3	25	8.4
700	31	3,133	6.7	-9.9	26	11.8
650	31	3,738	4.4	-13.6	26	14.5
600	31	4,386	.9	-16.7	27	16.4
550	31	5,077	-3.0	-20.0	27	18.3
500	31	5,830	-7.1	-25.2	27	19.8
450	31	6,641	-11.9	-29.4	27	24.1
400	31	7,538	-17.1	-33.9	27	25.7
350	31	8,527	-23.2	-39.4	27	27.6
300	31	9,637	-31.7	-46.6	27	27.7
250	31	10,900	-41.4		28	29.1
200	31	12,378	-52.7		27	29.6
175	30	13,228	-59.2		27	29.7
150	30	14,177	-66.2		27	28.6
125	30	15,262	-73.4		27	25.4
100	30	16,546	-79.4		26	20.4
80	30	17,808	-79.4		26	13.0
70	30	18,571	-75.9		26	8.8
60	30	19,474	-70.2		26	5.4
50	30	20,574	-64.4		22	2.0
40	29	21,955	-59.2		19	1.4
30	29	23,779	-54.5		11	3.8
25	28	24,953	-52.1		10	6.7
20	28	26,407	-49.4		11	7.6
15	24	28,307	-45.1		11	7.0
10	21	31,050	-40.6		10	12.7
7	18	33,500	-38.0		09	20.4
5						
4						

* MEDFORD, OREG. 973 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	401	2.4	.0	15	.5
1000	31	180				
950	31	600	2.3	.6	15	.9
900	31	1,033	2.5	-2.1	18	2.9
850	31	1,495	1.5	-5.4	21	5.3
800	31	1,982	-.6	-7.0	25	7.6
750	31	2,495	-3.1	-9.7	26	11.1
700	30	3,042	-5.9	-14.8	27	12.6
650	30	3,618	-9.2	-18.3	27	14.1
600	30	4,235	-13.2	-21.3	27	16.1
550	30	4,889	-17.3	-25.4	27	17.4
500	30	5,602	-21.8	-29.6	27	19.2
450	30	6,363	-26.7	-34.8	28	21.4
400	30	7,211	-32.7	-39.8	28	24.1
350	30	8,136	-39.6	-44.8	28	25.4
300	30	9,175	-47.6		28	26.8
250	30	10,359	-55.0		29	31.7
200	29	11,771	-59.0		29	29.7
175	27	12,624	-58.7		29	24.6
150	26	13,592	-58.4		29	24.1
125	25	14,737	-59.0		29	19.8
100	24	16,140	-60.9		29	16.0
80	24	17,526	-60.9		30	11.2
70	24	18,357	-59.4		30	9.3
60	24	19,322	-59.0		33	6.4
50	24	20,473	-56.5		34	8.0
40	24	21,895	-54.8		01	8.5
30	23	23,746	-53.0		03	11.6
25	23	24,925	-52.1		03	14.7
20	23	26,374	-50.9		03	17.6
15	21	28,259	-51.1		03	21.3
10	17	30,927	-48.9		03	24.1
7	13	33,324	-45.6		03	26.1

MERIDA, MEXICO 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	11	18.3	17.5	08	2.0
1000	31	164	20.3	18.2	09	4.1
950	31	601	18.0	14.9	12	4.9
900	31	1,069	15.8	10.8	12	4.1
850	31	1,554	13.6	6.7	12	2.7
800	31	2,064	12.1	.5	15	.9
750	31	2,597	9.3	-3.0	18	1.3
700	31	3,172	6.2	-6.7	21	3.3
650	31	3,771	3.0	-12.6	22	4.2
600	31	4,421	-.3	-19.3	22	4.6
550	31	5,106	-4.0	-23.6	24	5.1
500	30	5,860	-8.5	-27.7	24	7.2
450	28	6,665	-14.1	-32.2	24	9.1
400	28	7,555	-20.3	-37.2	25	12.5
350	25	8,526	-28.2	-42.2	25	14.0
300	25	9,613	-36.8	-49.1	25	17.8
250	23	10,846	-46.5		25	20.0
200	22	12,292	-56.5		25	25.3
175	22	13,131	-60.6		24	23.8
150	21	14,084	-64.2		24	24.8
125	19	15,186	-68.3		25	22.6
100	19	16,506	-73.6		24	17.8
80	19	17,803	-74.9		24	9.2
70	18	18,578	-73.7		27	6.6
60	17	19,481	-71.2		28	4.1
50	17	20,570	-67.0		31	5.5
40	16	21,935	-61.7		33	3.6
30	13	23,746	-54.9		02	3.1
25	12	24,925	-51.9		30	3.1
20	9	26,387	-48.9			
15	8	28,293	-46.1			

* MIAMI, FLA. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	4	18.9	16.2	06	.9
1000	31	165	19.2	16.1	10	2.3
950	31	602	16.5	13.0	12	3.8
900	31	1,064	14.0	9.3	15	3.1
850	31	1,546	12.1	5.0	19	2.8
800	31	2,052	9.8	.3	23	3.1
750	31	2,588	7.5	-4.7	25	4.7
700	31	3,153	4.9	-10.2	25	5.7
650	31	3,752	1.6	-14.1	25	7.9
600	31	4,395	-2.3	-18.6	25	9.9
550	31	5,079	-6.5	-23.2	26	11.9
500	31	5,821	-10.6	-28.0	26	13.7
450	31	6,620	-15.9	-33.3	26	16.0
400	31	7,502	-22.5	-38.2	26	18.8
350	31	8,469	-30.1	-44.2	26	20.8
300	31	9,547	-38.7	-50.2	26	23.4
250	31	10,775	-48.0		26	26.5
200	31	12,215	-57.0		27	29.8
175	29	13,057	-60.0		27	30.7
150	29	14,011	-63.7		26	29.7
125	29	15,119	-67.7		26	26.9
100	26	16,439	-73.1		26	22.5
80	24	17,731	-74.7		26	15.1
70	22	18,506	-74.4		27	11.7
60	18	19,409	-71.8		27	9.8
50	18	20,497	-67.3		27	7.3
40	15	21,857	-62.7		29	4.5
30	14	23,661	-55.5		28	3.9
25	13	24,832	-52.9		27	5.9
20	11	26,272	-50.3		27	7.5
15	8	28,170	-45.3			
10	7	30,908	-40.6			

* MIDLAND, TEXAS 918 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	874	-1.1	-8.6	24	1.7
1000	31	186				
950	31	603			24	2.5
900	31	1,037	5.8	-6.0	24	2.5
850	31	1,507	6.6	-8.9	27	5.3
800	31	2,003	5.0	-11.3	27	6.5
750	31	2,528	2.7	-13.9	28	7.9
700	31	3,083	-.2	-16.0	28	9.9
650	31	3,669	-3.7	-19.5	27	11.7
600	31	4,300	-7.5	-23.2	27	12.0
550	31	4,965	-11.6	-26.6	27	15.6
500	31	5,697	-16.5	-30.7	27	15.8
450	31	6,473	-22.1	-35.4	27	17.7
400	31	7,336	-28.7	-40.4	27	20.0
350	31	8,278	-35.8	-46.2	27	18.8
300	31	9,331	-43.9		27	19.9
250	31	10,632	-52.3		27	24.2
200	31	11,954	-58.1		27	25.8
175	31	12,793	-58.8		27	23.4
150	31	13,756	-60.8		27	23.6
125	31	14,881	-64.0		27	21.9
100	31	16,239	-66.2		27	19.5
80	30	17,591	-67.1		27	14.4
70	30	18,337	-66.1		27	12.2
60	28	19,341	-64.7		27	8.5
50	28	20,460	-62.8		28	5.0
40	27	21,840	-60.6		31	3.1
30	26	23,646	-57.5		33	2.3
25	25	24,802	-55.9		36	2.2
20	25	26,227	-54.2		33	2.4
15	24	28,083	-51.9		32	4.8
10	22	30,734	-49.0		29	9.2
7	16	33,117	-44.7		28	13.9

MONTERREY, MEXICO 970 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	423	7.1	2.6	32	2.7
1000	27	172				
950	27	599	9.8	3.6	33	2.5
900	27	1,049	10.4	.9	32	1.8
850	27	1,524	10.1	-2.9	23	1.6
800	27	2,028	9.3	-5.8	22	1.9
750	27	2,541	7.4	-8.1	26	4.4
700	27	3,126	3.9	-11.8	27	6.3
650	27	3,718	.1	-15.2	27	6.7
600	27	4,361	-3.9	-19.3	26	8.5
550	27	5,040	-8.0	-23.9	25	8.6
500	27	5,777	-13.4	-28.0	24	11.0
450	27	6,571	-19.2	-32.2	25	13.0
400	27	7,436	-25.7	-38.1	25	14.4
350	27	8,369	-33.2	-44.1	24	18.5
300	27	9,454	-41.4		25	21.0
250	27	10,667	-50.4		25	25.5
200	27	12,097	-58.0		25	30.2
175	27	12,931	-61.0		25	27.8
150	27	13,884	-63.3		25	25.9
125	27	14,994	-66.8		25	21.6
100	27	16,333	-70.4		24	22.2
80	27	17,653	-71.1		25	17.0
70	27	18,443	-70.6		25	14.2
60	27	19,364	-68.6		25	11.0
50	27	20,464	-65.7		26	7.4
40	26	21,830	-62.5		26	4.5
30	24	23,634	-56.8		27	3.3
25	24	24,704	-54.9		27	3.6
20	23	26,234	-52.4		27	6.7
15	20	28,111	-49.9		26	9.3
10	14	30,786	-45.5		25	14.3

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JANUARY 1967

MONTGOMERY, ALA. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	61	5.1	2.6	33	.9
1000	30	177	7.1	2.6	30	1.3
950	30	601	8.0	.8	27	2.9
900	30	1,047	7.3	-1.8	26	5.5
850	30	1,517	6.1	-3.3	27	7.1
800	30	2,013	4.6	-7.3	27	9.7
750	30	2,534	2.4	-10.3	27	11.8
700	30	3,092	-.2	-13.2	26	13.8
650	30	3,676	-2.8	-16.5	26	15.6
600	30	4,313	-6.8	-20.2	26	17.0
550	30	4,977	-10.7	-24.4	26	19.2
500	30	5,715	-15.4	-28.8	26	21.2
450	30	6,495	-21.1	-33.6	26	22.9
400	30	7,362	-27.2	-38.1	25	27.4
350	30	8,310	-34.2	-44.1	26	30.4
300	30	9,371	-42.2	-47.5	26	32.4
250	30	10,580	-50.9		26	38.0
200	30	12,005	-58.2		26	36.8
175	30	12,843	-59.6		26	36.5
150	30	13,803	-61.5		26	34.4
125	29	14,924	-64.2		26	31.7
100	29	16,283	-66.8		26	25.9
80	28	17,624	-68.3		26	19.2
70	26	18,425	-67.4		26	16.4
60	25	19,360	-65.8		26	12.1
50	25	20,471	-63.8		27	9.3
40	25	21,848	-60.7		27	6.6
30	25	23,651	-57.2		28	5.9
25	24	24,811	-54.9		28	6.0
20	24	26,245	-52.6		27	7.6
15	23	28,099	-50.7		26	11.5
10	21	30,782	-45.7		26	21.2
7	17	33,191	-41.1		26	29.9
5	12	35,485	-37.1			

* NANTUCKET, MASS. 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	14	.5	-2.8	30	2.6
1000	31	136	1.2	-3.2	28	4.1
950	31	547	-.2	-5.7	28	7.5
900	31	980	-1.5	-7.9	28	8.8
850	31	1,435	-2.8	-11.2	27	11.1
800	31	1,914	-4.4	-13.4	27	13.1
750	31	2,417	-6.4	-16.2	27	15.5
700	31	2,958	-8.3	-19.4	27	18.8
650	31	3,524	-10.9	-22.3	27	22.1
600	31	4,142	-14.3	-25.5	27	25.0
550	31	4,790	-19.2	-28.5	27	26.7
500	31	5,503	-22.5	-32.4	27	30.2
450	31	6,263	-27.3	-37.6	26	35.1
400	31	7,109	-32.7	-41.6	26	37.5
350	31	8,037	-39.2	-45.7	26	40.0
300	31	9,077	-46.4		26	43.0
250	31	10,269	-53.3		27	40.9
200	31	11,690	-57.4		27	38.3
175	31	12,534	-57.2		27	35.4
150	30	13,511	-57.9		27	33.8
125	30	14,660	-58.3		27	30.7
100	30	16,040	-59.7		27	27.5
80	30	17,449	-60.9		27	23.4
70	28	18,273	-60.8		27	21.8
60	28	19,230	-60.8		27	19.4
50	28	20,364	-60.4		27	19.1
40	28	21,754	-59.9		27	18.3
30	28	23,556	-58.5		28	14.8
25	28	24,701	-58.3		28	13.8
20	27	26,112	-57.0		27	16.5
15	26	27,935	-55.9		27	18.0
10	22	30,546	-51.0		26	27.9
7	19	32,885	-46.2		26	34.8
5	7	35,186	-38.4			

* NASHVILLE, TENN. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	180	1.7	-1.6	19	1.5
1000	30	169			16	.9
950	30	585	2.2	-3.2	24	7.0
900	30	1,021	1.5	-5.5	26	9.7
850	30	1,481	.5	-9.3	26	10.3
800	30	1,966	-1.2	-10.7	26	11.8
750	30	2,480	-2.8	-13.8	26	13.9
700	30	3,024	-4.9	-17.5	27	15.2
650	30	3,605	-7.5	-19.4	26	18.8
600	30	4,224	-10.9	-22.9	26	20.9
550	30	4,886	-14.7	-26.4	26	22.4
500	30	5,603	-19.3	-31.1	26	25.4
450	30	6,376	-24.7	-35.3	26	27.6
400	30	7,225	-30.8	-42.4	26	30.0
350	30	8,160	-37.6	-46.4	26	32.3
300	30	9,208	-44.8		26	35.7
250	30	10,406	-52.4		26	38.9
200	30	11,828	-57.7		26	39.8
175	30	12,671	-58.0		26	38.1
150	30	13,642	-58.9		26	37.0
125	30	14,781	-61.2		26	32.5
100	30	16,161	-62.8		26	26.8
80	30	17,530	-63.9		26	20.2
70	30	18,349	-63.3		26	16.9
60	30	19,297	-62.7		27	13.8
50	29	20,425	-61.3		27	10.3
40	28	21,813	-59.9		27	8.0
30	28	23,616	-58.0		29	7.3
25	27	24,769	-56.8		28	8.7
20	26	26,183	-55.4		28	10.2
15	26	28,020	-54.4		27	13.2
10	25	30,637	-50.0		26	22.1
7	20	33,026	-43.2		26	30.9
5	9	35,378	-38.1			

NOME, ALASKA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	5	-9.8	-12.6	08	2.5
1000	27	78			09	2.4
950	27	476	-10.1	-13.0	15	2.3
900	27	830	-11.3	-15.0	19	2.3
850	27	1,328	-12.4	-19.1	20	2.0
800	27	1,789	-14.5	-22.2	22	2.9
750	27	2,276	-16.8	-26.4	22	3.1
700	27	2,792	-19.8	-29.2	24	3.3
650	27	3,336	-23.0	-32.7	24	3.4
600	27	3,921	-26.9	-36.3	25	4.5
550	27	4,538	-31.2	-40.5	24	5.0
500	27	5,213	-35.7	-43.8	24	6.2
450	27	5,936	-41.0	-46.0	25	7.1
400	27	6,730	-46.5		25	8.5
350	27	7,606	-52.0		25	9.6
300	27	8,592	-57.3		24	9.8
250	27	9,736	-57.8		24	11.3
200	27	11,142	-55.9		24	11.6
175	27	11,995	-54.4		24	12.5
150	27	12,995	-53.4		25	13.6
125	27	14,159	-53.2		24	15.8
100	27	15,601	-52.0		25	18.1
80	26	17,056	-50.9		25	20.9
70	26	17,926	-50.3		25	21.7
60	26	18,933	-49.9		26	23.7
50	26	20,127	-48.9		26	25.8
40	26	21,598	-47.4		26	29.7
30	26	23,504	-46.3		27	32.8
25	26	24,717	-46.0		27	36.6
20	25	26,235	-45.5		27	35.3
15	19	28,180	-45.3		27	36.3
10	11	30,847	-46.7			
7						
5						

* NORTH PLATTE, NEBR. 916 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	848	-8.2	-11.2	34	2.5
1000	31	161				
950	31	565			32	3.2
900	31	987	-2.7	-7.9	32	3.2
850	31	1,444	-.4	-9.3	30	6.4
800	31	1,927	-2.0	-11.2	30	8.3
750	31	2,440	-4.2	-14.0	30	10.4
700	31	2,980	-7.6	-16.8	29	12.6
650	31	3,552	-10.8	-19.2	30	13.8
600	31	4,165	-14.0	-22.5	29	14.5
550	31	4,819	-18.0	-26.3	29	15.9
500	31	5,527	-22.7	-31.1	29	17.4
450	31	6,285	-28.4	-35.8	29	19.0
400	31	7,124	-34.9	-41.8	29	19.9
350	31	8,040	-42.5	-44.9	30	22.5
300	31	9,065	-49.4		29	25.9
250	31	10,244	-55.0		28	28.6
200	31	11,657	-56.9		28	29.3
175	31	12,504	-56.3		28	27.2
150	31	13,483	-56.4		28	26.4
125	30	14,644	-57.8		28	23.2
100	30	16,046	-59.5		28	19.8
80	30	17,437	-60.6		29	13.8
70	30	18,270	-59.4		29	12.2
60	30	19,236	-59.5		29	10.0
50	29	20,376	-58.9		30	8.9
40	27	21,781	-58.0		32	8.3
30	25	23,601	-57.0		33	7.3
25	24	24,758	-56.6		34	9.6
20	23	26,175	-56.1		35	10.4
15	20	28,062	-55.4		35	12.7
10	15	30,638	-52.9		34	16.3
7						
5						

* OAKLAND, CALIF. 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	6	7.6	4.6	17	1.1
1000	31	169	9.5	3.1	17	.8
950	31	594	9.8	-.8	32	.8
900	31	1,044	8.5	-4.1	29	3.0
850	31	1,515	6.6	-6.2	29	4.6
800	31	2,010	4.1	-8.6	28	6.1
750	31	2,530	1.4	-11.8	29	7.2
700	31	3,086	-1.2	-14.4	28	9.1
650	31	3,669	-4.6	-17.9	29	10.2
600	31	4,299	-8.6	-22.5	29	12.6
550	31	4,960	-12.8	-26.4	28	15.5
500	31	5,690	-17.7	-29.6	28	17.2
450	31	6,463	-23.2	-34.5	28	19.4
400	31	7,323	-29.5	-39.0	28	21.3
350	31	8,261	-36.8	-44.3	29	22.5
300	31	9,310	-45.2		29	23.8
250	31	10,502	-54.5		29	26.4
200	31	11,903	-61.0		29	27.6
175	31	12,731	-61.2		30	27.8
150	31	13,689	-60.8		30	25.2
125	31	14,820	-62.5		30	19.3
100	29	16,192	-64.6		30	16.4
80	28	17,551	-65.2		31	9.6
70	28	18,346	-63.7		31	6.9
60	26	19,318	-61.7		33	4.7
50	26	20,453	-59.2		02	5.0
40	26	21,858	-57.1		04	7.8
30	23	23,688	-54.6		05	10.6
25	22	24,860	-53.7		05	13.5
20	20	26,305	-52.2		05	16.0
15	19	28,170	-50.4		05	18.6
10	13	30,810	-48.5		05	21.3
7						
5						
4						

OKLAHOMA CITY, OKLA. 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	392	.5	-3.4	22	1.0
1000	31	154				
950	31	572	3.3	-4.9	24	2.7
900	31	1,009	4.9	-7.9	25	6.0
850	31	1,475	4.5	-10.5	26	7.6
800	31	1,967	2.4	-13.5	27	9.0
750	31	2,481	-.3	-15.9	27	9.8
700	31	3,035	-3.0	-18.7	27	10.8
650	31	3,615	-6.1	-21.6	27	12.8
600	31	4,241	-9.8	-24.3	27	16.2
550	31	4,900	-14.3	-28.2	27	18.8
500	31	5,623	-19.2	-33.9	27	20.9
450	31	6,390	-24.6	-38.2	26	22.7
400	31	7,246	-30.8	-42.8	26	24.1
350	31	8,179	-37.8	-46.9	26	26.1
300	31	9,224	-45.5		26	28.6
250	31	10,418	-53.4		27	31.8
200	31	11,835	-57.7		27	33.0
175	31	12,677	-57.7		27	32.9
150	31	13,647	-59.1		27	30.4
125	31	14,783	-61.5		27	28.0
100	31	16,158	-63.6		27	22.5
80	30	17,526	-64.4		27	16.3
70	30	18,342	-63.7		27	12.7
60	30	19,290	-62.6		27	8.6
50	30	20,417	-61.3		28	5.6
40	29	21,806	-59.5		31	3.0
30	29	23,614	-57.3		33	4.3
25	28	24,771	-56.1		34	4.3
20	28	26,192	-55.2		33	5.1
15	22	28,032	-53.7		30	8.2
10	13	30,659	-51.2		30	11.5
7						
5						
4						

OMAHA, NEBR. 967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	403	-6.8	-9.1	29	1.9
1000	31	141				
950	31	545	-4.2	-7.5	30	3.7
900	31	972	-1.4	-9.8	31	6.8
850	31	1,427	-1.7	-11.6	30	8.6
800	31	1,908	-3.1	-14.6	30	10.3
750	31	2,414	-5.4	-16.3	30	12.3
700	31	2,956	-8.3	-18.4	29	14.3
650	31	3,523	-11.4	-21.7	29	16.2
600	31	4,138	-14.7	-25.7	29	17.5
550	31	4,787	-18.7	-29.7	29	19.4
500	31	5,496	-23.6	-34.1	29	20.1
450	31	6,249	-29.5	-38.7	29	21.8
400	31	7,088	-35.5	-43.2	29	24.3
350	31	8,004	-42.2	-45.8	28	26.6
300	31	9,031	-49.0		28	28.9
250	31	10,212	-54.7		28	31.2
200	31	11,629	-56.7		28	31.4
175	30	12,478	-56.0		28	29.9
150	30	13,459	-55.4		28	27.7
125	29	14,615	-57.3		28	24.9
100	29	16,021	-58.6		28	19.8
80	28	17,415	-59.5		28	16.2
70	28	18,250	-59.3		29	13.5
60	28	19,215	-58.9		29	12.1
50	28	20,357	-59.2		29	9.2
40	26	21,762	-58.5		31	8.0
30	26	23,574	-57.8		32	8.1
25	26	24,725	-57.7		32	9.8
20	25	26,133	-57.9		32	12.0
15	20	27,953	-58.1		33	14.8
10	8	30,523	-56.9			
7						
5						
4						

+ PAGO PAGO, AMERICAN SAMOA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	29.6	24.3	08	4.2
1000	31	92	28.1	22.4	08	4.4
950	31	545	23.8	18.4	06	4.9
900	31	1,017	20.6	15.0	05	5.9
850	31	1,510	17.8	11.0	05	6.0
800	31	2,027	14.9	6.8	05	5.2
750	31	2,573	12.2	3.2	05	4.6
700	31	3,147	9.2	-1.1	06	3.9
650	31	3,759	5.8	-4.8	06	3.9
600	31	4,410	2.3	-9.4	06	3.0
550	31	5,107	-1.6	-13.6	06	2.5
500	31	5,843	-5.5	-18.5	07	1.6
450	31	6,683	-10.0	-23.7	09	.8
400	31	7,584	-15.5	-28.7	17	1.3
350	31	8,579	-22.3	-35.0	20	2.7
300	31	9,692	-30.9	-43.7	19	4.1
250	31	10,958	-41.4		20	7.6
200	31	12,432	-53.9		21	12.3
175	31	13,276	-60.8		21	13.7
150	31	14,220	-67.3		21	15.1
125	31	15,302	-73.4		22	12.3
100	31	16,599	-78.0		21	7.9
80	31	17,869	-74.8		15	3.2
70	31	18,654	-69.8		11	4.2
60	31	19,580	-66.8		09	5.5
50	30	20,691	-63.0		08	6.7
40	30	22,077	-59.2		08	7.7
30	30	23,901	-54.3		08	11.0
25	30	25,074	-52.3		08	13.1
20	29	26,529	-49.8		09	15.7
15	27	28,422	-46.4		09	21.4
10	24	31,140	-41.2		09	30.3
7	16	33,562	-38.6		09	37.3
5						
4						

* PEORIA, ILL. 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	200	-4.7	-7.9	24	1.4
1000	31	138				
950	31	544	-3.9	-8.4	27	6.4
900	31	969	-3.4	-9.4	28	8.6
850	31	1,421	-3.4	-12.1	28	9.9
800	31	1,900	-4.6	-14.2	28	12.4
750	31	2,407	-6.7	-16.5	27	13.6
700	31	2,943	-8.8	-19.9	27	15.3
650	31	3,514	-11.4	-22.3	27	17.1
600	31	4,124	-15.2	-25.4	27	18.8
550	31	4,777	-19.2	-28.8	28	21.4
500	31	5,479	-24.0	-32.6	27	23.4
450	31	6,240	-29.3	-37.4	27	25.9
400	31	7,071	-35.2	-41.7	27	29.0
350	31	7,989	-41.6	-45.0	27	32.2
300	31	9,020	-48.2		27	35.6
250	31	10,206	-53.8		27	36.8
200	31	11,628	-56.7		27	34.5
175	31	12,475	-56.5		27	34.0
150	31	13,453	-56.5		27	30.9
125	31	14,607	-58.2		27	27.2
100	31	16,007	-59.7		27	23.3
80	31	17,398	-60.6		27	18.4
70	31	18,228	-60.5		27	15.6
60	30	19,186	-60.9		28	13.8
50	30	20,320	-60.3		28	11.3
40	30	21,711	-60.2		29	10.5
30	29	23,512	-58.9		30	10.4
25	29	24,657	-58.6		30	11.0
20	28	26,059	-58.6		30	11.1
15	28	27,871	-57.3		30	14.8
10	24	30,449	-53.0		29	20.1
7	23	32,771	-48.1		28	24.3
5	15	35,023	-43.1		28	30.9
4	5	36,409	-40.9			

* PITTSBURGH, PA. 974 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	359	-1.6	-5.3	23	2.7
1000	31	151				
950	31	559	-1.4	-5.3	24	5.6
900	31	990	-3.3	-6.8	25	9.6
850	31	1,441	-4.6	-10.3	26	12.4
800	31	1,918	-5.3	-14.1	26	14.1
750	31	2,423	-7.0	-16.4	26	15.8
700	31	2,960	-9.0	-18.2	26	17.0
650	31	3,528	-11.6	-21.5	26	19.0
600	31	4,140	-14.9	-25.0	26	21.6
550	31	4,794	-18.5	-28.4	26	25.2
500	31	5,499	-22.9	-32.2	26	27.1
450	31	6,257	-28.2	-37.4	26	30.1
400	31	7,099	-33.8	-41.4	26	34.4
350	31	8,022	-40.3	-45.5	26	38.5
300	31	9,058	-46.8		26	42.4
250	31	10,250	-53.2		26	42.0
200	31	11,670	-57.2		26	40.9
175	31	12,515	-56.8		26	36.9
150	31	13,490	-57.4		26	34.7
125	31	14,639	-59.0		27	31.2
100	31	16,033	-60.1		27	28.2
80	31	17,424	-60.6		27	19.0
70	31	18,253	-61.0		27	16.6
60	31	19,209	-61.1		27	15.6
50	31	20,342	-60.4		28	14.9
40	31	21,733	-59.8		28	14.3
30	30	23,534	-59.4		28	11.7
25	28	24,675	-58.9		29	14.2
20	28	26,078	-58.0		28	14.6
15	27	27,895	-56.4		28	16.5
10	26	30,503	-51.5		27	23.5
7	22	32,846	-46.7		26	30.5
5	6	34,903	-47.1			

+ PONAPE, CAROLINE IS. 1003 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	39	28.2	23.6	08	4.5
1000	31	68	27.8	23.2	08	5.4
950	31	511	23.7	19.2	08	8.9
900	31	993	20.2	15.4	08	10.8
850	31	1,486	17.9	10.2	08	9.7
800	31	2,003	15.9	4.1	09	8.6
750	31	2,545	13.6	-.3	09	6.9
700	31	3,128	10.7	-3.8	10	7.2
650	31	3,736	7.2	-6.2	09	9.0
600	31	4,397	3.5	-9.7	09	8.5
550	31	5,094	-.3	-14.6	09	9.8
500	31	5,856	-4.5	-19.2	09	10.5
450	31	6,677	-9.2	-24.6	09	12.2
400	31	7,562	-14.6	-30.5	09	11.3
350	31	8,581	-21.0	-36.8	09	8.6
300	31	9,701	-29.5	-43.9	09	7.4
250	31	10,976	-39.7	-52.4	11	6.5
200	31	12,461	-52.4		11	7.0
175	31	13,310	-59.6		10	6.3
150	30	14,256	-67.3		10	6.1
125	30	15,333	-75.4		09	9.6
100	30	16,597	-83.6		09	14.1
80	30	17,841	-78.3		09	7.2
70	30	18,614	-72.5		25	1.8
60	30	19,531	-67.9		27	8.9
50	30	20,638	-63.5		27	11.0
40	30	22,021	-59.2		27	11.8
30	30	23,833	-56.7		27	10.1
25	30	24,991	-55.1		27	9.0
20	30	26,426	-52.0		26	4.1
15	29	28,297	-50.0		10	7.2
10	28	30,969	-44.7		09	21.2
7	19	33,389	-41.1		09	24.7
5	11	35,664	-37.4			

PORTLAND, MAINE 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	20	-5.9	-9.3	31	2.2
1000	31	134	-3.6	-8.4	28	3.3
950	31	538	-4.2	-8.9	28	3.9
900	31	964	-5.4	-11.0	28	5.7
850	31	1,412	-6.7	-12.8	28	8.4
800	31	1,884	-7.6	-14.7	27	12.2
750	31	2,383	-9.2	-16.8	27	14.7
700	31	2,917	-11.5	-19.4	26	16.4
650	31	3,477	-14.3	-23.1	27	18.8
600	31	4,086	-17.5	-25.9	27	21.3
550	31	4,727	-21.4	-29.3	27	23.8
500	31	5,430	-26.1	-33.7	27	26.9
450	31	6,178	-31.0	-38.5	27	30.5
400	31	7,012	-36.4	-42.8	27	34.9
350	31	7,927	-41.9	-44.3	26	36.8
300	31	8,958	-47.9		26	41.0
250	31	10,146	-53.3		26	40.0
200	31	11,570	-56.3		27	34.4
175	31	12,419	-55.9		27	32.1
150	31	13,400	-56.0		27	30.1
125	31	14,557	-57.0		27	28.3
100	31	15,964	-58.3		27	24.3
80	31	17,362	-59.6		27	21.7
70	31	18,196	-59.6		27	19.3
60	31	19,158	-60.0		27	16.4
50	31	20,295	-60.1		28	14.4
40	31	21,665	-60.1		28	13.1
30	31	23,490	-59.9		28	13.5
25	30	24,619	-59.6		28	14.6
20	30	26,015	-59.2		28	16.7
15	30	27,817	-58.9		28	19.9
10	30	30,379	-55.2		27	29.6
7	29	32,646	-49.0		27	38.9
5	26	34,921	-44.0			

QUILLAYUTE, WASH. 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	58	5.0	4.3	15	1.5
1000	31	114			18	1.4
950	31	529	3.1	1.0	19	5.5
900	31	968	.5	-1.7	21	8.0
850	31	1,425	-2.2	-5.1	22	9.4
800	31	1,905	-4.5	-8.8	24	10.5
750	31	2,411	-7.2	-12.1	25	11.3
700	31	2,947	-10.2	-14.9	25	13.0
650	31	3,513	-13.4	-18.3	25	14.0
600	31	4,120	-16.8	-22.9	26	16.6
550	31	4,766	-20.7	-27.6	26	18.9
500	31	5,467	-25.5	-31.8	26	22.6
450	31	6,220	-30.7	-36.4	27	22.7
400	31	7,050	-36.6	-39.5	27	24.4
350	31	7,962	-43.2	-41.1	28	26.0
300	31	8,984	-49.9		27	28.0
250	31	10,161	-55.2		27	27.6
200	31	11,578	-55.9		27	25.7
175	31	12,430	-55.2		27	24.5
150	31	13,415	-54.7		27	22.3
125	31	14,581	-55.1		28	19.6
100	31	16,005	-55.4		28	17.3
80	29	17,414	-55.2		28	13.3
70	29	18,267	-54.9		28	11.1
60	26	19,253	-54.1		30	10.1
50	25	20,432	-52.8		31	9.0
40	25	21,876	-51.9		33	8.7
30	24	23,741	-51.5		34	11.5
25	23	24,916	-51.5		35	12.8
20	21	26,371	-51.7		36	14.3
15	16	28,264	-50.6		01	17.4
10	13	30,923	-50.5		36	19.8
7	7	33,192	-50.0			
5						

RAPID CITY, S. DAK. 901 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	966	-4.5	-8.9	30	2.1
1000	31	139				
950	31	548			29	1.8
900	31	977			29	1.8
850	31	1,430	-1.8	-10.9	30	7.6
800	31	1,911	-3.6	-12.2	30	10.7
750	31	2,415	-6.0	-14.1	30	12.6
700	31	2,956	-9.0	-16.2	30	13.7
650	31	3,521	-12.3	-19.2	30	15.0
600	31	4,134	-15.9	-22.9	29	16.1
550	31	4,779	-19.8	-26.9	29	18.5
500	31	5,485	-24.7	-31.7	29	20.3
450	31	6,240	-29.9	-35.9	29	22.7
400	31	7,073	-36.1	-40.1	29	23.0
350	31	7,985	-43.6		29	24.8
300	31	9,006	-50.8		29	26.8
250	31	10,178	-56.1		30	29.5
200	31	11,591	-56.7		29	28.0
175	31	12,439	-56.0		29	26.3
150	31	13,421	-55.6		29	25.4
125	31	14,581	-56.5		29	23.2
100	31	15,993	-57.4		28	18.9
80	30	17,401	-58.8		29	16.5
70	30	18,239	-58.4		29	13.9
60	26	19,206	-59.0		29	12.6
50	26	20,357	-57.6		30	10.8
40	26	21,770	-56.7		32	9.1
30	26	23,505	-56.6		33	10.4
25	24	24,754	-56.2		33	12.4
20	23	26,171	-56.0		34	14.7
15	18	27,987	-56.0		35	17.6
10	7	30,594	-56.0			
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5						

See reference note at end of table

ST CLOUD, MINN. 976 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	316	-12.0	-15.7	33	1.5
1000	31	127				
950	31	524	-10.5	-12.9	33	2.8
900	31	938	-8.2	-12.5	32	4.6
850	31	1,384	-7.2	-13.4	30	6.5
800	31	1,856	-8.3	-15.5	30	8.7
750	31	2,358	-10.4	-17.4	30	10.7
700	31	2,885	-12.7	-21.0	30	12.9
650	31	3,446	-15.4	-24.6	30	14.1
600	31	4,049	-18.7	-27.4	30	16.7
550	31	4,689	-22.6	-31.2	30	19.1
500	31	5,386	-27.4	-36.7	30	19.9
450	31	6,129	-33.0	-40.0	30	21.9
400	31	6,955	-39.0	-44.0	30	24.9
350	31	7,858	-45.1	-44.2	30	27.5
300	31	8,874	-51.0		29	30.4
250	31	10,049	-54.6		29	31.3
200	31	11,474	-54.9		28	29.4
175	30	12,333	-54.0		28	26.9
150	30	13,321	-54.2		28	25.3
125	30	14,489	-54.9		28	24.2
100	30	15,910	-56.4		28	21.5
80	30	17,323	-57.3		28	18.8
70	30	18,166	-57.4		29	17.8
60	29	19,147	-57.5		29	15.6
50	29	20,296	-58.2		30	13.3
40	29	21,703	-57.5		30	13.2
30	28	23,515	-58.0		31	14.4
25	28	24,663	-58.2		32	15.9
20	28	26,065	-58.8		32	17.0
15	23	27,879	-59.4		32	18.6
10	11	30,456	-59.6			
7						
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ST PAUL IS., ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	10	-1.2	-4.2	17	2.7
1000	31	23			15	3.1
950	31	430	-3.5	-7.2	19	4.9
900	31	856	-5.6	-10.1	20	5.7
850	31	1,303	-7.8	-13.2	21	6.3
800	31	1,773	-10.2	-17.1	21	6.4
750	31	2,269	-13.2	-21.2	21	6.3
700	31	2,790	-16.7	-24.4	21	6.6
650	31	3,340	-20.4	-28.4	20	6.8
600	31	3,931	-24.5	-32.4	20	6.8
550	31	4,556	-29.2	-36.7	19	7.0
500	31	5,234	-33.9	-40.4	20	7.8
450	31	5,962	-39.0	-43.5	19	9.0
400	31	6,765	-44.2		20	9.7
350	31	7,660	-49.6		21	9.3
300	31	8,648	-54.4		21	8.9
250	31	9,811	-55.3		22	10.2
200	31	11,242	-52.5		23	12.1
175	31	12,108	-50.9		24	12.6
150	31	13,114	-49.6		24	13.3
125	31	14,311	-48.4		24	14.2
100	31	15,781	-47.6		24	15.2
80	31	17,258	-46.8		24	15.7
70	31	18,144	-46.0		24	15.7
60	31	19,171	-44.7		24	16.4
50	31	20,393	-43.7		24	16.0
40	31	21,894	-42.9		25	16.8
30	31	23,838	-42.1		26	17.0
25	30	25,072	-41.9		26	16.0
20	29	26,585	-42.2		26	15.2
15	26	28,526	-42.6		27	14.6
10	19	31,290	-40.9		27	16.8
7	8	33,763	-40.3			
5						

SALEM, OREG. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	61	5.8	3.5	18	4.0
1000	31	147			19	5.1
950	31	567	4.7	1.5	21	8.8
900	31	1,006	2.2	-1.2	22	10.6
850	31	1,466	.2	-4.1	24	12.2
800	31	1,951	-2.1	-7.2	25	14.2
750	31	2,458	-4.9	-10.8	26	15.8
700	31	3,001	-8.0	-13.7	26	16.9
650	31	3,568	-11.6	-17.4	26	18.5
600	31	4,183	-15.2	-21.9	27	21.1
550	31	4,830	-19.1	-25.2	27	22.5
500	31	5,539	-23.7	-30.2	28	25.6
450	31	6,295	-29.0	-34.8	28	26.9
400	31	7,135	-34.7	-40.2	28	28.8
350	31	8,054	-41.3	-43.2	28	28.6
300	31	9,083	-48.8		28	31.4
250	31	10,264	-55.1		28	35.8
200	31	11,676	-57.6		27	28.5
175	31	12,521	-56.6		27	27.7
150	31	13,499	-56.6		28	26.0
125	31	14,652	-57.8		28	21.1
100	30	16,056	-57.7		28	17.6
80	30	17,465	-57.9		28	12.5
70	30	18,306	-58.0		29	10.3
60	30	19,281	-56.4		30	7.0
50	30	20,442	-54.7		34	7.5
40	30	21,874	-53.4		36	7.7
30	30	23,727	-53.1		01	13.1
25	30	24,905	-51.9		03	16.3
20	29	26,358	-51.0		03	17.4
15	24	28,235	-50.5		03	20.4
10	9	30,954	-48.6			
7						
5						

SALT LAKE CITY, UTAH 874 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,288	-1.7	-5.7	15	3.2
1000	31	206				
950	31	619				
900	31	1,057				
850	31	1,512	-.5	-6.6	17	4.3
800	31	1,996	-1.7	-8.0	21	5.2
750	31	2,504	-4.4	-9.8	26	6.4
700	31	3,048	-7.8	-12.0	28	8.8
650	31	3,619	-10.7	-15.5	28	10.5
600	31	4,233	-14.2	-19.4	29	13.2
550	31	4,888	-17.4	-23.3	29	16.3
500	31	5,598	-21.5	-28.1	29	20.1
450	31	6,345	-27.0	-33.3	29	21.9
400	31	7,206	-33.3	-38.6	29	25.0
350	31	8,131	-40.0	-43.8	29	28.6
300	31	9,165	-48.0		30	31.9
250	31	10,345	-55.8		30	33.8
200	31	11,750	-59.3		30	30.5
175	31	12,597	-58.8		29	27.6
150	31	13,557	-58.2		29	24.1
125	30	14,699	-60.3		29	20.7
100	30	16,083	-61.8		29	16.8
80	29	17,467	-61.6		30	12.3
70	29	18,295	-61.0		30	10.0
60	29	19,255	-59.9		31	8.4
50	28	20,402	-58.5		33	5.4
40	27	21,809	-57.0		36	6.7
30	25	23,636	-55.7		01	8.7
25	23	24,799	-54.6		02	10.7
20	23	26,229	-53.9		02	14.4
15	21	28,089	-52.9		02	17.7
10	16	30,740	-50.4		02	16.6
7	5	33,063	-52.1			
5						

SAN DIEGO, CALIF. 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	124	7.2	4.8	06	.7
1000	31	159	9.6	4.8	07	.9
950	31	588	12.7	-.5	02	.6
900	31	1,042	11.4	-4.0	32	1.0
850	31	1,518	10.1	-7.2	31	1.8
800	31	2,020	8.1	-10.2	30	4.0
750	31	2,547	5.8	-11.9	31	6.0
700	31	3,112	2.5	-13.8	30	7.4
650	31	3,702	-.8	-17.4	30	8.2
600	31	4,343	-4.7	-21.0	30	10.2
550	31	5,013	-9.2	-24.3	30	11.6
500	31	5,753	-14.4	-28.4	30	13.6
450	31	6,534	-20.3	-32.9	30	14.7
400	31	7,406	-27.0	-38.8	30	15.9
350	31	8,355	-34.6	-44.6	30	17.9
300	31	9,413	-43.2	-46.4	30	18.9
250	31	10,616	-52.8		30	21.0
200	30	12,022	-60.5		30	23.1
175	30	12,853	-60.7		29	22.4
150	30	13,809	-62.1		29	21.2
125	30	14,931	-64.2		29	18.3
100	29	16,284	-67.6		29	14.4
80	27	17,633	-67.0		29	9.4
70	27	18,441	-65.6		29	7.3
60	27	19,380	-63.8		31	4.9
50	27	20,506	-60.6		35	3.0
40	27	21,901	-58.2		03	4.0
30	27	23,719	-55.9		05	6.4
25	27	24,881	-54.6		05	8.0
20	26	26,313	-52.9		06	10.5
15	25	28,176	-50.5		05	11.4
10	25	30,834	-47.6		04	10.9
7	21	33,201	-44.8		01	7.8
5	14	35,507	-42.4			

SAN NICOLAS, CALIF. 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	174	11.6	4.8	32	2.4
1000	31	162			34	2.1
950	31	594	13.7	-2.8	33	2.2
900	31	1,048	11.7	-7.7	31	2.4
850	31	1,524	10.2	-9.3	31	3.7
800	31	2,026	8.0	-10.8	31	5.5
750	31	2,556	5.5	-13.0	31	6.5
700	31	3,117	2.3	-16.2	30	8.1
650	31	3,711	-1.5	-19.0	30	9.6
600	31	4,344	-5.5	-21.8	30	11.0
550	31	5,020	-10.2	-25.4	30	12.0
500	31	5,747	-15.4	-29.2	29	13.7
450	31	6,535	-20.4	-37.1	29	15.5
400	31	7,397	-26.9	-38.1	29	16.5
350	31	8,345	-34.6	-45.7	29	17.7
300	31	9,403	-43.3	-53.6	29	19.6
250	31	10,604	-53.0	-62.1	29	21.9
200	31	12,010	-61.5	-69.9	29	24.9
175	31	12,838	-61.8	-70.7	29	25.1
150	31	13,791	-62.8	-71.8	29	21.7
125	31	14,909	-65.0		29	19.2
100	31	16,258	-68.1		29	15.9
80	31	17,598	-67.6		30	8.2
70	31	18,405	-66.2		29	7.2
60	30	19,347	-64.1		33	5.3
50	30	20,472	-60.8		01	4.3
40	30	21,869	-58.3		06	5.6
30	30	23,690	-55.7		05	9.4
25	29	24,852	-54.4		06	10.6
20	26	26,285	-52.3		06	13.2
15	25	28,152	-49.9		05	11.8
10	17	30,832	-47.5		05	17.5
7	6	33,182	-45.1			
5						

* SAN JUAN, P. R. 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	6	22.6	19.4	12	2.3
1000	31	152	22.6	19.2	10	5.9
950	31	592	19.5	16.7	08	9.1
900	31	1,062	16.4	13.1	08	8.6
850	31	1,547	13.2	9.3	08	8.2
800	31	2,055	10.4	3.2	08	8.0
750	31	2,590	9.4	-5.6	08	6.1
700	31	3,163	8.1	-12.2	08	5.6
650	31	3,743	4.9	-15.1	07	5.3
600	31	4,419	1.3	-17.8	08	4.9
550	31	5,105	-3.1	-21.7	07	4.2
500	31	5,862	-8.1	-26.7	06	3.5
450	31	6,662	-13.8	-31.0	04	2.6
400	31	7,555	-20.5	-36.7	36	3.1
350	31	8,530	-27.4	-42.5	33	4.5
300	31	9,621	-35.5	-49.7	31	7.2
250	31	10,866	-44.5		29	9.9
200	30	12,329	-54.0		28	12.4
175	30	13,176	-58.9		28	13.1
150	30	14,131	-64.3		29	12.0
125	30	15,230	-70.6		29	9.9
100	30	16,535	-76.3		31	5.5
80	30	17,813	-77.8		01	2.7
70	30	18,580	-75.6		02	1.9
60	30	19,480	-71.0		35	2.1
50	29	20,571	-66.5		34	1.7
40	29	21,939	-60.7		29	2.7
30	29	23,756	-54.8		33	1.7
25	29	24,930	-51.5		05	1.9
20	27	26,387	-48.3		08	3.2
15	26	28,291	-46.1		10	6.5
10	20	31,006	-43.8		11	7.8
7	15	33,410	-40.3		11	7.1
5						

* SAULT STE MARIE, MICH. 985 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	271	-9.4	-12.7	04	.4
1000	31	106				
950	31	501	-8.4	-11.1	27	1.9
900	31	922	-9.1	-12.6	27	4.8
850	31	1,364	-9.8	-14.3	28	6.3
800	31	1,831	-10.9	-15.9	28	8.4
750	31	2,325	-12.6	-17.9	28	10.1
700	31	2,850	-15.0	-20.1	27	11.8
650	31	3,404	-17.6	-23.3	27	13.5
600	31	4,003	-20.8	-26.3	27	15.5
550	31	4,637	-24.4	-30.5	27	18.0
500	31	5,329	-29.0	-35.1	27	19.8
450	31	6,071	-35.0	-40.6	27	22.3
400	31	6,889	-39.8	-42.3	27	25.8
350	31	7,790	-45.6		26	28.8
300	31	8,802	-51.5		27	30.6
250	31	9,979	-53.6		27	32.7
200	31	11,411	-53.7		27	31.0
175	31	12,271	-52.9		27	29.6
150	31	13,264	-53.4		27	27.8
125	31	14,434	-54.4		27	26.5
100	31	15,857	-55.8		27	24.0
80	31	17,274	-57.4		27	21.8
70	31	18,115	-57.9		27	21.1
60	31	19,096	-58.5		28	20.2
50	31	20,231	-58.8		28	19.3
40	31	21,629	-59.5		28	20.4
30	27	23,437	-60.3		29	18.4
25	27	24,573	-60.6		29	19.7
20	27	25,962	-60.7		29	22.0
15	26	27,750	-60.1		29	24.1
10	25	30,285	-57.7		29	27.6
7	20	32,564	-52.5		29	35.5
5	8	34,852	-46.6			

SHEMYA, ALASKA 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	38	-.8	-3.3	21	4.3
1000	30	-27				
950	30	381	-3.6	-6.3	23	5.9
900	30	806	-6.6	-9.6	24	6.9
850	30	1,251	-9.5	-13.1	24	7.7
800	30	1,717	-12.5	-18.3	24	8.7
750	30	2,210	-15.9	-22.5	24	8.1
700	30	2,725	-19.3	-26.7	24	9.1
650	30	3,271	-22.8	-30.2	23	9.1
600	30	3,855	-26.7	-34.8	23	10.4
550	30	4,478	-30.8	-38.7	23	11.6
500	30	5,150	-35.2	-41.9	23	11.3
450	30	5,875	-40.1	-43.4	23	12.6
400	30	6,674	-45.7		23	14.3
350	30	7,552	-51.1		22	14.6
300	30	8,546	-54.5		24	15.1
250	30	9,715	-53.6		24	15.5
200	30	11,163	-49.5		24	16.2
175	30	12,039	-48.9		24	14.7
150	30	13,053	-48.2		24	16.2
125	29	14,252	-47.4		24	15.4
100	28	15,738	-46.9		24	15.3
80	28	17,218	-46.2		23	14.3
70	28	18,106	-45.7		24	14.0
60	27	19,137	-44.5		23	14.1
50	27	20,363	-43.0		23	12.4
40	27	21,869	-42.1		23	10.9
30	27	23,820	-41.4		22	9.4
25	27	25,058	-41.2		22	9.7
20	27	26,573	-41.4		23	8.7
15	27	28,526	-41.4		22	7.4
10	26	31,283	-41.7		23	6.8
7	18	33,713	-40.9		23	7.1
5	8	36,082	-39.6			

* SHREVEPORT, LA. 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	79	4.7	2.0	19	.8
1000	31	172	5.7	.9	20	1.2
950	31	598	5.9	-.7	23	4.8
900	31	1,036	5.9	-3.2	25	6.2
850	31	1,504	5.0	-6.3	26	7.6
800	31	1,998	3.7	-9.7	26	8.7
750	31	2,517	1.7	-12.8	26	9.8
700	31	3,074	-.9	-16.7	27	11.8
650	31	3,660	-4.0	-19.6	27	14.6
600	31	4,291	-7.7	-22.4	26	15.5
550	31	4,959	-12.2	-26.8	26	17.3
500	31	5,695	-17.0	-31.1	26	19.5
450	31	6,461	-22.6	-35.6	26	23.6
400	31	7,322	-29.0	-40.6	26	25.8
350	31	8,264	-35.8	-47.0	26	30.4
300	31	9,317	-43.9		25	33.2
250	30	10,518	-52.4		26	36.2
200	30	11,936	-58.9		26	40.2
175	30	12,771	-59.9		26	36.9
150	30	13,731	-61.0		26	33.6
125	30	14,856	-63.8		26	31.7
100	30	16,215	-66.4		26	25.3
80	30	17,558	-67.8		27	19.4
70	29	18,366	-66.8		26	15.7
60	28	19,299	-65.7		26	12.0
50	24	20,412	-63.7		27	9.6
40	24	21,787	-61.3		29	4.5
30	22	23,586	-58.1		33	4.0
25	22	24,736	-56.9		31	4.7
20	20	26,153	-55.2		29	4.5
15	18	27,995	-52.5		29	6.6
10	17	30,632	-48.3		27	13.9
7	9	32,958	-41.8			
5	5	35,227	-37.3			

SPOKANE, WASH. 930 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	717	.0	-2.3	20	3.5
1000	31	133				
950	31	547			22	7.5
900	31	982	.2	-3.5	22	7.5
850	31	1,439	-1.6	-6.4	24	9.6
800	31	1,920	-4.4	-8.7	25	9.7
750	31	2,422	-7.5	-11.9	26	10.4
700	31	2,960	-10.7	-15.9	27	11.9
650	31	3,521	-14.1	-19.3	27	14.3
600	31	4,131	-17.4	-23.9	27	17.1
550	31	4,774	-21.3	-28.0	28	19.3
500	31	5,475	-25.8	-33.0	28	21.4
450	31	6,225	-31.2	-38.0	28	23.7
400	31	7,057	-37.3	-41.6	28	26.0
350	31	7,967	-43.8	-43.8	28	29.4
300	31	8,987	-50.4		28	32.5
250	31	10,160	-56.4		28	35.5
200	31	11,573	-56.3		28	33.3
175	31	12,424	-54.7		29	29.2
150	31	13,411	-54.7		28	25.8
125	30	14,569	-55.0		29	22.5
100	30	15,990	-56.4		28	19.0
80	30	17,409	-55.9		29	15.8
70	30	18,257	-56.0		29	14.1
60	30	19,238	-55.2		30	12.7
50	30	20,404	-54.0		31	11.2
40	29	21,833	-53.7		32	10.6
30	28	23,692	-52.8		34	13.3
25	29	24,868	-53.0		34	15.4
20	25	26,318	-52.7		35	17.1
15	22	28,185	-52.3		35	19.6
10	20	30,804	-51.8		36	19.8
7	10	33,226	-48.0			

SWAN ISLAND, W. I. 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	10	24.5	21.2	08	4.4
1000	31	131	23.6	20.2	07	5.9
950	31	581	20.3	17.9	08	7.7
900	31	1,044	17.4	13.8	09	7.4
850	31	1,531	14.5	9.2	09	6.8
800	31	2,041	11.5	6.0	10	6.0
750	31	2,585	9.4	-.4	10	5.3
700	31	3,150	7.4	-6.2	10	5.3
650	31	3,758	4.2	-11.0	12	4.5
600	31	4,405	.8	-15.5	13	4.1
550	31	5,095	-3.1	-18.5	15	3.4
500	31	5,847	-7.6	-24.1	19	3.4
450	31	6,655	-12.9	-28.8	20	4.4
400	31	7,548	-19.3	-34.4	23	4.2
350	31	8,526	-27.1	-40.7	26	5.2
300	31	9,618	-35.9	-47.8	26	9.5
250	31	10,858	-45.8		26	14.8
200	30	12,308	-56.0		25	19.5
175	30	13,148	-61.0		25	20.3
150	30	14,095	-65.4		25	18.7
125	30	15,191	-70.8		25	13.3
100	30	16,494	-76.6		23	5.6
80	29	17,772	-76.0		14	1.1
70	29	18,537	-75.5		03	1.6
60	29	19,437	-72.3		32	1.7
50	28	20,522	-67.5		30	3.3
40	27	21,883	-61.2		29	5.3
30	26	23,694	-55.1		31	4.3
25	26	24,865	-52.5		01	1.8
20	26	26,315	-50.2		10	3.1
15	23	28,198	-47.6		12	4.6
10						
7						

+ TACUHAYA, MEXICO 773 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	2,306	16.8	2.7	20	.3
1000	31	60				
950	31	509				
900	31	988				
850	31	1,486				
800	31	2,011				
750	31	2,561	14.5	.3	06	.6
700	31	3,136	9.3	-4.2	23	.6
650	31	3,742	3.8	-6.4	29	.3
600	31	4,390	-1.4	-10.4	24	2.0
550	31	5,074	-4.7	-19.7	24	4.9
500	31	5,823	-9.4	-24.6	24	5.8
450	31	6,625	-14.8	-29.7	25	8.9
400	31	7,511	-20.7	-34.2	25	13.1
350	31	8,484	-28.1	-40.1	25	17.6
300	31	9,571	-36.5	-46.7	24	17.7
250	30	10,806	-46.5		24	17.1
200	29	12,252	-57.2		25	21.3
175	29	13,087	-61.9		24	20.9
150	29	14,034	-64.4		23	17.8
125	29	15,144	-67.0			
100	28	16,474	-71.9			
80	27	17,781	-72.5			
70	27	18,556	-71.8			
60	25	19,482	-69.7			
50	25	20,578	-66.3			
40	22	21,940	-62.5			
30	18	23,746	-56.8			
25	15	24,917	-53.2			
20	15	26,365	-50.6			
15	11	28,264	-49.1			
10	7	30,923	-46.0			
7						

TAMPA, FLA. 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	8	13.1	11.1	06	2.1
1000	31	173	14.8	11.2	08	3.8
950	31	607	14.1	8.6	15	2.4
900	31	1,063	12.0	5.7	22	2.8
850	31	1,541	10.3	1.6	24	4.5
800	31	2,044	8.6	-3.2	24	5.8
750	31	2,578	6.3	-6.7	25	7.2
700	31	3,140	3.5	-10.8	25	9.9
650	31	3,735	.3	-16.2	25	11.7
600	31	4,376	-3.3	-19.7	26	13.8
550	31	5,057	-7.3	-22.6	26	14.8
500	31	5,797	-11.8	-26.6	26	17.1
450	31	6,594	-17.4	-32.2	26	19.9
400	31	7,469	-23.8	-38.1	26	22.9
350	31	8,430	-30.8	-43.7	26	26.6
300	31	9,506	-39.1	-50.4	25	29.9
250	31	10,731	-48.5		26	31.9
200	31	12,169	-57.1		26	36.8
175	30	13,007	-59.4		26	39.4
150	30	13,944	-62.7		26	35.7
125	30	15,079	-66.2		26	33.4
100	30	16,417	-70.4		25	26.8
80	29	17,733	-72.5		26	18.0
70	29	18,516	-72.2		26	14.5
60	29	19,428	-69.5		26	10.6
50	29	20,523	-66.3		26	6.7
40	29	21,988	-61.4		27	6.0
30	28	23,690	-56.8		27	5.1
25	28	24,862	-53.7		27	6.3
20	28	26,297	-50.4		27	8.0
15	28	28,137	-47.0		25	12.3
10	23	30,962	-41.9		25	20.7
7	8	33,329	-42.0			

TOPEKA, KANS. 985 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	269	-3.0	-7.6	26	1.6
1000	31	149				
950	31	556	-.9	-5.7	29	4.1
900	31	990	1.0	-8.2	29	6.0
850	31	1,450	.8	-10.7	30	8.3
800	31	1,936	-.9	-12.9	29	9.5
750	31	2,445	-3.4	-15.4	29	10.2
700	31	2,993	-5.8	-19.3	29	11.3
650	31	3,562	-9.2	-22.1	29	13.3
600	31	4,185	-13.3	-25.1	29	14.8
550	31	4,835	-17.6	-28.2	28	16.8
500	31	5,560	-22.2	-32.2	28	18.3
450	31	6,309	-27.5	-37.2	28	19.8
400	31	7,153	-33.7	-42.1	28	22.1
350	31	8,077	-40.5	-45.0	27	24.0
300	31	9,112	-47.4		28	26.9
250	31	10,371	-53.7		28	29.4
200	31	11,718	-57.7		28	31.9
175	31	12,562	-57.1		28	30.7
150	31	13,538	-57.0		28	28.4
125	31	14,688	-58.7		28	25.0
100	31	16,084	-61.0		28	19.9
80	30	17,465	-61.8		28	15.9
70	30	18,292	-60.9		28	13.6
60	30	19,251	-61.0		28	10.1
50	29	20,398	-60.1		29	8.3
40	29	21,783	-59.3		30	7.8
30	28	23,591	-58.1		32	7.3
25	27	24,741	-57.3		32	7.1
20	25	26,157	-56.1		33	8.3
15	23	27,988	-56.3		32	10.6
10	12	30,556	-54.0			
7	5	32,910	-50.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JANUARY 1967

+ TRUK, CAROLINE IS. 1009 MB

Standard pressure surface (mb.)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	2	28.0	23.7	07	4.3
1000	31	81	27.3	22.5	07	5.5
950	31	526	23.5	18.7	08	9.4
900	31	1,005	20.5	14.6	08	10.1
850	31	1,499	17.9	9.7	09	10.1
800	31	2,017	15.7	5.2	09	9.3
750	31	2,563	13.2	.2	09	9.3
700	31	3,142	10.5	-3.9	09	9.0
650	31	3,753	7.1	-6.9	09	9.1
600	31	4,411	3.6	-11.5	09	10.7
550	31	5,107	-.2	-15.7	09	9.8
500	31	5,870	-4.4	-20.1	09	11.6
450	31	6,689	-9.2	-24.8	09	12.6
400	31	7,598	-14.5	-31.1	09	11.7
350	31	8,597	-21.2	-36.7	09	10.6
300	31	9,716	-29.5	-43.7	10	9.5
250	31	10,990	-39.8	-52.3	11	8.3
200	31	12,475	-52.1		11	8.4
175	31	13,325	-59.4		11	8.0
150	31	14,272	-67.2		11	8.4
125	31	15,350	-75.3		10	10.3
100	31	16,615	-83.6		09	15.1
80	31	17,867	-77.2		09	8.2
70	31	18,641	-72.5		30	1.3
60	31	19,559	-67.6		28	7.2
50	31	20,670	-62.7		27	9.8
40	31	22,057	-58.9		27	10.9
30	31	23,874	-56.2		27	11.1
25	31	25,037	-54.4		27	7.9
20	31	26,476	-51.1		24	2.4
15	29	28,356	-49.2		11	8.4
10	25	31,041	-44.1		09	21.5
7	19	33,468	-40.5		03	28.9
5	9	35,722	-37.5			

* TUCSON, ARIZ. 928 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	789	4.3	-7.7	14	3.5
1000	31	173				
950	31	595			13	3.4
900	31	1,041	10.2	-6.2	13	3.4
850	31	1,515	8.9	-9.1	15	1.6
800	31	2,015	6.5	-11.8	21	1.2
750	31	2,541	4.1	-14.3	27	1.9
700	31	3,101	1.7	-16.9	29	4.7
650	31	3,686	-1.7	-19.3	29	7.5
600	31	4,327	-5.6	-22.5	30	9.3
550	31	4,992	-10.1	-25.5	30	10.8
500	31	5,732	-15.3	-29.4	30	12.1
450	31	6,509	-21.2	-34.5	30	14.0
400	31	7,378	-28.0	-40.3	30	15.3
350	31	8,322	-35.7	-46.5	30	15.7
300	31	9,375	-44.3		30	18.2
250	31	10,571	-53.5		30	20.2
200	31	11,983	-59.4		29	22.2
175	31	12,818	-60.1		29	23.1
150	31	13,778	-61.6		29	20.4
125	31	14,901	-64.1		28	18.9
100	30	16,254	-66.8		28	16.1
80	30	17,600	-67.1		28	12.5
70	30	18,407	-65.9		28	9.2
60	30	19,347	-63.6		29	6.1
50	30	20,470	-61.8		30	3.5
40	30	21,859	-59.4		36	2.8
30	29	23,672	-56.7		04	5.1
25	28	24,836	-55.0		05	6.0
20	28	26,267	-53.3		05	7.1
15	27	28,128	-51.1		04	7.3
10	25	30,780	-48.5		36	6.4
7	16	33,169	-43.9		34	5.3

* VANDENBERG AFB, CALIF. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	100	8.4	3.5	08	1.0
1000	31	167	10.9	3.0	07	1.3
950	31	595	12.6	-.6	02	1.0
900	31	1,049	11.0	-4.1	31	1.0
850	31	1,524	9.1	-6.9	30	3.1
800	31	2,025	6.8	-8.1	30	4.9
750	31	2,550	4.4	-11.2	30	7.0
700	31	3,112	1.7	-14.1	30	9.1
650	31	3,701	-1.9	-16.6	30	10.5
600	31	4,338	-5.9	-20.3	30	12.7
550	31	5,005	-10.4	-23.0	29	13.6
500	31	5,741	-15.6	-27.4	28	15.9
450	31	6,517	-21.3	-32.8	28	17.9
400	31	7,386	-27.9	-38.2	28	20.6
350	31	8,331	-35.4	-44.0	29	21.0
300	31	9,385	-44.0		29	22.8
250	31	10,582	-53.8		29	23.9
200	31	11,987	-61.6		29	26.2
175	31	12,814	-61.5		29	24.9
150	31	13,767	-62.2		29	24.0
125	31	14,890	-64.0		29	19.0
100	31	16,246	-66.7		29	14.8
80	30	17,593	-66.4		30	10.3
70	30	18,402	-65.1		31	6.7
60	30	19,345	-63.0		33	5.3
50	22	20,474	-60.5		36	4.3
40	22	21,873	-57.8		04	6.8
30	27	23,699	-55.9		06	10.3
25	27	24,862	-54.3		06	11.8
20	27	26,296	-52.6		05	14.1
15	26	28,167	-50.4		05	15.1
10	21	30,834	-47.8		05	20.9
7	14	33,202	-45.8		03	17.9
5	5	35,429	-41.9			

VICTORIA, TEXAS 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	33	8.9	5.9	36	.6
1000	31	169	10.2	4.5	11	.7
950	31	502	9.1	2.3	19	3.1
900	31	1,043	8.7	.5	21	3.5
850	31	1,515	8.2	-2.5	22	4.5
800	31	2,015	7.2	-6.3	24	5.4
750	31	2,541	4.9	-10.7	25	6.8
700	31	3,104	2.1	-13.1	26	8.5
650	31	3,690	-1.4	-15.6	26	10.1
600	31	4,332	-5.1	-20.6	26	12.2
550	31	5,002	-9.2	-25.2	26	13.6
500	31	5,742	-14.2	-29.1	25	15.2
450	31	6,524	-19.9	-34.2	26	18.4
400	31	7,397	-26.2	-39.2	25	20.3
350	31	8,349	-33.3	-44.7	25	23.5
300	31	9,414	-41.4	-48.8	25	27.1
250	31	10,627	-50.4		25	32.5
200	31	12,055	-58.0		25	35.1
175	31	12,894	-59.6		25	35.0
150	31	13,853	-61.8		25	32.0
125	31	14,974	-65.0		25	27.9
100	31	16,323	-68.0		26	25.2
80	30	17,658	-69.8		26	19.5
70	29	18,453	-69.0		26	15.4
60	28	19,376	-67.1		26	11.8
50	28	20,481	-65.0		26	8.4
40	27	21,853	-61.7		27	5.2
30	26	23,651	-58.2		27	5.2
25	22	24,705	-56.3		27	6.2
20	22	26,218	-54.0		28	7.4
15	21	28,075	-52.0		27	11.9
10	16	30,755	-46.8		27	25.4
7	7	33,090	-45.6			

* WAKE IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	25.0	21.8	08	6.1
1000	31	128	23.9	20.9	08	7.0
950	31	569	20.1	18.2	08	7.4
900	31	1,041	17.0	14.0	09	6.8
850	31	1,528	15.0	8.5	10	5.7
800	31	2,040	13.6	1.9	11	4.9
750	31	2,561	11.9	-4.0	11	3.9
700	31	3,158	9.3	-9.5	11	3.2
650	31	3,765	6.5	-14.1	09	1.8
600	31	4,422	2.9	-17.7	35	.6
550	31	5,118	-.7	-21.7	28	1.0
500	31	5,877	-5.4	-25.8	29	1.8
450	31	6,690	-11.0	-29.9	31	3.5
400	31	7,592	-16.7	-34.2	30	4.3
350	31	8,581	-23.4	-39.9	30	6.4
300	31	9,691	-31.7	-46.9	30	7.7
250	31	10,954	-41.5		29	8.7
200	31	12,430	-53.1		30	10.7
175	31	13,279	-59.5		30	10.3
150	31	14,226	-66.7		30	9.2
125	31	15,308	-74.0		30	7.8
100	27	16,596	-80.7		27	4.4
80	23	17,828	-82.5		24	1.7
70	20	18,590	-78.4		17	.9
60	19	19,470	-72.1		18	.9
50	18	20,557	-66.4		30	1.4
40	18	21,923	-61.3		25	.5
30	18	23,728	-56.6		25	1.8
25	18	24,809	-54.4		03	1.0
20	17	26,330	-51.0		06	1.5
15	17	28,215	-47.3		10	3.0
10	17	30,921	-42.5		09	10.5
7	16	33,332	-40.7		09	13.1

* WALLOPS IS., VA. NASA 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	3	1.9	-1.0	29	1.7
1000	31	166	4.4	-1.3	29	2.9
950	31	581	3.4	-4.3	28	5.3
900	31	1,021	1.7	-6.1	27	7.7
850	31	1,480	-.1	-8.4	26	10.4
800	31	1,964	-1.8	-11.9	26	13.0
750	31	2,474	-3.0	-15.7	26	15.9
700	31	3,022	-5.2	-16.9	26	18.8
650	31	3,595	-7.8	-19.1	26	20.7
600	31	4,220	-11.3	-22.1	26	23.7
550	31	4,876	-15.2	-25.9	26	25.8
500	31	5,597	-19.8	-29.5	26	29.0
450	31	6,364	-25.1	-34.1	26	32.1
400	31	7,217	-30.9	-39.4	26	36.0
350	31	8,151	-37.7	-44.9	26	38.3
300	31	9,198	-44.8		26	37.6
250	31	10,397	-52.4		27	34.8
200	29	11,813	-58.0		27	33.1
175	29	12,654	-58.1		27	35.8
150	29	13,623	-59.0		27	34.9
125	28	14,761	-60.6		27	31.3
100	26	16,142	-63.4		27	25.9
80	23	17,509	-64.2		27	21.8
70	23	18,327	-63.5		27	18.7
60	22	19,273	-62.8		28	13.7
50	20	20,395	-61.8		28	12.8
40	20	21,778	-60.8		28	11.1
30	20	23,571	-59.4		29	12.0
25	19	24,715	-58.2		29	12.9
20	15	26,143	-56.1		28	16.6
15	13	27,988	-53.0		28	16.2
10	11	30,636	-46.7			
7	5	33,022	-42.8			

WASHINGTON DULLES INT. ARPT. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	45	-1.0	-4.0	27	1.5
1000	30	157			26	2.4
950	[illegible]	573	2.2	-4.5	26	7.3
900	30	1,006	.2	-6.4	27	9.6
850	30	1,443	-1.8	-8.5	27	10.5
800	30	1,945	-2.8	-12.8	27	11.7
750	30	2,455	-4.4	-15.3	27	13.3
700	30	2,996	-6.8	-17.8	26	15.4
650	30	3,570	-9.6	-19.8	26	18.3
600	30	4,187	-12.6	-22.5	26	20.9
550	30	4,843	-16.6	-26.2	26	23.3
500	30	5,556	-21.3	-30.0	27	27.1
450	30	6,321	-26.7	-34.8	26	29.9
400	30	7,165	-32.7	-39.6	26	34.0
350	30	8,093	-38.7	-43.8	26	37.5
300	30	9,137	-45.6		26	41.8
250	30	10,331	-53.5		26	44.2
200	30	11,747	-58.4		27	44.0
175	30	12,589	-58.1		27	40.3
150	30	13,557	-58.5		27	37.1
125	28	14,705	-60.4		27	31.7
100	28	16,039	-62.6		27	26.8
80	18	17,443	-62.9		27	21.9
70	28	18,285	-62.3		27	17.4
60	28	19,239	-61.8		27	15.1
50	28	20,368	-61.1		28	12.5
40	28	21,758	-59.9		28	11.2
30	28	23,560	-58.3		29	10.5
25	28	24,709	-57.5		29	11.8
20	28	26,120	-56.8		28	15.2
15	24	27,946	-54.7		28	18.1
10	23	30,565	-50.5		27	21.6
7	7	32,901	-48.8			

WINNEMUCCA, NEV. 871 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,310	-2.1	-5.4	19	2.1
1000	31	200				
950	31	613				
900	31	1,054				
850	31	1,538	1.2	-5.4	19	3.9
800	31	1,996	-.1	-8.1	23	5.4
750	31	2,505	-2.9	-11.1	26	8.1
700	31	3,055	-5.7	-14.2	27	11.0
650	31	3,628	-8.2	-18.1	28	13.4
600	31	4,251	-11.6	-20.7	28	15.7
550	31	4,936	-15.8	-24.7	29	16.9
500	31	5,675	-20.7	-28.9	29	17.7
450	31	6,390	-26.1	-34.1	29	20.3
400	31	7,237	-32.0	-39.4	29	23.4
350	31	8,168	-38.9	-44.1	29	27.0
300	31	9,208	-46.7		29	30.5
250	31	10,394	-55.3		29	33.2
200	31	11,798	-60.0		29	30.1
175	31	12,636	-58.1		29	30.3
150	31	13,607	-58.3		29	24.6
125	31	14,750	-59.8		29	21.0
100	31	16,140	-61.2		29	16.5
80	29	17,572	-61.5		29	11.2
70	27	18,352	-60.3		31	8.5
60	27	19,315	-59.0		31	6.5
50	26	20,462	-57.0		33	4.9
40	26	21,880	-55.3		35	5.9
30	26	23,720	-54.5		02	7.6
25	26	24,841	-53.2		02	9.1
20	24	26,342	-51.7		02	11.3
15	23	28,209	-51.6		02	13.5
10	17	30,845	-50.6		02	17.1
7	7	33,180	-51.1			

WINSLOW, ARIZ. 855 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,492	-7.0	-11.4	16	1.8
1000	31	248				
950	31	656				
900	31	1,089				
850	31	1,535			16	1.6
800	31	2,019	.5	-10.3	25	2.0
750	31	2,537	-.4	-13.5	27	4.2
700	31	3,086	-2.2	-15.9	29	5.9
650	31	3,670	-4.5	-19.3	29	8.6
600	31	4,299	-7.8	-22.1	30	11.9
550	31	4,964	-12.0	-25.7	29	14.0
500	31	5,673	-16.9	-29.5	29	16.2
450	31	6,469	-22.7	-33.4	29	18.6
400	31	7,329	-29.2	-39.7	29	20.1
350	31	8,249	-36.6	-45.4	30	21.9
300	31	9,318	-45.0		30	22.8
250	31	10,511	-54.5		30	24.7
200	31	11,915	-60.4		30	25.7
175	31	12,749	-59.7		29	24.4
150	31	13,710	-61.1		29	23.2
125	31	14,836	-63.0		29	19.0
100	30	16,203	-65.5		29	15.2
80	30	17,558	-65.8		29	13.3
70	29	18,371	-64.6		29	8.7
60	29	19,315	-62.5		30	6.2
50	28	20,441	-61.2		32	4.0
40	28	21,833	-59.3		01	4.0
30	28	23,645	-56.7		03	5.6
25	27	24,804	-55.7		04	7.1
20	24	26,231	-54.0		04	8.7
15	18	[illegible]	-53.0		04	10.7

YAKUTAT, ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	12	-8.0	-10.1	11	2.0
1000	31	22			11	1.4
950	31	430	-2.1	-7.7	11	4.3
900	31	857	-4.7	-10.0	12	4.2
850	31	1,305	-7.6	-12.4	12	4.7
800	31	1,774	-10.7	-15.5	13	4.0
750	31	2,270	-13.4	-19.7	14	2.6
700	31	2,791	-16.4	-23.5	15	1.7
650	31	3,344	-20.0	-26.6	17	1.8
600	31	3,934	-23.8	-29.8	17	1.7
550	31	4,563	-27.7	-33.7	19	2.2
500	31	5,244	-32.1	-37.9	21	2.9
450	31	5,980	-37.4	-42.2	22	2.9
400	31	6,794	-42.9	-44.3	26	4.0
350	31	7,674	-48.4		27	6.8
300	31	8,677	-53.2		27	9.2
250	31	9,844	-55.5		28	12.9
200	31	11,274	-52.4		27	13.4
175	31	12,140	-51.4		27	14.0
150	31	13,141	-51.2		28	15.6
125	31	14,327	-50.6		28	16.6
100	31	15,723	-50.3		28	17.6
80	31	17,240	-49.9		28	20.7
70	31	18,113	-49.3		28	20.1
60	31	19,125	-49.3		28	21.3
50	31	20,323	-48.3		29	22.8
40	31	21,791	-48.5		29	27.3
30	31	23,686	-47.8		30	31.2
25	31	24,888	-48.1		30	33.7
20	30	26,356	-48.7		30	34.9
15	27	28,248	-48.6		30	36.7
10	21	30,936	-48.0		31	40.7
7	13	33,263	-47.6			

+ YAP, CAROLINE IS. 1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	17	27.1	23.8	05	5.4
1000	31	82	26.6	23.0	06	7.1
950	31	529	23.0	19.0	07	11.9
900	31	1,006	20.1	15.7	07	13.2
850	31	1,499	17.8	11.5	08	12.7
800	31	2,016	15.8	5.7	08	11.3
750	31	2,557	13.1	1.2	08	10.5
700	31	3,140	10.1	-3.9	09	11.2
650	31	3,751	6.6	-6.3	09	12.7
600	31	4,408	3.4	-11.7	09	12.5
550	31	5,100	-.4	-15.8	09	12.2
500	31	5,866	-4.5	-20.6	09	12.7
450	31	6,682	-9.4	-25.4	10	13.4
400	31	7,571	-15.3	-29.6	09	12.8
350	31	8,567	-22.0	-35.9	10	11.8
300	31	9,703	-30.3	-43.3	10	11.1
250	31	10,973	-40.6	-51.6	11	10.3
200	30	12,453	-53.1		11	11.3
175	30	13,299	-60.3		12	11.7
150	30	14,242	-68.1		11	11.8
125	30	15,314	-76.4		11	14.6
100	30	16,574	-83.4		10	15.0
80	30	17,826	-78.1		10	6.5
70	30	18,595	-73.6		33	.2
60	30	19,507	-68.1		29	3.3
50	30	20,615	-62.9		27	5.3
40	29	22,002	-59.1		26	7.5
30	29	23,815	-56.4		27	6.5
25	28	24,980	-54.1		26	4.6
20	28	26,420	-50.7		17	1.5
15	27	28,301	-49.1		10	7.9
10	25	30,989	-43.5		10	18.6
7	19	33,396	-40.4		09	22.1
5	8	35,688	-37.7			

YUCCA FLAT, NEV. 885 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,196	-2.1	-7.7	27	1.1
1000	31	209				
950	31	628				
900	31	1,069				
850	31	1,520	3.5	-7.9	32	1.5
800	31	2,011	2.1	-10.0	26	1.6
750	31	2,531	.6	-12.7	30	3.0
700	31	3,082	-1.6	-14.7	30	4.8
650	31	3,665	-4.8	-18.0	30	7.9
600	31	4,294	-8.5	-21.1	29	10.7
550	31	4,959	-12.7	-24.8	29	13.4
500	31	5,685	-17.7	-28.5	30	16.3
450	31	6,457	-23.1	-32.7	29	18.9
400	31	7,318	-29.3	-38.3	29	22.1
350	31	8,258	-36.6	-43.5	29	23.8
300	31	9,307	-45.1		29	24.5
250	31	10,499	-54.4		29	26.3
200	31	11,901	-61.1		29	28.1
175	31	12,730	-60.6		30	26.3
150	31	13,690	-60.6		29	24.3
125	31	14,821	-62.2		29	21.5
100	31	16,190	-64.5		29	16.6
80	30	17,550	-64.0		30	9.8
70	30	18,369	-62.9		30	7.7
60	30	19,322	-61.6		32	6.5
50	30	20,457	-59.4		36	3.8
40	28	21,860	-57.8		03	4.9
30	27	23,683	-56.0		04	8.0
25	23	24,853	-54.2		05	9.5
20	17	26,289	-52.7		04	10.8
15	13	28,153	-51.3			
10	5	30,789	-48.5			

YUMA, ARIZ. 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	21	131	7.0	-5.8	03	.8
1000	21	173	9.5	-6.2	03	1.3
950	21	595	13.6	-3.8	36	3.2
900	21	1,048	11.5	-6.0	01	2.7
850	21	1,525	9.4	-7.2	33	2.4
800	21	2,024	7.2	-9.2	29	2.9
750	21	2,549	5.1	-11.5	29	4.5
700	21	3,113	2.6	-13.5	28	6.1
650	21	3,700	-.6	-16.1	29	8.1
600	21	4,343	-4.7	-19.4	29	10.5
550	21	5,012	-9.3	-23.3	29	12.7
500	21	5,752	-14.5	-28.4	29	13.6
450	21	6,530	-20.3	-32.1	29	15.1
400	21	7,402	-27.2	-38.4	29	17.1
350	21	8,349	-34.9	-45.4	29	17.4
300	21	9,403	-43.9		29	17.7
250	21	10,601	-53.6		30	19.7
200	21	12,006	-61.0		30	22.1
175	20	12,840	-60.9		29	22.6
150	20	13,793	-62.4		29	21.8
125	19	14,916	-65.4		28	18.3
100	18	16,264	-68.2		28	15.8
80	15	17,613	-69.2		29	12.2
70	14	18,409	-67.9		29	9.3
60	11	19,351	-65.2		30	6.5
50	10	20,477	-62.7		35	4.2
40	9	21,861	-59.7			
30	9	23,672	-57.1			
25	9	24,832	-55.3			
20	8	26,263	-54.5			
15	8	28,119	-51.2			
10	6	30,732	-50.8			
7	5	33,059	-49.1			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

See reference note at end of table

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. JANUARY 1967

Date	Sun's zenith distance								
	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	ALBUQUERQUE, N. MEX.								
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Jan.									
1-----	1.04	1.14	1.27	1.43	1.44	1.46	1.29	1.16	1.06
2-----	1.05	1.17	1.30	----	----	----	----	----	----
3-----	1.09	1.19	1.28	----	----	----	----	----	----
5-----	1.07	----	----	----	----	----	----	----	----
7-----	----	1.15	1.27	1.42	1.45	1.40	1.27	1.12	.99
8-----	1.06	1.16	1.27	1.46	1.50	1.45	1.25	1.10	.97
9-----	1.10	1.21	1.31	1.46	1.48	1.44	1.23	1.16	1.02
10----	1.05	1.14	1.23	1.37	1.41	1.34	1.24	1.11	.99
11----	1.02	1.14	1.28	1.42	1.45	1.43	1.32	1.14	1.05
12----	1.08	1.18	1.30	1.43	----	----	----	----	----
13----	.98	1.08	1.21	1.32	1.37	----	----	----	----
14----	.97	1.08	1.22	----	----	----	----	----	----
16----	1.04	1.15	1.28	1.40	1.46	1.42	1.23	1.05	.99
17----	----	----	----	----	----	1.43	1.28	1.17	1.06
18----	1.08	1.19	1.30	----	----	1.46	1.32	1.22	1.13
19----	1.08	1.20	----	----	----	----	----	1.11	1.01
20----	.98	1.10	----	1.38	1.42	----	----	----	.98
21----	----	----	1.25	1.39	1.43	1.38	1.21	1.06	----
22----	1.09	----	----	----	----	----	----	----	----
24----	1.06	----	----	----	----	----	----	----	----
25----	----	----	----	----	----	----	----	1.08	----
26----	1.04	1.17	1.29	1.43	1.46	1.42	1.28	----	----
27----	1.09	1.21	1.32	1.46	----	----	----	----	----
30----	1.05	1.14	1.24	1.43	1.43	1.41	1.22	1.10	.98
Averages	1.05	1.16	1.27	1.41	1.44	1.42	1.26	1.12	1.02
	BLUE HILL OBS., MASS.								
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Jan.									
2-----	0.67	0.77	0.89	----	----	----	0.99	0.87	0.74
6-----	.95	1.05	1.18	----	1.30	----	1.20	1.05	.95
16----	.84	.94	1.10	----	1.28	----	1.13	1.01	.89
18----	.93	1.01	1.13	----	1.33	----	1.23	1.11	.99
20----	.77	.89	1.04	----	1.18	----	----	----	----
21----	.79	.90	1.01	----	1.23	----	1.11	.98	.87
30----	.88	.98	----	1.30	1.30	1.29	1.13	1.05	.93
31----	.94	1.04	1.16	1.32	1.33	1.33	----	----	----
Averages	0.85	0.95	1.07	1.31	1.28	1.31	1.13	1.01	0.90
	OMAHA, NEBR.								
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Jan.									
1-----	----	----	HS1.15	----	HM1.28	----	----	----	----
3-----	----	----	----	----	HM1.28	----	----	----	----
8-----	----	----	----	----	HM1.28	----	----	----	----
9-----	----	----	----	----	HS1.28	----	----	----	----
10----	HS0.96	HS1.04	HM1.16	----	HS1.28	----	HS1.11	HS1.01	HS0.88
27----	HS .94	HS1.04	HS1.14	----	1.26	----	----	----	----
Averages	0.95	1.04	1.15	----	1.28	----	1.11	1.01	0.88

Date	Sun's zenith distance								
	A M				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	MADISON, WIS.								
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jan.									
3-----	----	----	----	----	----	----	----	M 0.94	M 0.86
15----	----	M 0.92	M 1.07	----	S 1.23	----	S 1.15	S 1.09	S .86
17----	S 0.95	S 1.06	S 1.18	----	S 1.29	----	S 1.19	S 1.05	S .94
28----	----	----	----	----	M 1.26	----	----	----	----
Averages	0.95	0.99	1.13	----	1.26	----	1.17	1.03	0.89
	TUCSON, ARIZ.								
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jan.									
1-----	0.97	1.07	1.18	1.31	----	----	----	----	----
2-----	----	----	.87	1.18	----	1.35	----	----	----
4-----	.83	.95	1.10	1.32	----	1.35	1.17	1.06	0.97
5-----	----	.84	----	----	----	----	----	----	----
6-----	.46	.52	.67	1.09	1.23	1.17	1.03	.90	.78
7-----	.59	.70	.87	1.20	----	----	----	----	----
8-----	.42	.49	.69	1.01	1.15	1.14	1.03	.91	.79
9-----	----	.55	.69	1.02	1.24	1.20	1.00	.88	.77
10----	----	.48	.63	.97	1.16	1.11	.92	.77	.62
11----	----	----	----	----	1.41	1.35	1.19	1.07	.97
12----	.95	1.05	----	----	----	----	----	----	----
13----	.87	.98	1.10	1.26	1.35	----	1.11	.95	.89
14----	----	----	----	1.25	1.30	1.25	1.08	.96	.85
15----	.84	.82	1.02	1.27	1.30	1.28	1.11	1.03	.93
16----	.88	1.02	1.14	1.32	1.33	1.26	1.12	.97	.88
17----	.84	.94	1.06	1.26	----	1.26	1.07	.93	.80
18----	.90	.97	1.09	1.27	1.21	1.13	1.06	.89	.81
19----	.88	.97	1.05	1.30	1.26	1.23	1.05	.75	.69
20----	.83	.90	1.09	1.28	1.29	1.16	1.04	.94	.86
21----	.93	1.02	1.13	----	1.26	----	.91	.81	---
22----	Pyrheliometer inoperative								
26----	Pyrheliometer inoperative in a.m.								
27----	----	----	----	----	1.24	1.27	----	----	----
28----	----	----	.99	1.31	1.37	1.34	1.18	---	----
29----	Pyrheliometer inoperative								
30----	1.08	1.12	1.16	1.35	1.36	1.17	.90	.64	.39
31----	1.05	1.11	1.16	----	----	----	----	----	---
Averages	0.83	0.87	0.98	1.22	1.28	1.24	1.06	0.90	0.80
	MAUNA LOA OBS., HAWAII								
	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jan.									
25----	1.22	1.30	1.39	1.49	1.61	----	----	1.20	1.13
26----	1.15	1.24	1.35	1.47	1.58	1.47	1.34	1.23	1.13
27----	1.17	1.25	1.35	1.47	1.58	----	----	----	----
28----	1.15	1.23	1.33	1.46	1.47	----	----	----	----
Averages	1.17	1.26	1.36	1.47	1.56	1.47	1.34	1.22	1.15

S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon
HS Slight haze
HM Moderate haze

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No 2, page 63, of this publication

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	---	---	320	330	258	350	305	303	304	334	343	282	352	357	384	378	367	382	386	355	363	193	108	349	119	390	341	362	344	372	311	322
ANNETTE ALASKA	56	17	50	70	15	12	50	33	6	15	23	35	32	8	48	23	33	26	21	27	27	62	109	115	73	122	111	33	42	28	---	44
APALACHICOLA FLORIDA	173	101	101	327	365	353	239	215	89	51	344	361	198	117	133	438	456	448	335	255	149	347	380	393	372	157	383	456	447	416	342	288
ARGONNE NAT. LAB.	60	145	143	117	116	53	79	154	209	156	192	225	157	59	242	76	254	251	206	217	223	42	195	74	84	36	140	269	90	267	125	150
ASTORIA OREGON	68	25	41	14	59	51	42	54	61	13	50	14	26	58	109	105	104	32	12	77	115	102	91	58	53	73	18	102	39	128	210	65
ATLANTA GEORGIA	32	56	243	265	324	311	51	50	91	168	299	263	201	52	201	333	338	76	163	254	243	248	254	259	231	---	96	385	365	352	197	213
BARROW ALASKA †	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	4	6	1	2	5	7
BETHEL ALASKA	5	27	6	13	16	16	16	16	16	12	24	9	13	47	13	9	46	7	19	19	22	71	22	23	47	49	73	66	73	99	79	31
BISMARCK N.DAK.	45	126	49	71	45	84	178*	83	172	175	97	99	67	183	131	159	215	151	126	78	192	77	94	95	192	137	---	120	192	123	219	126*
BLUE HILL MASS.	55	203	71	25	153	221	121	12	198	67	184	143	149	44	164	230	169	246	119	225	238	191	189	163	85	176	18	45	184	261	267	149
BOISE IDAHO	152	168	58	32	115	89	182	111	86	100	134	102	68	216	50	163	160	130	35	31	59	225	---	73	181	36	74	86	76	151	52	106
BOSTON MASSACHUSETTS	47	199	62	15	134	221	108	27	171	60	164	139	112	44	180	237	148	239	110	209	---	175	---	145	71	206	20	74	131	249	271	137
BROWNSVILLE TEXAS	166	400	163	424	271	402	127	149	31	91	262	196	158	406	208	421	349	66	95	207	179	270	219	211	287	304	466	470	470	467	270	265
CANTON ISLAND P.I.	661	654	633	620	659	660	626	720	571*	664	669	664	491	679	652	693*	660	676	661	640	628	655	626	675	682	689	678	552	675	644	639	648*
CAPE HATTERAS N.C.	37	184	57	31	208	276	140	60	37	23	233	294	297	30	41	254*	---	288	44	312	218	284	298	310	287	316	227	341	293	222	327	199*
CARIBOU MAINE	89	108	99	75	85	159	147	84	102	124	131	---	102	120	93	---	97	207	196	190	80	208	64	86	91	79	163	72	147	168	263	125
CHARLESTON S.C.	33	101	40	101	342	331	148	95	83	38	341	294	332	139	47	365	367	354	152	338	335	338	337	343	300	345	264	424	410	403	368	255
CLEVELAND OHIO	25	89	158	144	97	67	74	105	150	94	82	185	101	115	77	187	141	216	199	199	50	73	139	65	143	12	39	116	219	---	---	116
COLUMBIA MISSOURI	219	185	214	266	189	87	151	279	272	255	288	187	195	251	298	117	255	277	289	304	255	282	267	84	225	---	---	---	281	270	184	229
DAVIS CALIFORNIA	220	245	91	57	250	258	263	225	234	245	169	257	263	238	148	297	268	51	56	50	20	239	211	172	250	68	98	65	161	126	288	180
DODGE CITY KANSAS	---	---	---	---	179	166	283	---	286	280	286	255	287	147	---	275	285	214	310	312	268	303	245	241	163	348	342	314	292	304	299	267
E. LANSING MICHIGAN	---	103	65	---	179	80	85	101	159	131	133	101	191	103	138	99	209	275	176	185	223	41	178	34	33	25	96	284	268	314	83	141
EL CENTRO CALIF. NPF	381	257	248	249	141	259	219	260	258	250	249	214	251	255	256	254	266	273	268	266	236	165	276	168	276	290	301	288	298	288	218	254
EL PASO TEXAS	377	364	375	376	368	370	398	385	402	395	389	382	389	386	397	400	404	404	405	402	411	386	261	379	363	439	412	431	415	432	443	392
ELY NEVADA	186	293*	249	237	135	---	265	291	247	292	---	274	233	286	281	322	306	280	323	118	86	80	205	134	357	207	297	254	245	171	267	239
EPPLEY NEWPORT R.I.	37	179	---	27	114	224	100	28	208	64	187	142	173	45	164	237	199	251	105	234	247	208	179	237	101	92	49	57	204	278	273	155
FAIRBANKS ALASKA	3	3	9	5	6	3	7	23	20	6	7	30	34	42	22	7	25	50	51	9	24	7	44	12	11	9	59	56	60	24	62	23
FORT WORTH TEXAS	347	339	350	340	348	247	227	363	160	350	354	357	72	348	365	358	117	135	372	363	302	352	105	334	146	353	376*	394	392	345	367	302*
FRESNO CALIFORNIA	162	80	109	110	197	216	215	235	239	242	220	197	189	219	225	37	38	108	152	79	14	132	264	106	277	281	258	120	85	59	206	163
GAINESVILLE FLORIDA	---	---	112	336	495	483	---	---	287	163	420	345	386	369	152	428	430	421	341	395	487	510	411	402	392	333	398	450	---	435	382	376
GLASGOW MONTANA	81	136	134	109	59	146	168	124	173	137	82	149	113	167	72	138	213	199	121	97	123	67	140	201	147	206	183	155	200	181	190	142
GRAND JUNCTION COLO.	253	283	313	279	157	280	300	265	298	292	266	160	192	155	168	117	311	330	331	285	215	78	119	188	132	279	306	289	275	274	211	239
GREAT FALLS MONTANA	68	152	---	66	78	144	137	122	84	63	123	---	27	114	104	137	123	161	91	128	49	117	176	177	166	146	111	149	57	219	114	117
GREENSBORO N.C.	31	196	139	35	177	251	173	26	102	208	286	292	231	69	157	300	295	---	---	292	282	278	262	279	287	247	241	338	339	125	306	215
INDIANAPOLIS INDIANA	55	276	81	198	83	108	215	91	248	135	272	255	163	126	255	119	---	---	---	---	39	56	131	141	177	36	73	322	103	292	215	158
INYOKERN CALIFORNIA	263	279	275	266	262	286	284	294	272	293	264	280	285	291	380	403	411	414	323	283	219	74	444	230	325	336	303	304	278	234	338	297
ITHACA NEW YORK	26	192	57	19	106	163	70	102	71	135	94	70	132	39	71	193	101	121	178	167	152	167	53	62	126	31	23	77	104	148	173	104
LAKE CHARLES LA.	95	337	213	361	360	125	113	150	41	145	351	332	32	167	302	383	154	31	239	112	246	123	214	187	215	200	382	409	406	342	300	228
LAKELAND FLORIDA	115	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	246	247	307	294	397	335	218	469	485	455	419	---
LANDER WYOMING	203	241	229	236	100	229	255	172	232	232	178	235	255	92	217	200	260	277	204	205	177	194	88	287	170	189	296	279	200	306	156	213
LARAMIE WYOMING	171	211	135	85	107	218	221	176	213	180	155	175	156	153	179	158	254	267	221	219	177	197	226	260	150	241	279	204	196	278	240	197
LAS VEGAS NEVADA	284	299	287	293	259	302	306	305	298	300	257	286	300	308	310	324	335	336	301	162	168	50	270	179	330	330	351	299	229	223	335	278
LITTLE ROCK ARKANSAS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LOS ANGELES CALIF.	272	238	293	284	182	272	282*	283	300	309	266	270	251	246	290	203	270	292	269	259	148	13	327	33	321	336	335	268	103	86	351	247*
MADISON WISCONSIN	104	111	185	116	199	66	109	203	231	209	154	221	220	121	263	58	282	268	186	194	191	57	199	---	163	64	272	264	91	225	131	172
MANHATTAN KANSAS	280	91	261	259	181	86	192	268	254	261	257	182	214	196	276	185	229	152	257	262	191	254	228	105	50	204	298	279	152	232	246	212
MATANUSKA ALASKA	---	10	34	2	8	23	24	26	35	14	43	49	43	57	53	21	52	18	40	65	61	68	69	58	71	60	73	64	58	39	68	43
MEDFORD OREGON	144	128	81	77	189	105	83	50	63	95	137	68	133	58	66*	214	50	84	62	19	52	229	207	109	116	110	91	80	281	48	179	110
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MIDLAND TEXAS	338	315	334	336	341	233	330	306	191	220	345	336	309	347	359	346	364	356	376	355	364	354	303	310	290	376	364	389	385	363	359	332
NASHVILLE TENNESSEE	90	234	132	250	202	189	166	265	210	277	306	287	103	166	298	306	182	313	114	210	178	89	169	240	176	193	88	350	335	324	116	212
NEW YORK N.Y. U	52	204	95	7	27	218	34	13	195	63	215	89	187	20	167	234	182	250	70	195	219	214	156	215	124	148	5	135	208	293	175	142
NORTH OMAHA NEBRASKA	262	162	263*	262	107	129	---	273	272	273	240	---	208	272	289	220	194	160	272	283	249	80	111	18	79	299	303	289	274	96	193	212*
OAK RIDGE TENNESSEE	29	276	153	239	102	244	10	136	129	296	298	311	178	43	283	318	295	325	93	222	192	137	232	192	303	189	52	363	312	317	96	205
OKLAHOMA CITY OKLA.	272	---	---	261	255	---	---	---	---	---	---	---	---	---	---	262	271	204	292	282	279	279	181	280	108	68	307	304	256	301	91	---

Note.--Langley is the unit used to denote one gram calorie per square centimeter. Values with an asterisk are interpolated.

† Sun below horizon January 1 through 23.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PAGE ARIZONA	---	280	230	259	193	261	255	253	253	249	251	138	185	259	245	256	266	249	269	208	190	157	166	115	---	278	279	240	270	265	203	232
PHOENIX ARIZONA	278	274	273	276	168	297	274	304	295	291	290	166	280	286	286	287	302	292	293	331	320	196	185	250	330	335	362	370	339	364	304	287
PORTLAND MAINE	64	199	64	30	143	226	146	38	170	---	174	160	138	62	173	208	76	---	164	205	204	168	59	79	26	174	42	67	95	262	275	134
PROSSER WASHINGTON	---	---	122	79	175	166	---	---	65	58	80	31	167	29	198	192	150	97	41	67	77	186	135	109	42	70	32	145	---	191	237	113
RAPID CITY S.DAK.	94	172	132	209	92	128	240	153	243	191	133	175	199	245	81	226	224	253	224	114	192	188	80	212	123	279	272	188	202	126	91	177
RENO NEVADA	221	249	173	107	155	219	212	224	218	93	60	211	203	229	232	248	251	146	225	11	---	---	---	---	---	---	---	---	---	---	---	---
RICHLAND 25 NW WASH.	118	52	136	71	160	144	91	101	64	52	74	40	160	39	159	131	147	80	83	101	90	165	163	133	71	49	72	170	206	192	220	114
RIVERSIDE CALIFORNIA	269	283	293	242	202	296	141	300	302	299	270	287	285	244	237	192	312	161	147	149	109	7	171	14	294	325	336	295	289	53	243	227
RUSTON LOUISIANA	---	---	---	---	107	97	232	102	149	288	265	42	76	249	295	29	56	285	---	151	90	98	162	136	109	102	332	315	301	185	132	169
SAINT CLOUD MINN.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	245*	223	119	76	212	---
SALT LAKE CITY	98	165	140	159	69	157	172	177	268	237	155	136	161	200	226	148	251	283	269	57	65	31	101	114	117	175	269	253	154	202	---	167
SAN ANTONIO TEXAS	288	362	369	371	362	217	105	87	139	225	---	302	122	329	381	379	375	153	384	114	197	119	95	147	91	389	410	420	417	325	301	266
SANTA MARIA CALIF.	260	229	258	255	178	274	267	271	260	---	251	260	259	266	276	274	273	273	232	213	80	172	270	140	304	306	280	201	103	51	264	233
SAULT STE MARIE MICH	76	118	83	142	92	114	55	195	62	72	95	71	59	95	199	78	155	242	204	87	109	81	75	125	82	146	73	210	256	279	43	122
SEATTLE TACOMA WASH.	103	18	69	15	100	57	52	43	57	24	53	37	---	19	155*	122*	52	38	10	70	97	92	40	153*	38*	37	24	80	56	---	194	66*
STATE COLLEGE PENN.	89	139	279	175	216	218	43	90	194	194	156	165	109	70	109	246	159	254	118	250	145	151	94	155	173	58	24	116	180	315	123	155
SPOKANE WASHINGTON	82	74	127	22	58	149	44	75	90	35	97	55	70	57	142	184	113	62	14	151	53	208	159	157	37	66	60	120	106	218	220	100
STERLING VIRGINA	65	257	243	96	200	243	122	23	200	201	223	221	190	56	77	282	252	289	172	321	239	244	260	259	263	263	39	178	326	338	251	206
STILLWATER OKLAHOMA	291	245	280	276	218	208	282	291	201	291	292	288	240	263	301	272	287	230	309	293	269	298	268	296	155	165	333	321	282	314	179	266
SWAN ISLAND W.I.	449	452	448	258	82	332	447	429	419	396	442	453	416	372	313	297	306	434	477	475	---	505	504	480	409	79	355	191	277	396	398	376
TAMPA FLORIDA	229	249	---	---	---	---	---	---	341	262	343	---	---	---	---	---	369	356	281	372	227	265	343	340	350	351	251	453	452	445	420	---
TUCSON ARIZONA	332	327	280	332	272	323	318	338	340	336	338	142	335	332	337	343	319	333	343	348	341	235	139	228	275	350	369	369	314	373	358	313
WAKE ISLAND PACIFIC	222	235	350	340	320	282	276	210	309	288	326	354	362	370	370	358	336	312	327*	354	252	383	238	177	366	399	269	279	371	381	360	315

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a m. to 8 a.m.) at Palmer, Alaska

JANUARY 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-16	-38	-51	1	23	52	55	37	5	50	81	74	74	85	47	52	76	48	101	97	89	90	81	83	67	87	133	147	120	135	126	65

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

NOTE: Observations temporarily discontinued at Huntley, Mont., for instrument recalibration.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bismarck, N. D.	36372	20444	34347	36354	36359	36399	20414	34379	00419	20354	35319	34336	-----	20394	33371	35385
Caribou, Maine	-----	02433	35361	-----	35348	00383	34381	35373	32376	-----	33467	34340	34369	35345	35421	36388
Green Bay, Wis.	00378	34383	36450	34393	00411	-----	-----	00376	00409	00463	34335	00306	00336	00422	00442	-----
Tallahassee, Fla.	05261	05271	05275	00276	00273	00289	03295	05295	05305	-----	00253	02308	04308	05322	05359	00316
Albuquerque, N. Mex.	-----	00315	00315	00307	00279	00325	00381	00362	00283	00294	00287	00274	00293	00300	05293	00279
Mauna Loa, Hawaii	-----	00263	00242	00260	00297	00290	00252	-----	00259	00299	00335	-----	00274	06257	-----	05301
Sterling, Virginia	05356	00339	-----	05313	00368	00323	04318	05342	00338	00307	00377	00302	00312	05302	05307	00310
Nashville, Tenn.	04335	00317	00296	00330	00322	04299	00322	00337	00336	00320	00352	00310	04305	00307	00356	00312
Huancayo, Peru	00259	-----	00263	00258	02255	00265	03258	00262	06260	00263	00262	00260	00254	00254	-----	00256
Bedford, Mass.	-----	-----	35318	-----	00330	00387	-----	-----	00355	35327	-----	00312	00314	-----	-----	00343

Station	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Bismarck, N. D.	-----	35371	36358	34388	00352	36349	34356	36425	35443	35470	00361	35389	00363	34320	35382	378
Caribou, Maine	-----	02411	33378	32465	-----	35413	-----	-----	-----	35366	35390	-----	-----	36427	00418	393
Green Bay, Wis.	00396	00382	00379	04363	00360	07341	02336	05377	00354	04379	04433	00408	04409	00335	06392	384
Tallahassee, Fla.	00300	00297	00291	00298	03294	00277	00281	00275	00271	00268	00286	00309	00299	00317	00298	292
Albuquerque, N. Mex.	00313	00323	00300	00318	00279	05271	05293	05311	05361	00302	00283	05272	05283	00281	05285	302
Mauna Loa, Hawaii	00298	00290	00272	00265	00269	-----	00261	00254	00258	00263	00261	00256	-----	00257	04253	271
Sterling, Virginia	00301	00325	00337	00324	00324	00311	00299	00298	00306	00315	05356	00398	00415	00384	04342	332
Nashville, Tenn.	05332	00317	05358	00322	04336	05318	00292	-----	00294	00311	-----	00380	00335	00335	05314	324
Huancayo, Peru	00264	00260	00272	00264	00264	00265	00261	00260	00262	05265	00278	-----	00262	03265	00269	262
Bedford, Mass.	00304	00325	00337	00349	-----	-----	00296	00292	05317	00316	35331	-----	-----	00410	00343	332

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g . 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

DESCRIPTION of CHARTS

CHART I., A. NORMAL DAILY AVERAGE TEMPERATURE (°F. 1931-60) FOR MONTH. B. TEMPERATURE DEPARTURE FROM 30-YEAR MEAN (°F. 1931-60) FOR MONTH. Chart I-A is reproduced from Evironmental Data Service Publication "Climatic Maps of the United States". Chart I-B is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin", a publication of Environmental Data Service.

CHART II. TOTAL PRECIPITATION. -CHART II is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin".

CHART III. PERCENTAGE OF NORMAL PRECIPITATION. -Chart III is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin".

CHART IV. TOTAL SNOWFALL. CHART V. A. PERCENTAGE OF MEAN MONTHLY SNOWFALL. B. DEPTH OF SNOW ON GROUND.-Chart IV gives the total depth in inches of unmelted snowfall as reported during the month by Weather Bureau and cooperative stations. This is converted in Chart V-A into a percentage of the mean monthly total amount computed for each Weather Bureau station having at least 10 years of record. The depth of snow on ground is that reported by both Weather Bureau and cooperative stations as of 7:00 a.m. Eastern Standard Time on the Monday nearest the end of the month. This is reported only for the months December through March. The snowfall charts are presented each month November through April.

> Isolines for Charts I, II, III, IV, and V, are drawn through points of approximately equal value. Caution should be used in interpolating on these charts, particularly in mountainous areas.

CHART VI. A. PERCENTAGE OF POSSIBLE SUNSHINE. B. PERCENTAGE OF MEAN MONTHLY SUNSHINE. -CHART VI-A shows the amount of sunshine received in terms of percentage of the total hours of sunshine possible during the month. In Chart VI-B this is shown as a percentage of the mean number of hours of sunshine received. Means are computed for Weather Bureau stations having at least 10 years of record.

CHART VII. A. AVERAGE DAILY VALUES OF SOLAR RADIATION, LANGLEYS. B. PERCENTAGE OF MEAN DAILY SOLAR RADIATION. -Shown on Chart VII-A are the monthly averages of daily total solar radiation, both direct and diffuse, in langleys (gm. cal. cm. $^{-2}$) for all Weather Bureau stations which record this element.

CHART VII-B shows the percentages of the mean based on at least 5 years of record during the period 1950-1960, and corrected to the International Pyrheliometer Scale of 1956.

CHART VIII. -TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IX. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL. -Centers which can be identified for 24 hours or more are tracked in these charts. Semi-permanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a.m. EST positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

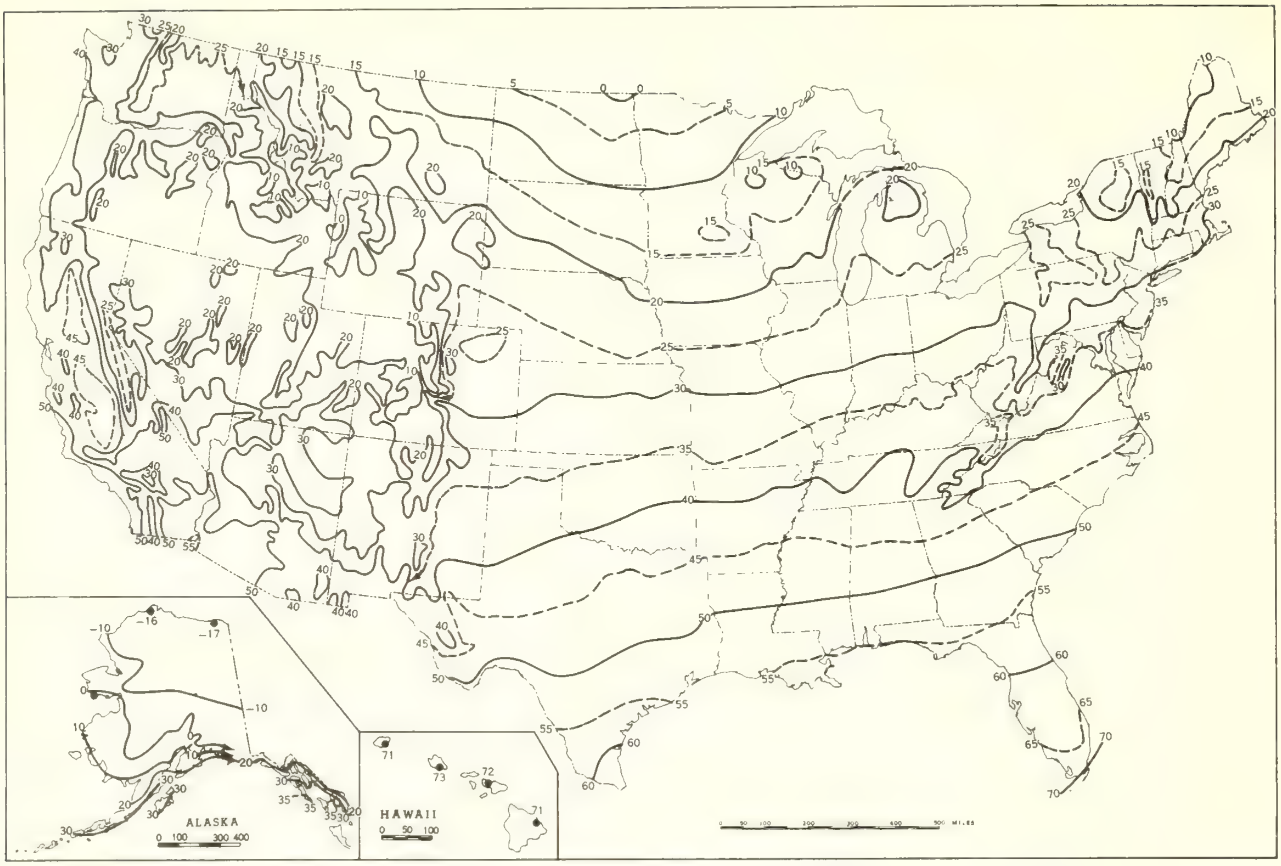
CHART X. AVERAGE SEA LEVEL PRESSURE (mb.) AND RESULTANT SURFACE WIND.-The average monthly sea level pressures are obtained from the eight daily 3-hourly observations reported at Weather Bureau Stations. Resultant surface wind directions (to 36 points of the compass) for the month are shown by arrows. Resultant speeds are indicated by the length of arrow shafts. Constancy ratios (resultant surface wind divided by average surface wind for month) are shown to two decimal places. The inset shows the departure of the average pressure based on 30-year normals for first-order Weather Bureau Stations, other stations having at least 10 years of record; and for each 10° intersection in a diamond grid over the oceans.

CHARTS XI-XVI. AVERAGE HEIGHT, TEMPERATURE, AND RESULTANT WINDS, 850, 700, 500, 300, 200, and 100 mb. -Height is given in geopotential meters and temperature in degrees Celsius. These are the averages of the 1200 GMT radiosonde reports. Wind speeds are given in meters per second; flag represents 25 m.p.s., full feather 5 m.p.s., and half feather 2 1/2 m.p.s. Directions are shown to 360° of the compass. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

CHART XVII. A. 50-MB. RESULTANT WINDS. B. 30-MB. RESULTANT WINDS. -Wind speed (isotachs) in knots. Arrows show resultant wind direction. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

Exact values of most of these charted elements for Weather Bureau stations are printed each month in tabular form in CLIMATOLOGICAL DATA, NATIONAL SUMMARY. Extreme values of temperature and precipitation for each state are included in the tables, Condensed Climatological Summary. Annual averages for surface elements are presented in the CDNS Annual Issue each year.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), January



B. Temperature Departure from 30 - Year Mean (°F 1931-60), January 1967.

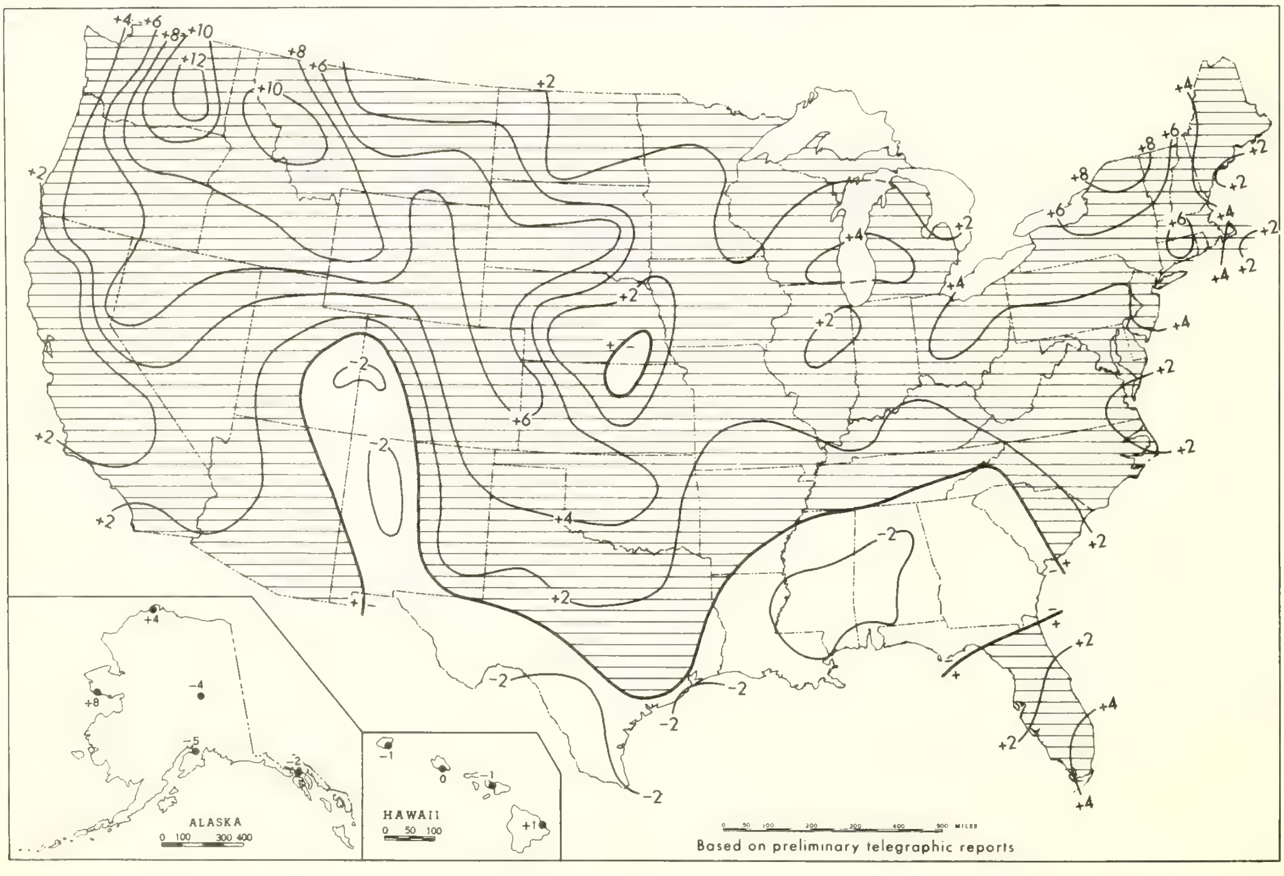


Chart II. Total Precipitation (Inches), January 1967.

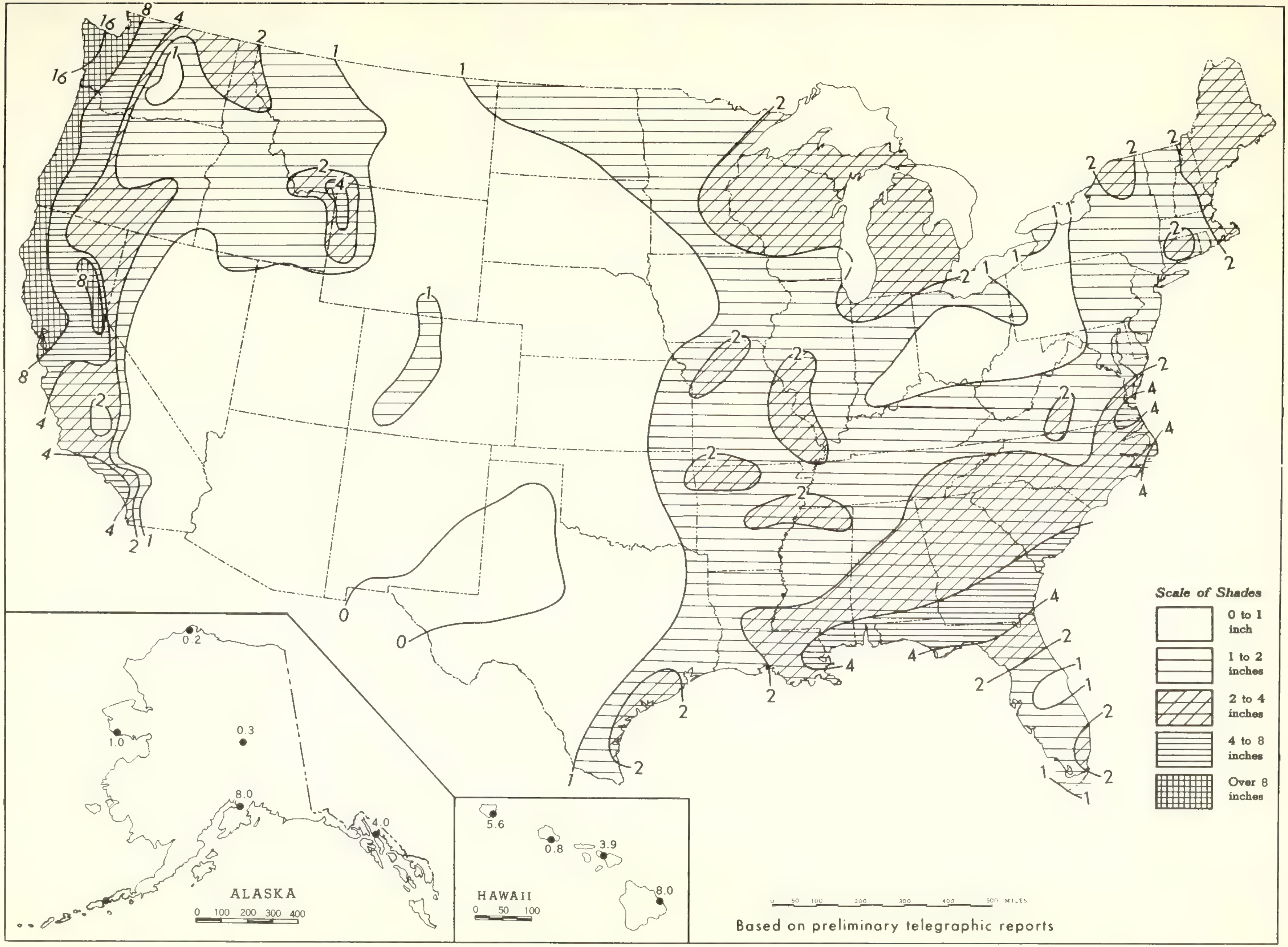


Chart III. Percentage of Normal Precipitation, January 1967.

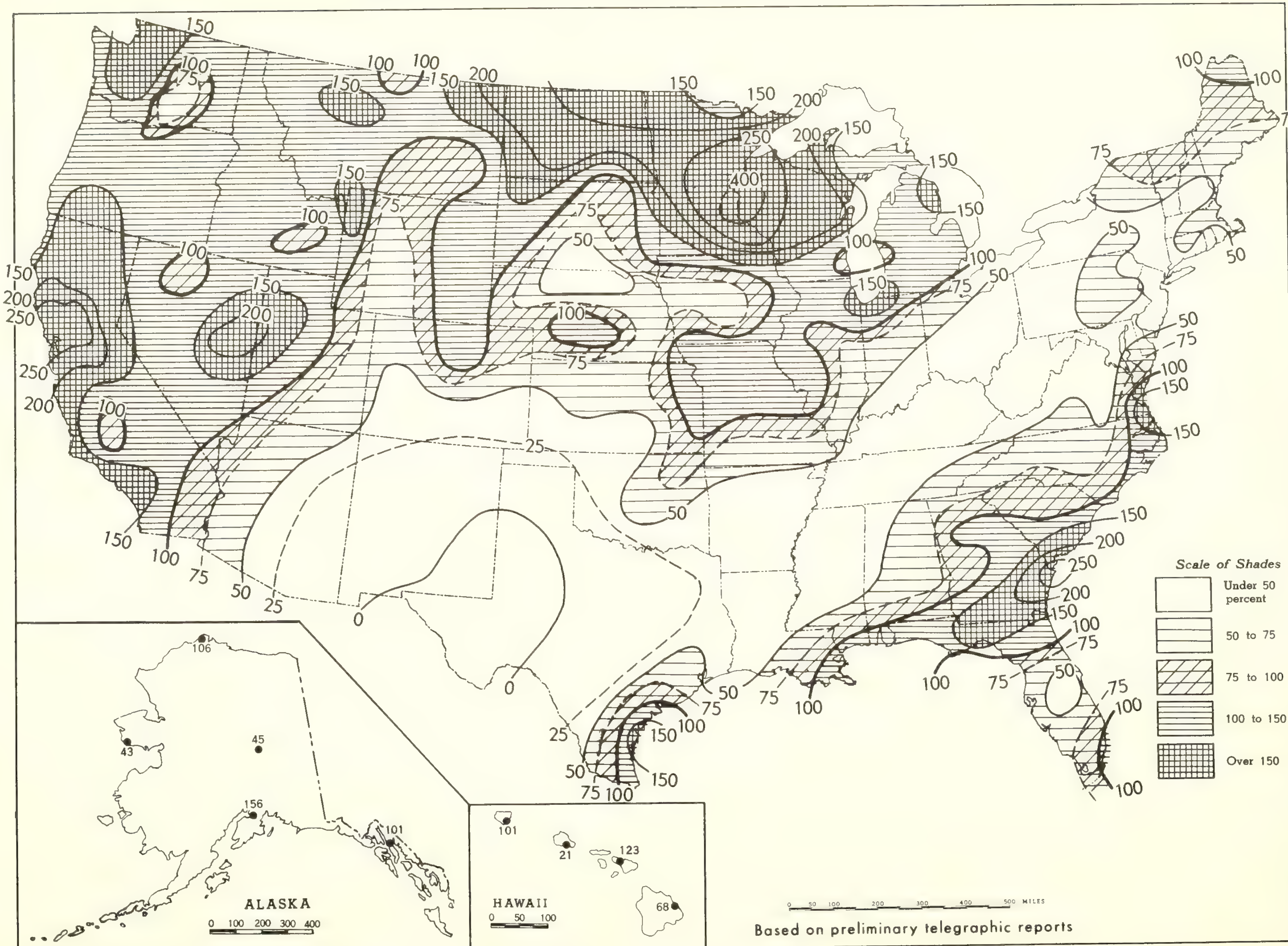
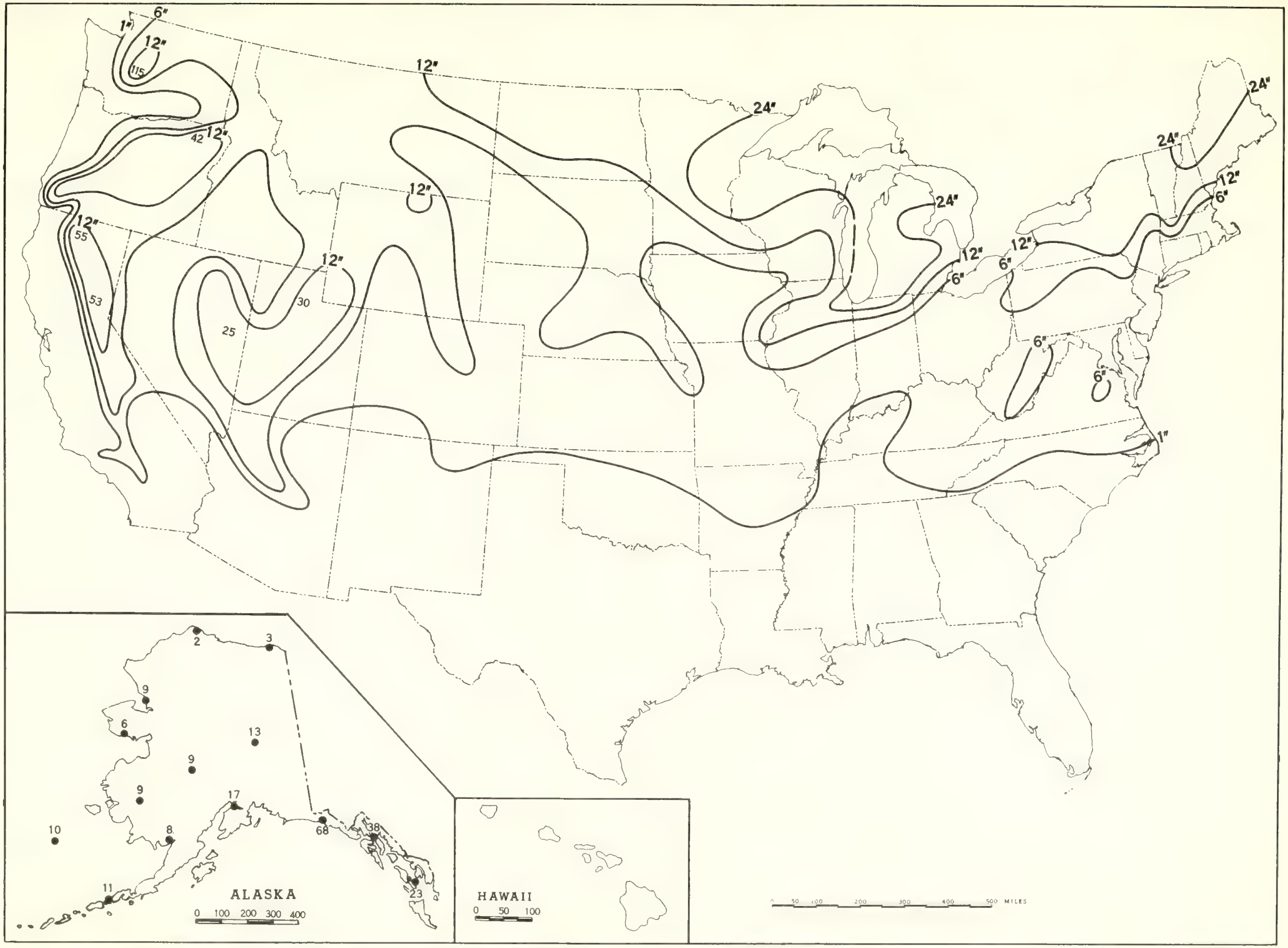
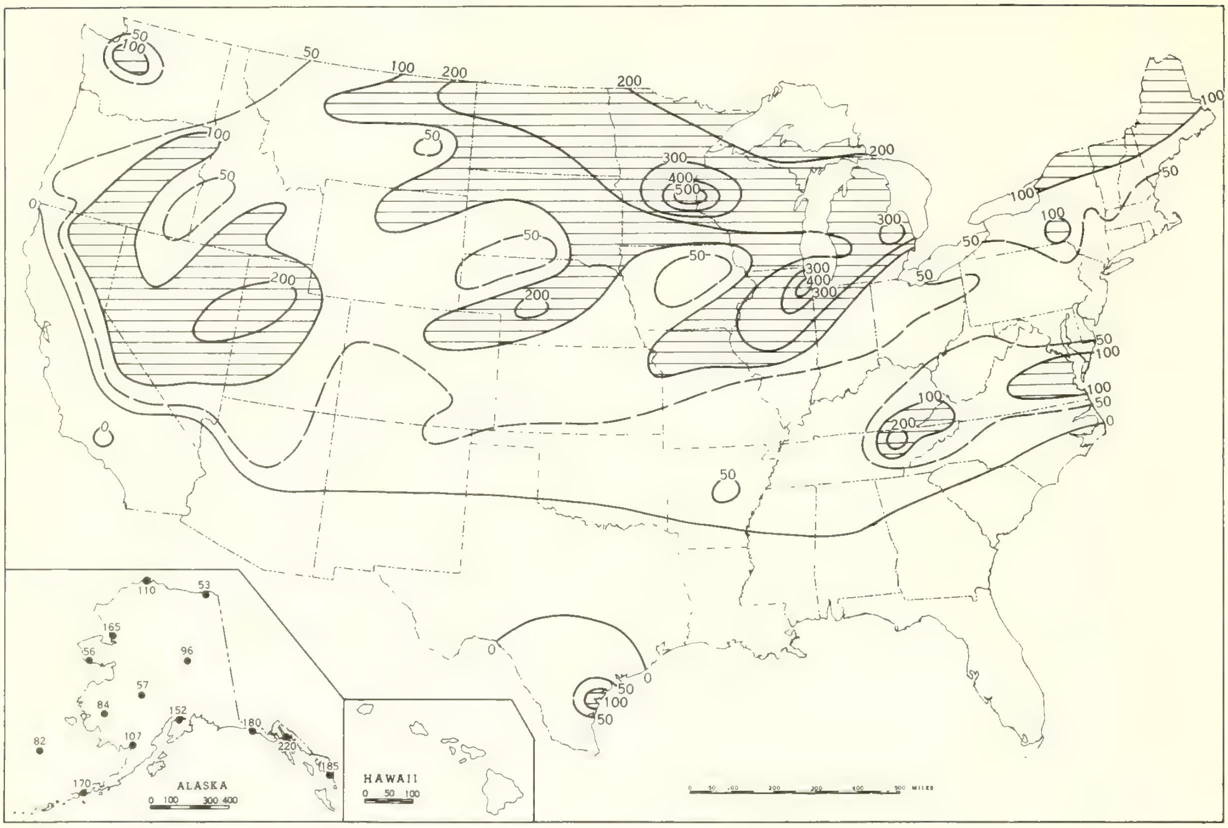


Chart IV. Total Snowfall (Inches), January 1967.

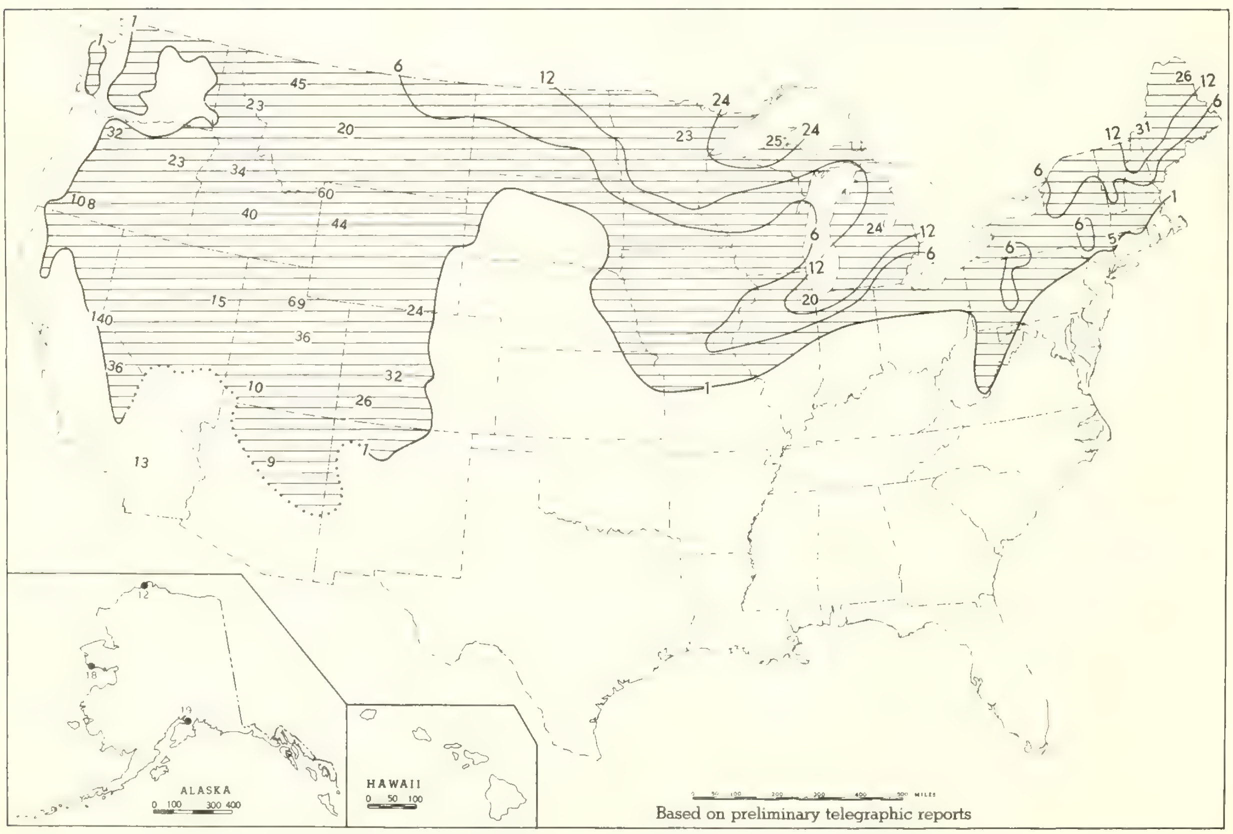


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, January 1967.

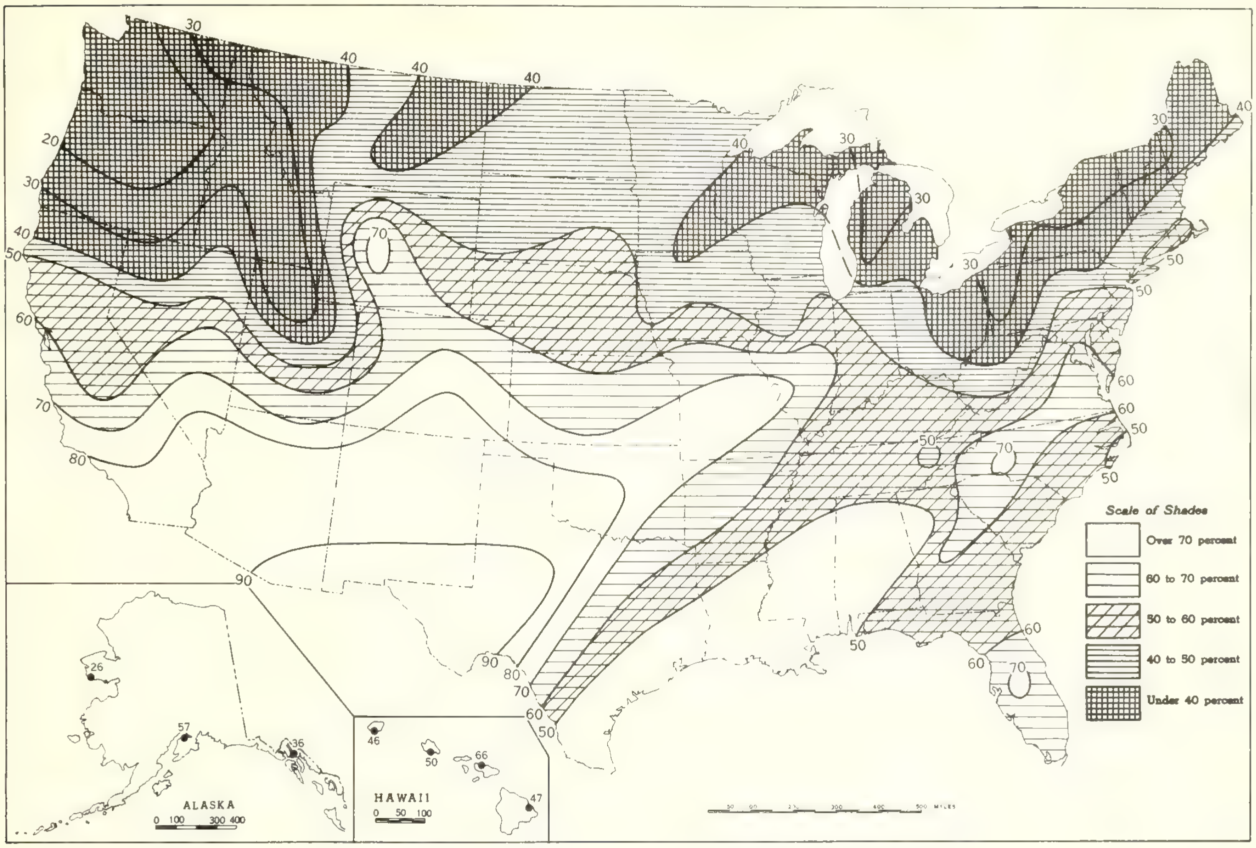


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., January 30, 1967.

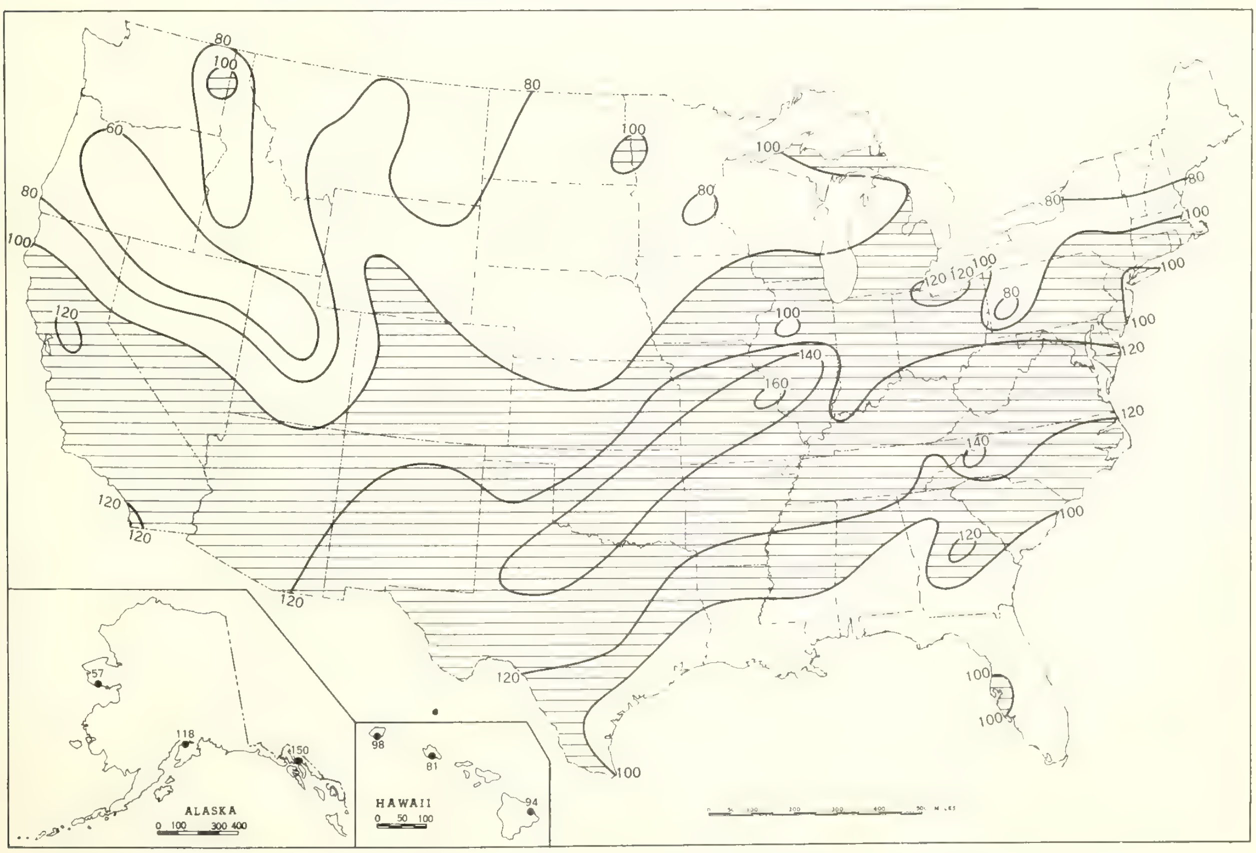


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a. m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, January 1967.

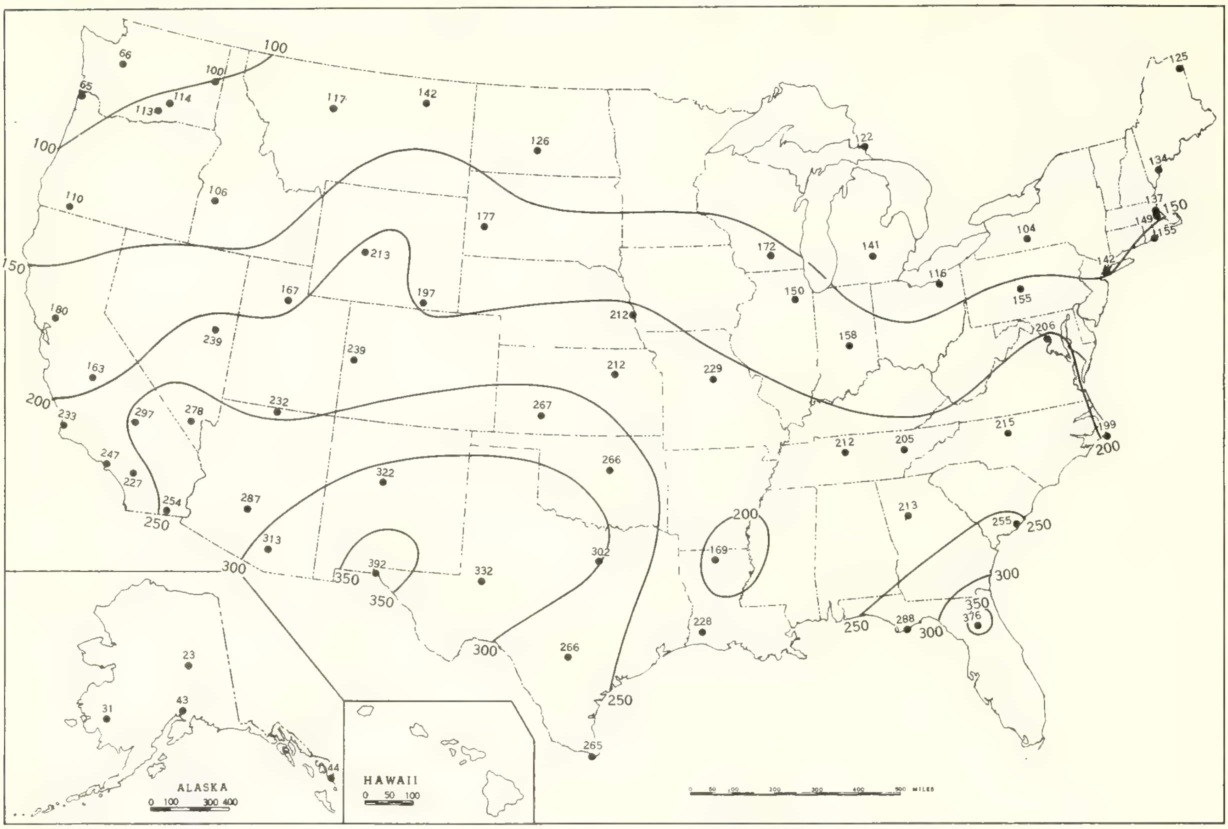


B. Percentage of Mean Monthly Sunshine, January 1967.

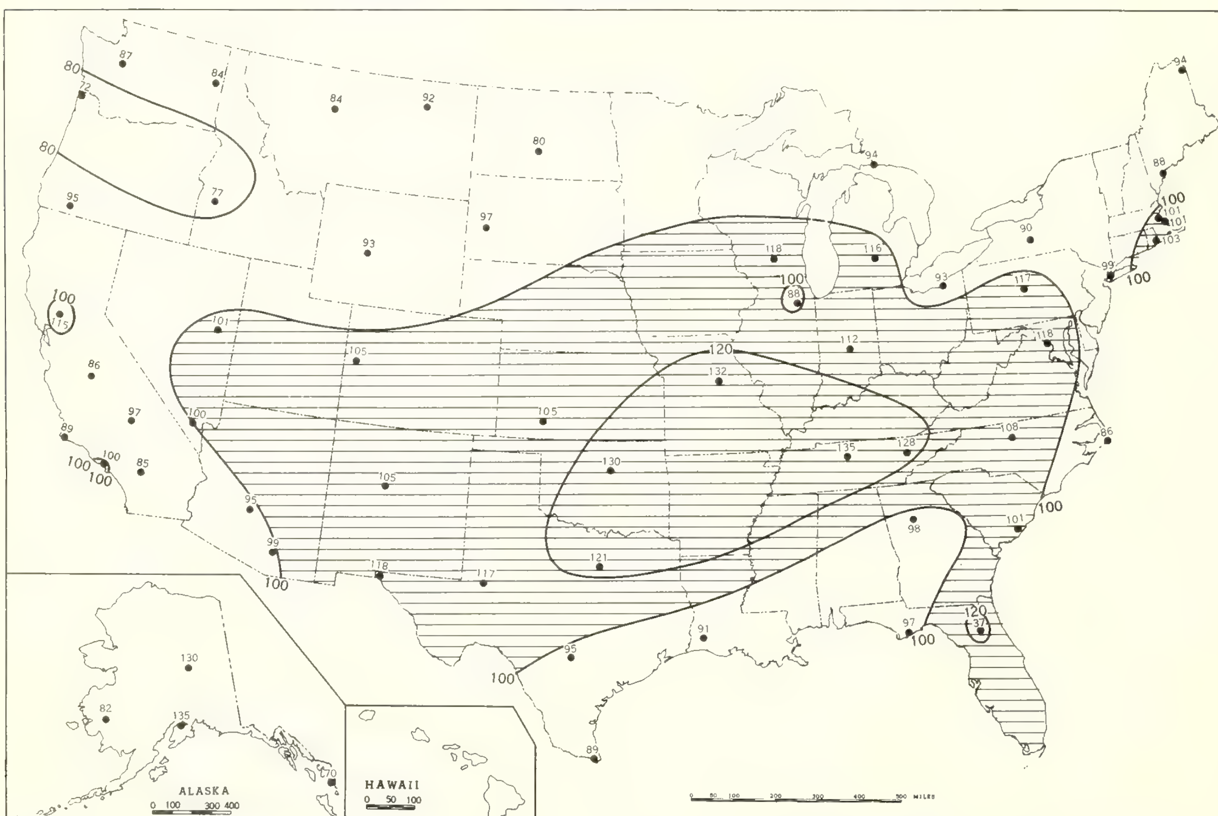


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, January 1967.

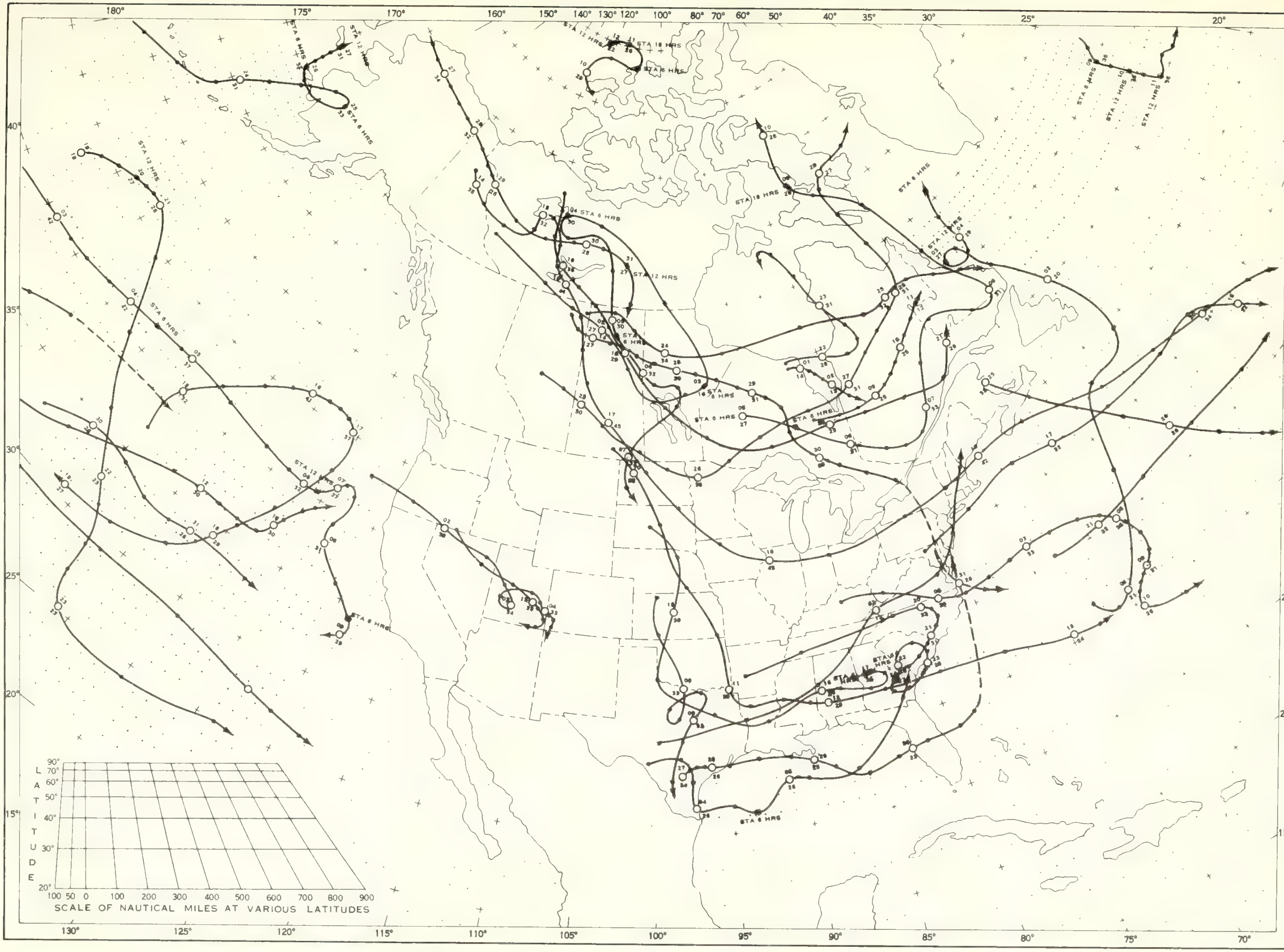


B. Percentage of Mean Daily Solar Radiation, January 1967.



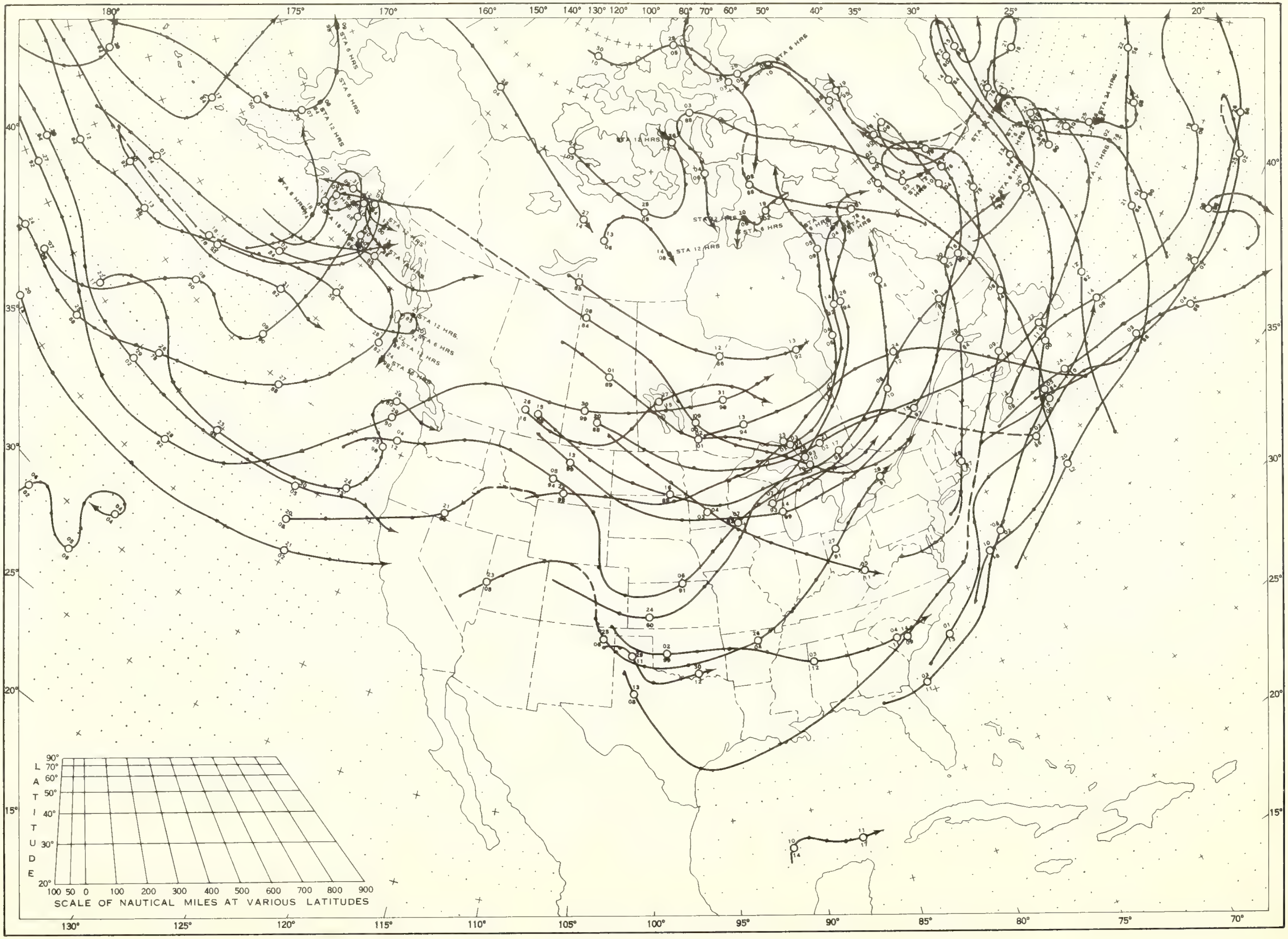
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, January 1967.



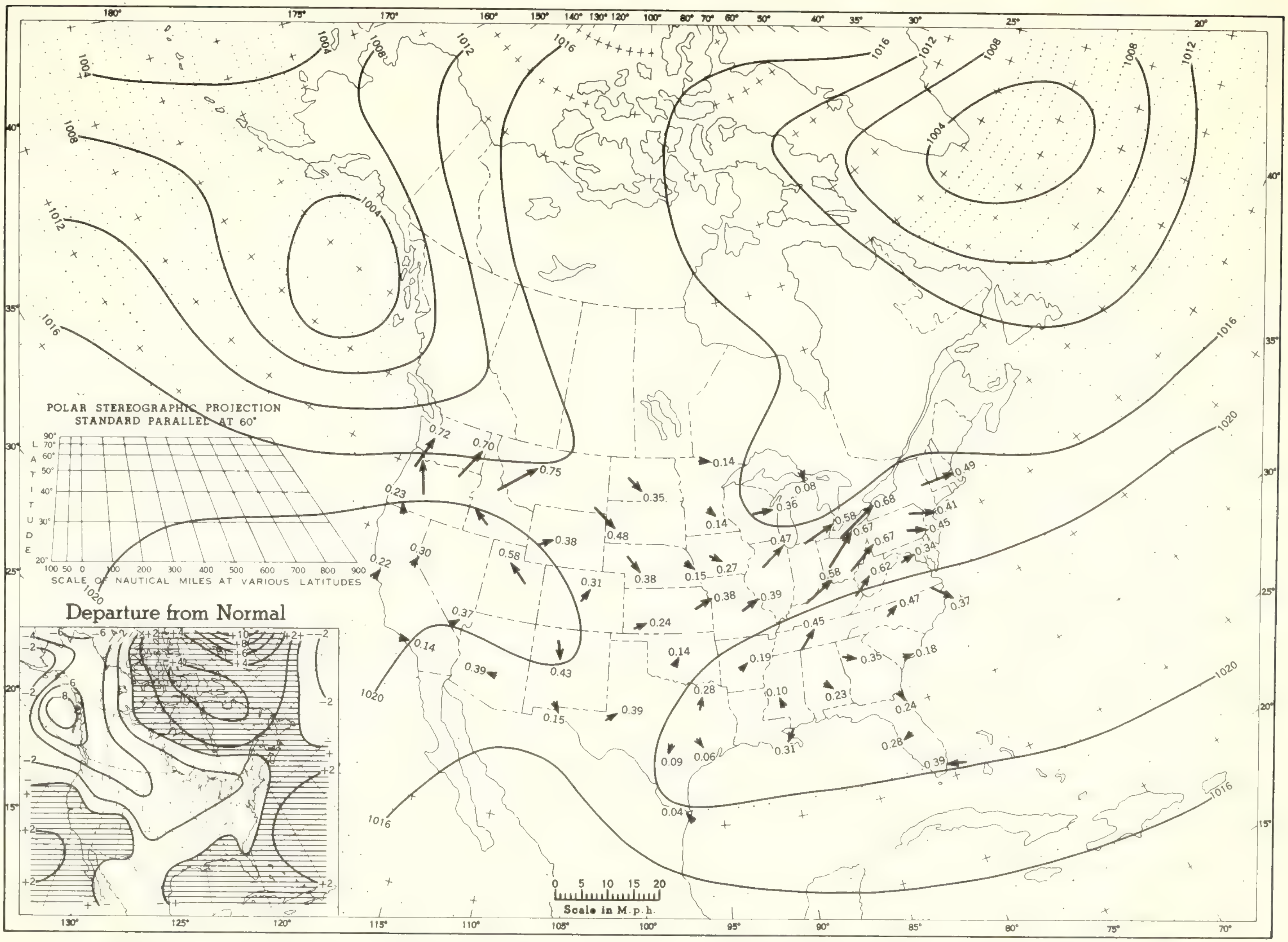
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, January 1967.



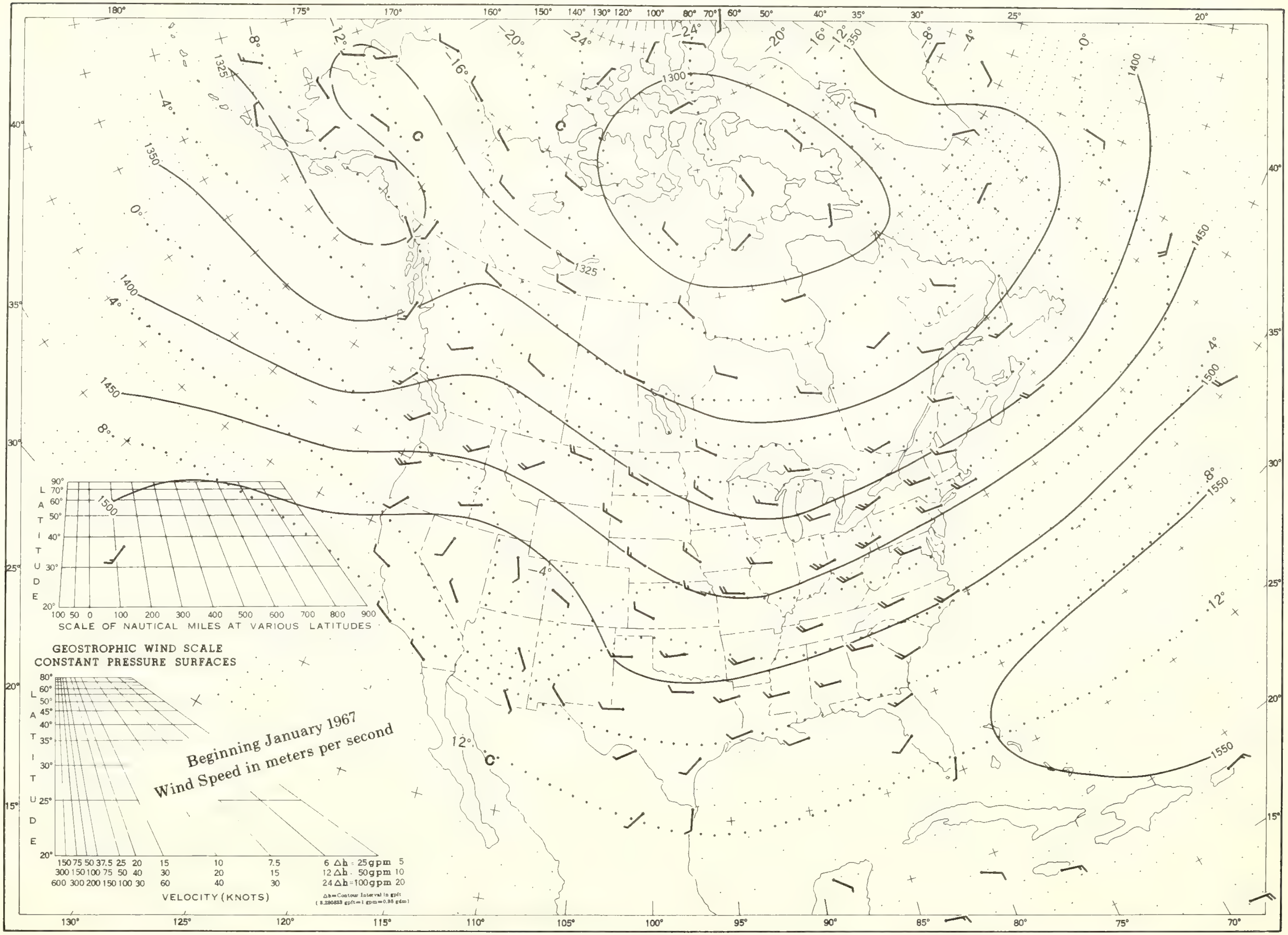
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, January 1967. Inset: Departure of Average Pressure (mb) from Normal, January 1967.



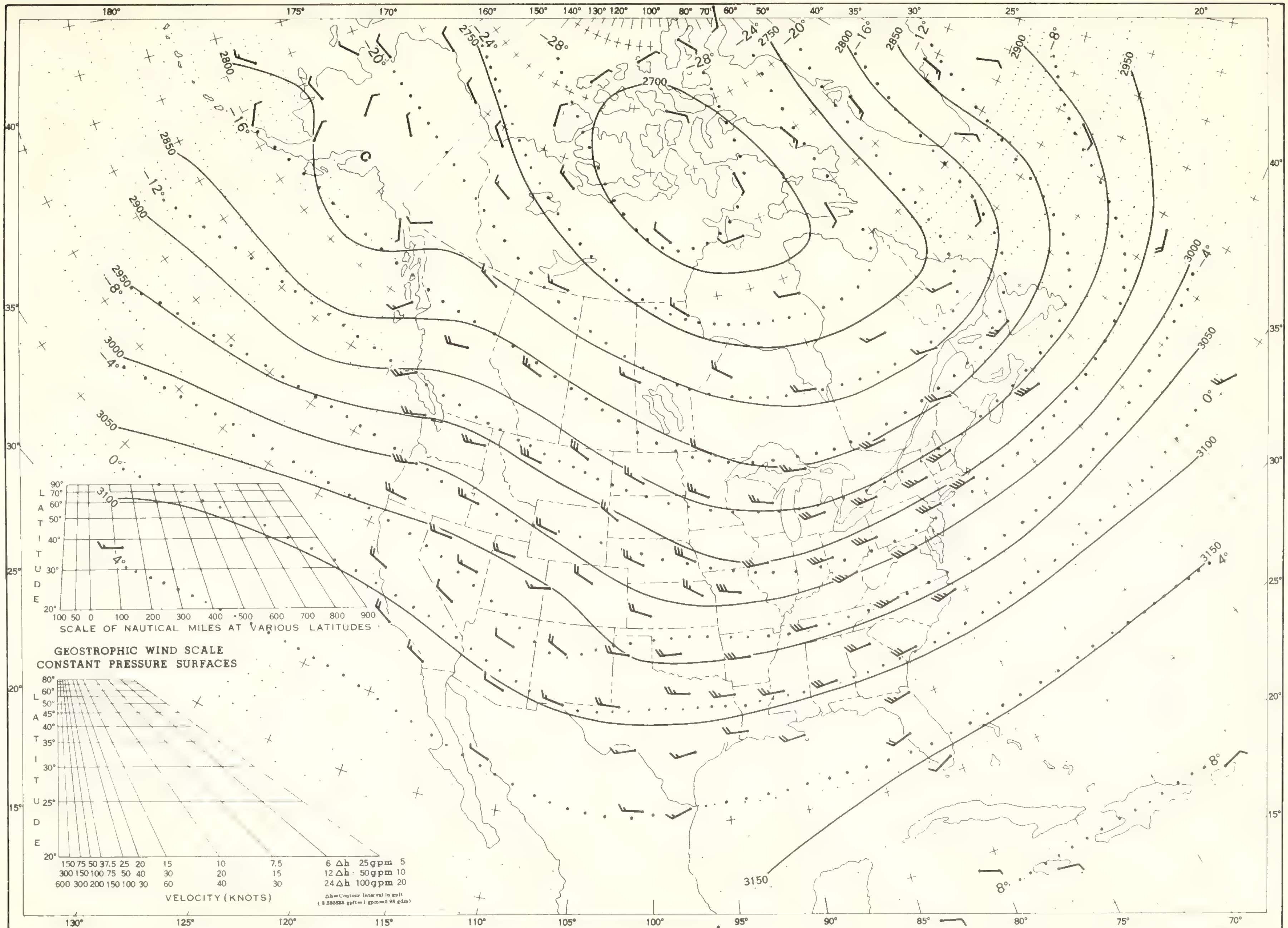
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed ÷ average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.



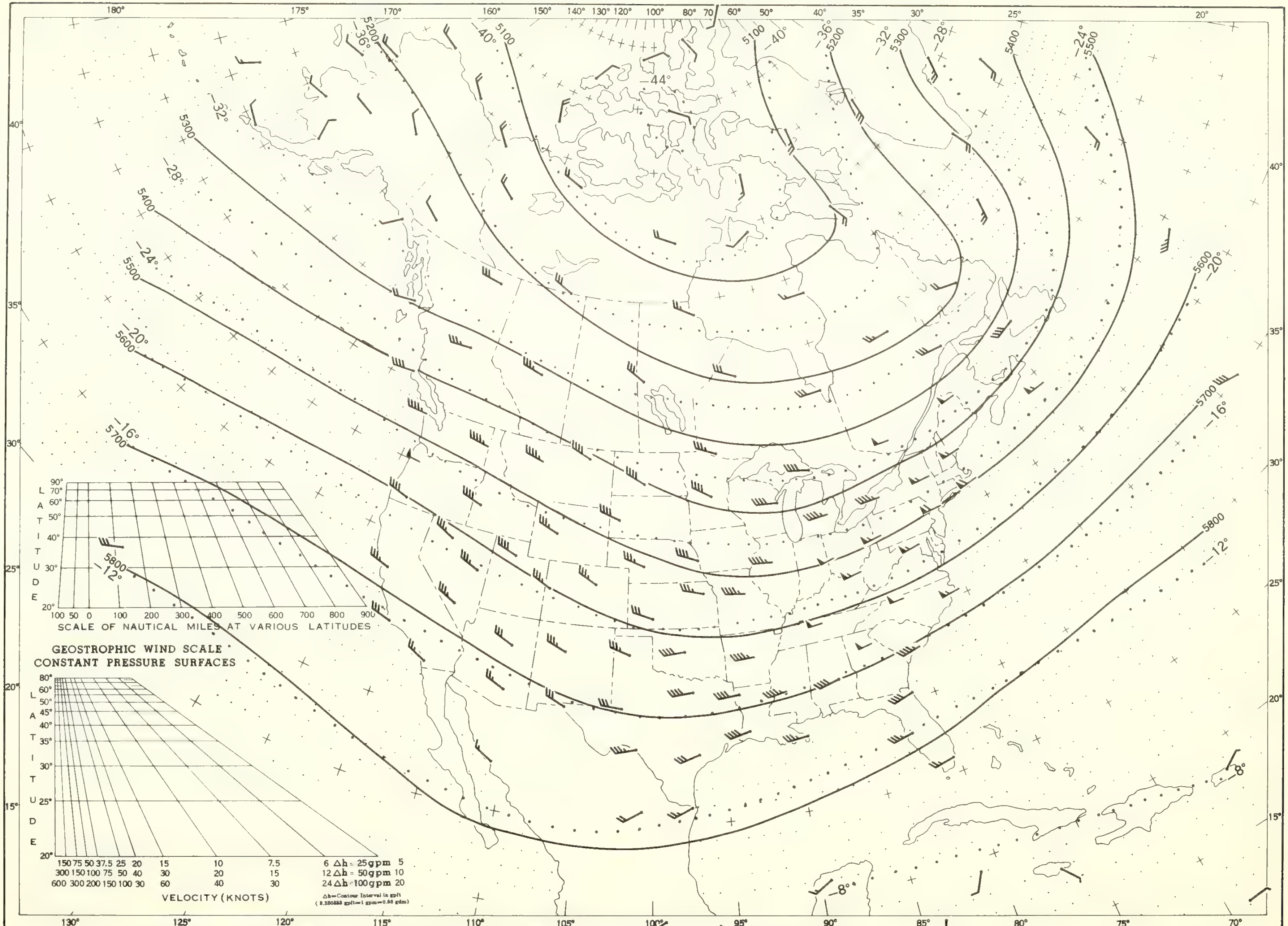
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.



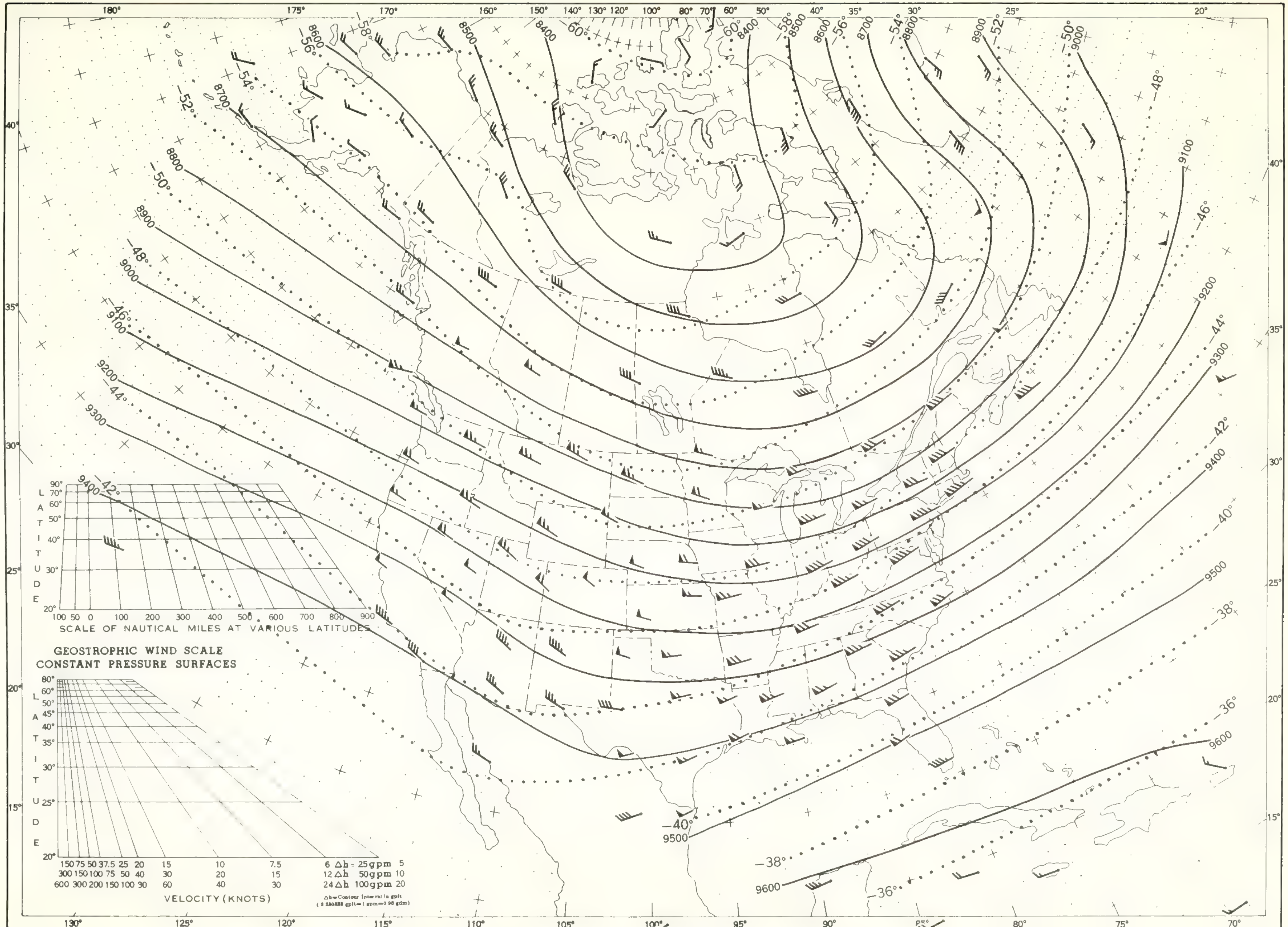
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.



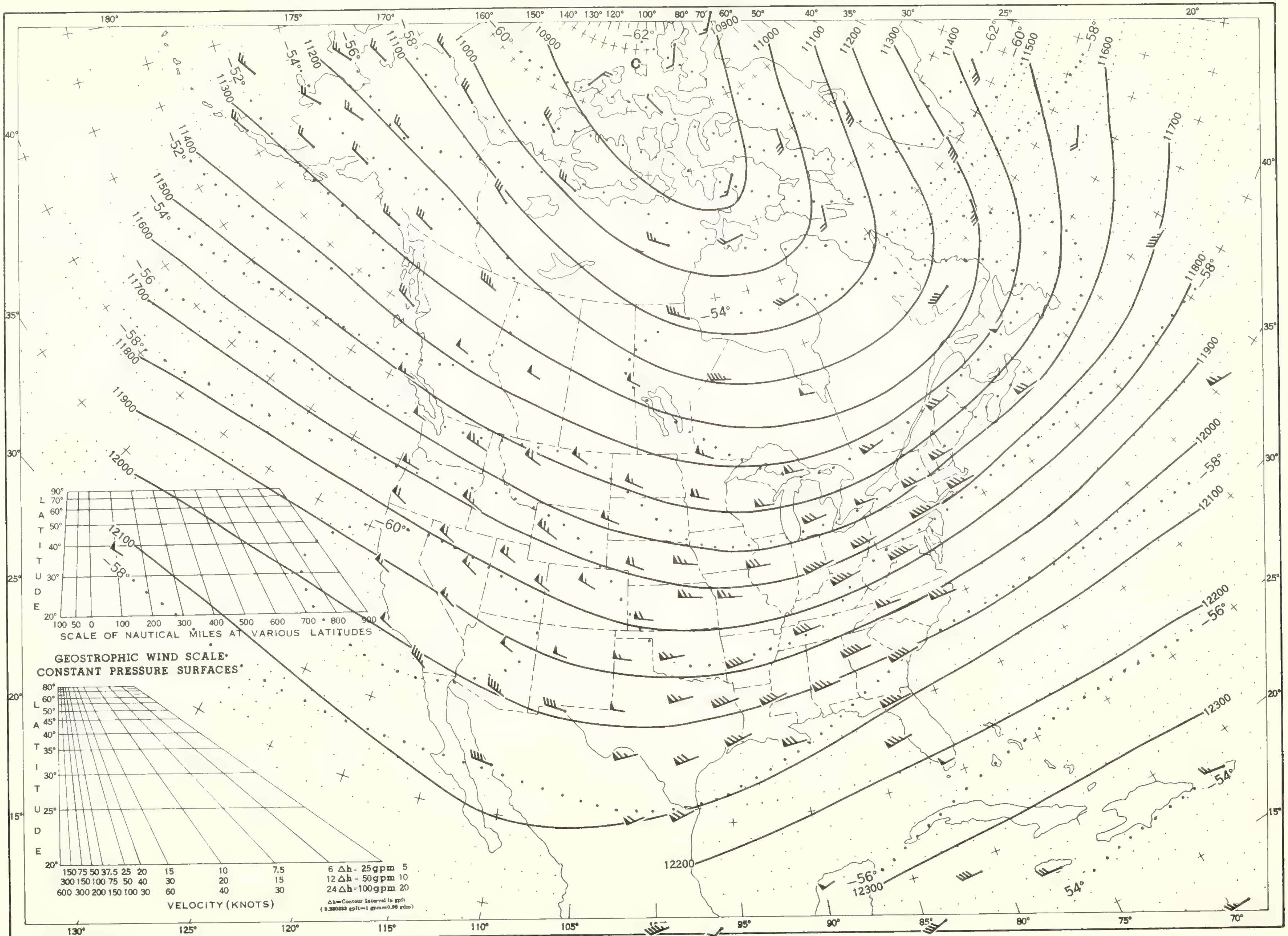
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.



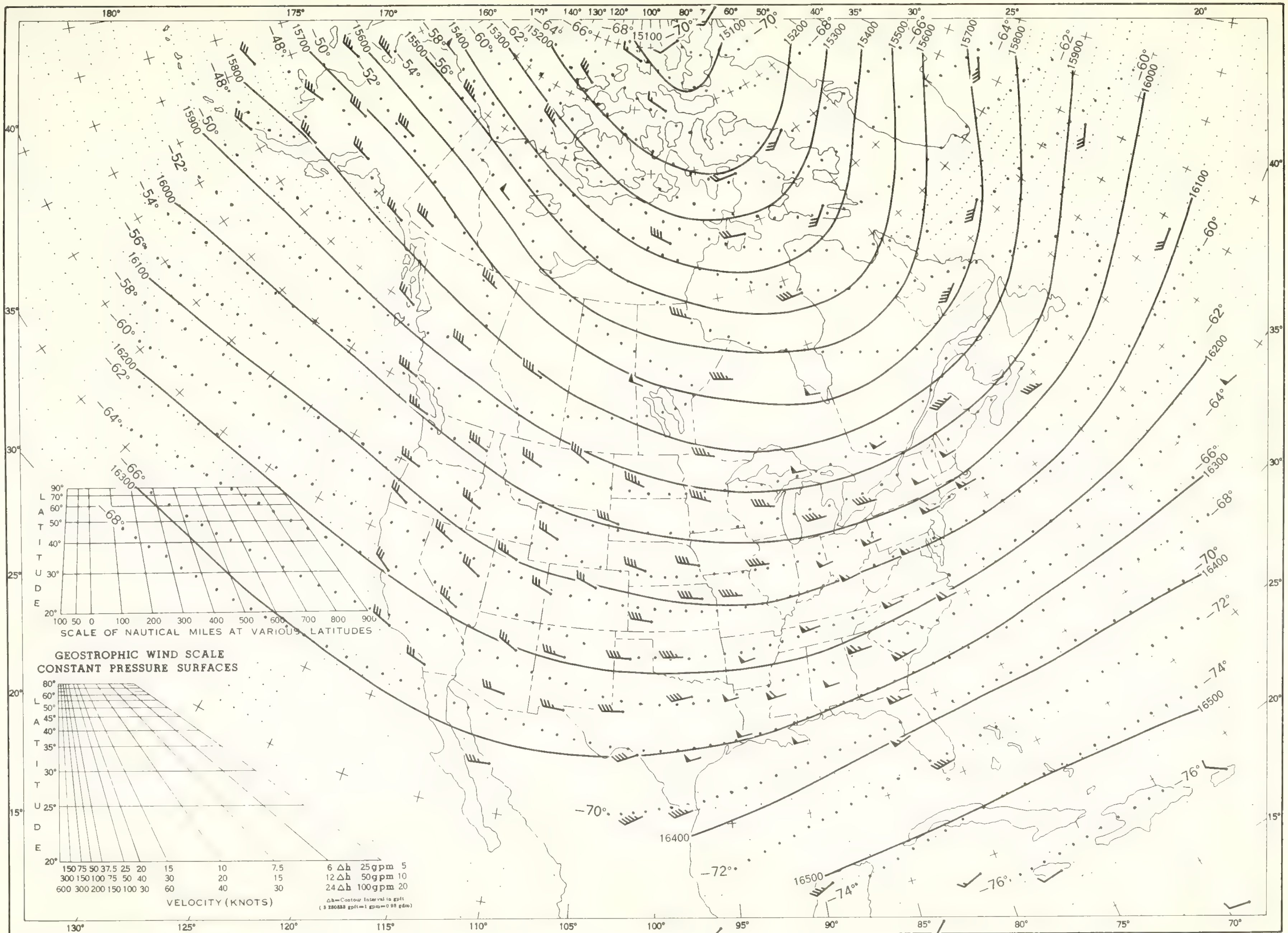
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.



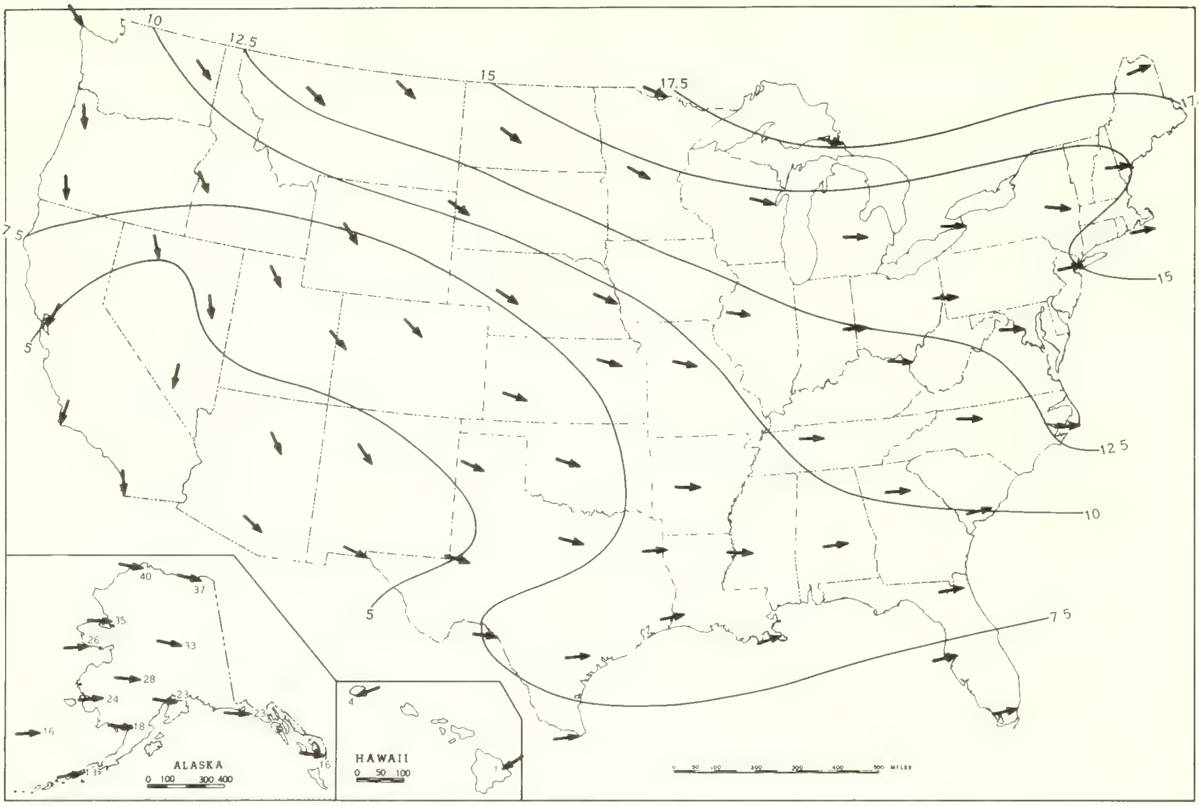
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, January 1967. Average Height and Temperature, and Resultant Winds.

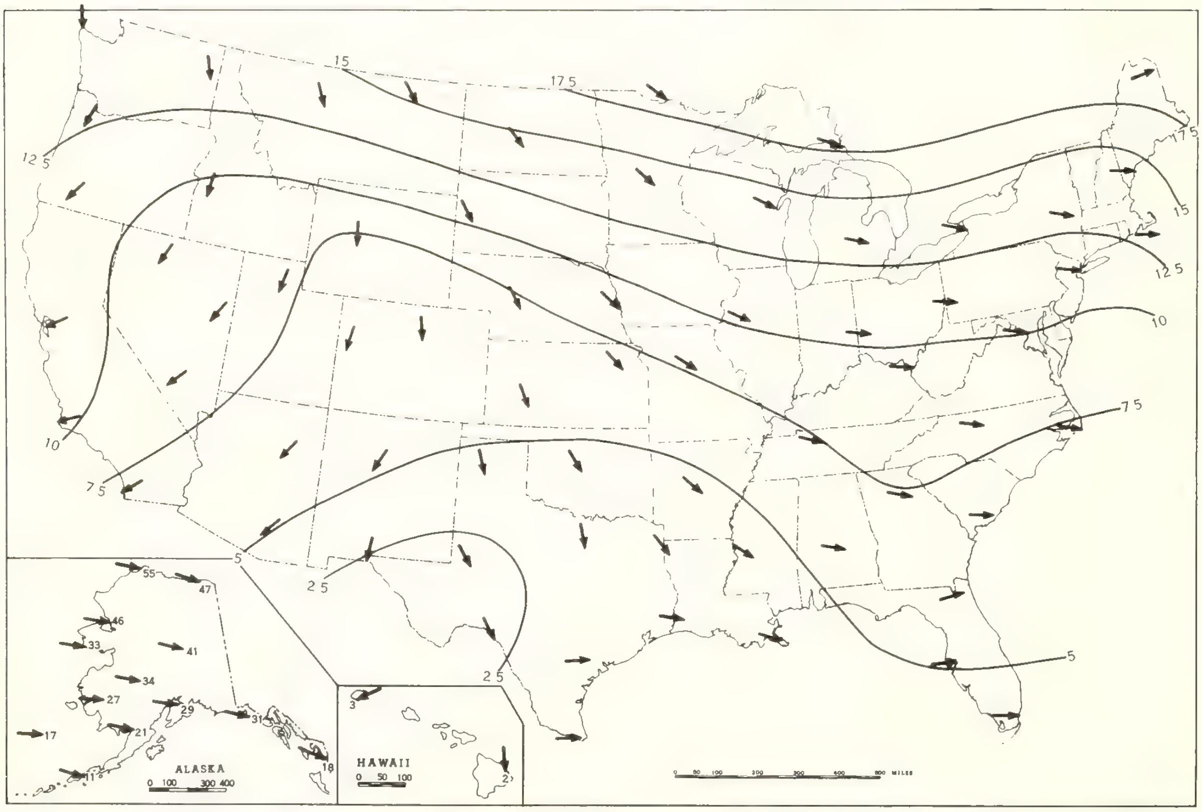


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, January 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, January 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

FEBRUARY 1967

Volume 18 No. 2

ASHEVILLE: 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 2 FEBRUARY 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Drought in Great Plains.
2. Dry period continues in Far West.
3. Heavy snowfall in East.
4. Cold month in East, warm West.
5. Chicago's worst snowstorm.

TEMPERATURES.--February was the second consecutive month of abnormally warm weather in the western half of the 48 States. Temperatures remained above normal most of the month and averaged as much as 10° above normal in the northern Rockies where relatively warm weather had persisted for eight consecutive months. Yakima, Wash., reported fruit bud development 3 to 4 weeks further along than usual. A few daily high temperature records were set in the Far West, and a few stations there also reported this February among the warmest on record. This was the fourth warmest February at Yakima, Wash., since 1909, and the fifth warmest at Missoula, Mont., during a 75-year record.

Following an abnormally mild January in the eastern half of the Country, February was colder than normal by as much as 10° in the upper Mississippi Valley and by about 3° to 6° elsewhere. The first week in the East was abnormally mild, but was followed by a sharp temperature decline and an unusually cold week with subzero minima on several days in the North. Cold weather continued in the North during the third week, but temperatures were relatively mild in the South. The last week was unusually cold east of the Great Plains, with weekly averages as much as 18° below normal in the Ohio Valley.

This was the coldest February in several years east of the Mississippi. In the upper Mississippi Valley, both Dubuque, Iowa, and Saint Cloud, Minn., had their coldest February since 1936. During the last week as arctic air pushed deep into the South, a number of stations there recorded their lowest temperatures for so late in the winter season. Fort Myers, Fla., had 32° on the 26th, the latest freeze there on record. Extreme temperatures for the month in the 48 States ranged from 87° on a few dates in the Far Southwest to -47° near Baudette, Minn., on the 6th and at Westhope, N. Dak., on the 14th.

The winter temperature pattern was about the same as that for February - relatively warm in the West and mostly cold from the Mississippi Valley eastward. All winter months were abnormally warm in the Pacific Northwest, and Walla Walla, Wash., had its warmest winter during a record dating back to 1873.

PRECIPITATION.--Precipitation was below normal in most of the Country and less than half normal in most of the central and lower Great Plains and west of the Continental Divide. In the western portions of the central and lower Great Plains, precipitation for the past 5 months has been only 40 percent of normal, leaving the soil dry and vulnerable to wind erosion. In western Kansas Dodge City measured only 0.01 inch of precipitation for its driest February in 87 years of record, and Goodland 0.02 inch for its driest in 46 years. March 1966 through February 1967 was the driest 12-month period at Oklahoma City, Okla., in 71 years. Examples of record dryness in Texas were 0.71 inch at Amarillo for the past 5 months and 1.10 inch at San Antonio for the past 4 months. Winter grains were in poor condition in some sections of this dry Great Plains area at the end of the month and some damage from wind erosion was reported. In the Southwest, Flagstaff, Ariz., reported its first February without measurable precipitation in 79 years.

Above normal precipitation was mostly limited to areas south of the Ohio River and along the Atlantic coast, sections of the northwestern Great Plains, and a few scattered sections in the Great Lakes region and upper Mississippi Valley. Precipitation east of the Rockies was well distributed through the month and with little snowmelt due to below-normal temperatures, no important flooding occurred.

At the end of February severe drought covered a narrow belt from Concordia, Kans., almost to Waco, Tex., and less intense drought existed in Nebraska, eastern Colorado, western Kansas, Eastern New Mexico, and western Texas. On the other hand water levels in the Great Lakes were higher than the 10-year average. Lake Erie was 4 inches higher than average and 4 inches higher than a year ago. Lakes Huron, Superior, and Michigan were slightly above average but Huron and Michigan were lower than at this time in 1966.

SNOWFALL.--Frequent light to occasional heavy snowfalls occurred east of the Rockies, and in some areas February totals were the heaviest in many years. Some of the stations reporting unusually heavy February totals were: Hartford, Conn., 25.2 inches, heaviest since 1934; Portland, Maine, 45.8, third greatest on record; Concord, N. H., 32.6, most since 1920; Trenton, N. J., 24.3, most since 1900; Alpena, Mich., 33.4, greatest February total since 1887, and Washington, D. C., 19.0 inches, most for February since 1936. Chicago, Ill., had its greatest snow during the closing days of January and the first few days of February when a 3-foot fall in an 11-day period was blown into drifts 12 to 15 feet high.

Snow depths increased during the month in the western mountains and the Northeast, but remained about the same in north-central areas.

STORMS.--February was a stormy month, particularly east of the Rockies where heavy snowfalls, high winds, and glaze caused damage in many areas.

The month's outstanding windstorm swept large areas of the Midwest and Northeast on the 15th and 16th, when winds with hurricane-force gusts were responsible for several deaths, many injuries, and millions of dollars property damage.

A heavy ice storm in the northern Piedmont region of North Carolina on the 17th and 18th caused considerable property damage, mostly as a result of tree limbs falling on power and communication lines, houses, and cars.

Heavy snowstorms in the Northeast, particularly on the 6-7th, 9-10th, and 17-18th, caused the usual transportation problems, damaged buildings and trees in some areas, and ran snow removal costs into many millions of dollars.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Brewton 3SSE	81	20	2 Stations	4	25	Slocomb	7.42	Waterloo	2.64
Alaska	2 Stations	48	28+	Kobuk	-56	14	Little Port Walter	26.94	Gilmore Creek	T
Arizona	Anvil Ranch	89	13	Holbrook	1	9	Portal 4SW	.94	93 Stations	.00
Arkansas	4 Stations	76	5	Evening Shade 1NE	5	25	Crossett 7S	6.86	Batesville Livestock	.42
California	2 Stations	89	28	Bodie	-17	20	Crescent City 7ENE	3.79	91 Stations	.00
Colorado	do	75	14	2 Stations	-35	21+	Berthoud Pass	4.29	3 Stations	.00
Connecticut	do	60	15	Coventry	-24	13	Stafford Springs 2	4.93	Baltic	1.82
Delaware	do	69	2+	Middletown 1WSW	-7	9	Georgetown 5SW	D 4.07	Newark University Farm	1.28
Florida	3 Stations	88	19+	Glen St Mary Nurseries	15	26	Island Grove 2WNW	7.95	Pompano Beach	.85
Georgia	Valdosta 4NW	81	17	Blairsville Exp Sta	-1	25	Blue Ridge	D 6.02	Fort Stewart	1.57
Hawaii	Lahaina 361, Maui	88	10	Haleakala Summit 338.4	23	21	Puohokamoa 2 343	25.40	Pohakuloa 107	.00
Idaho	3 Stations	66	27+	Island Park Dam	-27	20	Burke 2ENE	5.41	Grouse	.00
Illinois	2 Stations	69	2+	Wheaton 3SE	-18	12	Elizabethtown	3.37	Barry	.22
Indiana	Evansville WBAP	70	1	Mich City Phillips AP	-16	7	Rushville Sewage Plant	3.58	Albion 5E	.42
Iowa	Shenandoah	73	14	Decorah	-24	25	Dubuque WBAP	1.29	James 1NE	.02
Kansas	Hugoton	82	14	3 Stations	0	25+	Pittsburg	1.18	25 Stations	.00
Kentucky	2 Stations	72	2+	Owenton 2S	-14	25	Fourmile Ky Util Park	3.85	Cynthiana 2	D 1.40
Louisiana	Saint Bernard	82	2	Plain Dealing	16	8	Pine Grove Fire Tower	8.18	Hosston	1.53
Maine	Saco	55	15	Squa Pan Dam	-43	18	Gardiner	5.34	Van Buren 2	1.17
Maryland	6 Stations	71	3+	Oakland 1SE	-17	8	Salisbury	4.86	Chewsville Bridgeport	1.09
Massachusetts	2 Stations	60	15	Birch Hill Dam	-25	13	Blue Hill WB	4.79	Adams	2.16
Michigan	3 Stations	52	15+	Ironwood	-41	12	Eagle Harbor Coast Gd	4.41	East Lansing 3SE	.31
Minnesota	do	51	15+	Baudette 22S	-47	6	Montevideo 1SW	2.88	Isle 8N	.10
Mississippi	Merrill	81	18	University	9	25	Macon 2NE	7.50	Clarksdale	2.22
Missouri	Marshfield	75	14	Berryman 6NW	-8	25	Dexter	3.47	2 Stations	T
Montana	Roundup	68	27	2 Stations	-30	23+	Summit	5.55	Biddle	.00
Nebraska	Clay Center	77	14	do	-15	17+	Mullen 21NW	2.26	Staplehurst	.00
Nevada	2 Stations	79	15+	Charleston	-14	20	Adaven	.80	18 Stations	.00
New Hampshire	Windham	57	15	Mount Washington	-41	12	Mount Washington	7.28	Whitefield	1.67
New Jersey	6 Stations	66	3+	Sussex 1SE	-23	9	Manville	D 4.87	Wertsville	1.00
New Mexico	Bitter Lakes WL Ref	86	14	Capulin 6SSE	-11	8	Glorieta 2SE	2.50	9 Stations	.00
New York	New York Laurel Hill	63	15	2 Stations	-37	13	Boonville 2SSW	6.18	Watkins Glen	D .45
North Carolina	4 Stations	76	17+	Grandfather Mountain	-19	25	Lenoir	7.08	Mount Airy	1.88
North Dakota	Hettinger	57	28	Westhope	-47	14	Fessenden	3.14	Drake	.00
Ohio	Senecaville Dam	69	15	Mansfield 6W	-21	8	Cambridge Sewage Plant	3.32	2 Stations	1.26
Oklahoma	Hollis	82	14	Goodwell	7	24+	Idabel	2.73	do	T
Oregon	Brookings	78	6	2 Stations	-5	20	Valsetz	10.71	Suntex	.00
Pennsylvania	Lawrenceville	67	15	Du Bois 7E	-26	8	Phil Drexel Inst Tech	4.79	Scranton	.47
Puerto Rico	Lares	93	18	Cayey 1E	51	5	Rio Blanco Upper	8.71	Central San Francisco	.07
Rhode Island	2 Stations	56	15	Kingston	-18	13	Woonsocket	3.16	Block Island WBAP	2.18
South Carolina	5 Stations	79	18+	Caesars Head	-2	23	Caesars Head	5.96	Florence FAA AP	2.40
South Dakota	2 Stations	69	28	La Delle 7NE	-36	16	Dumont 2ENE	2.72	Bonesteel	T
Tennessee	Waverly	75	11+	Oneida	-9	9+	Monteagle	6.67	Red Boiling Spgs 3NNE	D 1.68
Texas	Mission	89	16	Stratford	7	24	Center	4.60	10 Stations	.00
Utah	Saint George	74	28	2 Stations	-18	20	Alta	D 5.18	4 Stations	.00
Vermont	Vernon	56	16	do	-37	14+	Mays Mill	4.65	Burlington WBAP	.77
Virginia	Tye River 1SE	74	3	Timberville 3E	-13	8	Williamsburg 2N	5.69	Dale Enterprise	.81
Washington	Kennewick	68	28	Chesaw 4NNW	5	19	Clearwater	20.09	4 Stations	.00
West Virginia	Athens Concord College	78	3	Bayard	-15	8	Pickens 1	6.63	Jane Lew	.23
Wisconsin	Prairie Du Chien	54	14	3 Stations	-45	12	Amery	2.81	2 Stations	.18
Wyoming	Torrington Exp Farm	69	28	Bondurant 3NW	-29	20	Bedford 2SE	1.92	Lingle 3S	.00

\+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	998.0	1021.1	53	31	41.8	-6.9	73	1	12	25	0	16	31	69	4.74	-0.54	1.11	12	1	0.8	1	2.1	30	29	SW	15	8	4	16	6.4	45
HUNTSVILLE	600	997.3	1020.9	50	30	40.1	-5.0	74	1	7	25	0	15	28	66	4.02	-1.20	1.83	8	0	1.0	1	1.1	33	25	21	15	7	6	15	6.6	
MOBILE	211	1012.5	1020.7	63	42	52.2	-3.0	79	17	25	26+	0	5	39	64	6.13	1.54	3.38	10	0	T	0	1.8	36	23	35	20+	6	8	14	6.2	
MONTGOMERY	194	1013.5	1020.9	58	38	48.0	-2.3	78	17	20	26	0	8	35	65	4.46	0.10	2.10	10	0	T	0	2.2	29	22	N	12	7	6	15	6.6	45
ALASKA												B																				
ANCHORAGE	114	999.7	1004.8	23	6	14.4	-4.3	38	6	-18	14	0	28	5	64	1.01	0.30	0.36	8	0	16.3	23	1.6	4	35	16	6	5	6	17	7.2	50
ANNETTE	110	1005.8	1010.0	44	35	39.2	4.1	47	20	30	21	0	9	35	87	15.32	6.78	1.78	26	0	17.7	4	8.7	16	37	15	26	0	1	27	9.6	
BARROW	31	1016.3	1016.8	-11	-22	-16.3	2.0	15	19	-37	15	0	28	-25	64	0.02	-0.15	0.01	2	0	0.4	12	5.8	8	24	27	23+	12	5	11	4.9	
BARTER ISLAND	39	1015.6	1017.5	-14	-27	-20.7	-1.1	19	21	-43	14	0	28	-27	70	0.08	-0.27	0.08	2	0	1.0	12	3.8	11	48	27	23	15	5	8	4.2	
BETHEL	125	998.0	1003.7	17	2	9.6	1.4	36	6	-25	13	0	28	5		0.24	-0.88	0.11	7	0	2.8	17	5.3	9	46	15	6	6	3	19	7.1	
COLD BAY	96	996.6	1000.6	33	24	28.5	0.5	40	5+	5	1	0	28	24	84	2.58	-0.59	0.49	22	0	15.4	5	6.6	19	73	16	19	0	8	20	8.2	
FAIRBANKS	436	992.6	1010.9	5	-19	-6.9	-4.0	28	6	-42	15	0	28	-19	52	0.25	-0.27	0.06	10	0	5.2	24	1.2	1	17	25	23	4	5	19	7.9	
JUNEAU	12	1006.4	1007.2	35	26	30.4	3.6	42	7	-1	16	0	23	28	88	4.74	1.68	0.70	23	0	32.0	16	8.7	11	31	12	28+	1	4	23	9.0	22
KING SALMON	49	1001.7	1003.8	23	7	15.0	-2.4	37	5	-21	1	0	27	8		0.54	-0.41	0.23	12	0	5.1	3	3.1	9	41	12	20	6	5	17	6.9	
KOTZEBUE	10	1009.1	1009.8	4	-10	-2.6	1.4	29	21+	-35	14+	0	28	-8	76	0.11	-0.19	0.04	7	0	3.5	28	10.7	10	43	12	20+	11	5	12	5.4	
MC GRATH	344	995.6	1008.9	11	-13	-0.6	-0.7	37	20	-42	15	0	28	-8	67	0.49	-0.65	0.14	10	0	11.7	26	0.6	24	25	18	19	8	6	14	6.1	
NOME	13	1004.4	1005.3	14	-2	6.2	0.7	31	20+	-33	13	0	28	2	81	0.26	-0.68	0.06	9	0	4.8	24	8.8	7	36	9	19	8	3	17	6.8	35
ST. PAUL ISLAND	22	995.6	996.5	32	24	27.9	4.6	38	14	9	1	0	27	24	84	1.64	0.41	0.28	22	0	15.2	7	3.9	15	55	19	17	0	8	20	8.2	
SHEMYA	122	990.9	994.7	34	26	29.6	-1.2	38	23	17	5+	0	26	25	84	1.66	-0.62	0.85	19	0	13.1	9	4.0	2	52	5	16	1	11	16	8.1	
YAKUTAT	28	1002.4	1003.5	32	16	24.4	-4.2	38	7+	-7	16+	0	28	24	92	10.40	2.20	2.58	22	0	64.2	66	5.5	11	33	14	7	1	2	25	9.1	
ARIZONA																																
FLAGSTAFF	6993	788.0	1019.5	50	21	35.3	5.7	59	24	12	15	0	27	12	43	T	-1.78	T	0	0	T	T	1.1	2	29	4	5	14	8	6	3.7	
PHOENIX	1117	977.7	1017.1	73	39	55.7	2.2	83	4	30	17+	0	3	23	32	0.00	-0.85	0.00	0	0	0.0	0	1.6	10	29Y	ENE	6	17	6	5	3.3	91
TUCSON	2584	927.9	1016.4	71	40	55.6	2.7	83	13	30	9	0	2	19	27	0.13	-0.71	0.13	2	0	0.0	0	2.6	15	29	SE	28	15	4	9	4.2	86
WINSLOW	4895	853.7	1021.4	57	22	39.4	1.9	71	13	10	8	0	25	8	32	0.01	-0.47	0.01	1	0	0.1	T	2.6	26	44	22	14	16	6	6	3.5	
YUMA	194	1010.5	1017.7	76	45	60.6	3.3	85	28	35	17	0	0	22	27	0.00	-0.36	0.00	0	0	0.0	0	4.6	36	30	N	6+	17	6	5	3.2	89
ARKANSAS																																
FORT SMITH	447	1003.7	1021.0	54	26	40.0	-3.7	76	5	12	25	0	22	24	58	0.57	-2.86	0.32	4	1	T	0	1.6	35	34	NW	15	9	8	11	5.8	59
LITTLE ROCK	257	1011.5	1021.4	52	29	40.4	-4.0	71	5+	16	7	0	22	28	65	2.31	-2.02	1.31	8	1	T	T	2.1	28	36	SW	15	11	5	12	5.5	59
TEXARKANA	391	1007.8	1021.2	56	34	45.1	-3.4	74	15	20	7	0	12	31	62	1.81	-2.21	0.77	7	0	0.0	0	1.0	20				11	4	13	5.4	
CALIFORNIA																																
BAKERSFIELD	475	1004.4	1022.5	59	40	49.7	-2.3	73	28	33	15	0	0	40	74	0.03	-1.11	0.03	1	0	0.0	0	1.7	36	21	35	24+	6	10	12	6.2	
BISHOP	4108	878.4		61	26	43.6	2.4	71	9	16	15	0	26			T	-0.98	T	0		T	T										
BLUE CANYON	5280			51	36	43.4	6.3	65	6	21	15	0	11			1.05	-9.14	0.61	5		4.1	26			29	2	5	11	6	11	5.3	
EUREKA U	43			54	41	47.6	-0.6	61	11	35	19	0	0			1.47	-4.06	0.60	8		0.0	0			38	NW	13	6	6	16	7.0	60
FRESNO	328	1010.5	1022.3	58	40	48.9	-1.6	76	28	31	15	0	1	43	83	0.22	-1.97	0.22	1	0	0.0	0	0.7	33	24	NW	14	5	10	13	6.6	53
LONG BEACH	34	1018.0	1019.2	71	44	57.5	3.1	84	28	38	22+	0	0	38	56	0.03	-2.28	0.03	1	0	0.0	0	1.5	27	18	10	20	14	8	6	3.9	
LOS ANGELES	97	1015.2	1018.7	70	49	59.6	4.4	84	28	44	21	0	0	43	60	0.05	-2.83	0.05	1	0	0.0	0	1.1	28	30Y	N	14	14	7	7	4.0	
LOS ANGELES U	270			75	51	62.9	5.8	87	28	45	21	0	0			0.11	-3.22	0.11	1		0.0	0			17	N	14	18	5	5	3.3	88
MT SHASTA R	3544			52	28	40.0	3.0	63	12	18	20	0	24			0.53	-5.38	0.40	4		3.9	2										
OAKLAND	6	1022.0	1022.3	59	46	52.3	1.6	67	10	40	22	0	0	42	70	0.27	-2.94	0.26	3	0	0.0	0	1.6	34	23	27	13	9	7	12	5.8	
RED BLUFF	342	1009.8	1022.8	62	40	51.1	1.4	75	10+	31	21	0	1	37	66	0.44	-2.87	0.44	2	0	0.0	0	3.4	34	30	NW	5	6	7	15	6.5	72
SACRAMENTO	17	1021.7	1022.4	57	39	48.4	-0.8	70	10	33	20+	0	0	41	82	0.41	-2.58	0.41	2	0	0.0	0	0.6	30	29	SW	13	7	4	17	6.8	58
SANDBERG R	4517	865.2		54	39	46.5	5.1	64	28+	25	15	0	8	18	38	0.26	-2.32	0.26	1		T	0	6.2	2	39	33	14	16	5	7	3.8	
SAN DIEGO	13	1017.6	1018.5	68	47	57.8	1.6	80	28	41	21	0	0	44	64	0.00	-2.15	0.00	0	0	0.0	0	1.9	31	19	NW	1	17	4	7	3.6	88
SAN FRANCISCO	8	1021.3	1022.2	60	43	51.4	0.5	65	21	39	22+	0	0	40	69	0.09	-3.39	0.06	3	0	0.0	0	1.8	32	32	NW	14	7	10	11	5.9	
SAN FRANCISCO U	52			60	47	53.2	0.2	66	28+	42	8	0	0			0.22	-3.44	0.19	4		0.0	0			23	W	13					77
SANTA CATALINA	1568			68	55	61.3	7.3	78	11	44	26	0	0			T	-3.16	T	0	0	0.0	0						17	4	7	3.5	
SANTA MARIA	236			67	37	51.9	0.1	75	10	30	22+	0	4			0.51	-1.99	0.48	3		0.0	0						17	6	5	3.5	
STOCKTON	22	1022.0	1023.0	57	39	48.1	-0.9	67	28+	31	21	0	2	42	82	0.33	-2.13	0.31	4	0	0.0	0	0.6	19	24	29	14	6	3	19	7.3	
COLORADO																																
ALAMOSA	7536	770.4		41	5	23.0	-0.5	54	25	-11	8	0	28			0.78	0.61	0.42	6		12.4	4						15	8	5	3.6	
COLORADO SPRINGS	6145	809.7	1018.8	48	18	33.0	1.5	63	28+	7	8	0	27	10	44	0.15	-0.18	0.15	2	0	3.6	3	4.8	35	38	29	22+	11	8	9	4.8	
DENVER	5283	835.1	1016.4	50	20	35.1	3.6	69	28	9	15	0	28	15	51	0.39	-0.30	0.15	7	0	4.4	1	2.7	27	40	NW	4	10	11	7	4.8	78
GRAND JUNCTION	4855	854.7	1021.3	48	24	36.4	3.8	61	25	16	21+	0	25	15	46	0.22	-0.47	0.21	3	0	T	T	1.5	8	56	W	14	14	6	8	4.4	72

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	855.4	1017.5	53	19	36.0	2.1	67	28	5	8	0	27	10	37	0.12	-0.36	0.09	3	0	1.2	1	3.1	32	48	NW	15	14	5	9	4.3	85
CONNECTICUT																																
BRIDGEPORT	7	1014.9	1015.6	35	20	27.4	-3.1	48	16	-2	13	0	28	16	65	2.52	-0.44	1.13	10	0	24.0	14	7.0	30	52	27	16	7	7	14	6.5	
HARTFORD	169	1008.1	1015.1	34	15	24.5	-2.6	57	15	-13	8	0	26	15	68	2.00	-0.94	0.63	12	0	25.2	14	4.4	32	53	SW	16	5	8	15	6.9	63
NEW HAVEN	6	1015.2		36	19	27.4	-2.2	52	16+	-3	13	0	28			2.87	-0.32	0.78	11		25.3	14			41	W	16	5	10	13	6.4	62
DELAWARE																																
WILMINGTON	78	1014.2	1017.2	38	20	29.4	-4.4	64	2	1	9	0	27	20	69	1.90	-1.05	0.80	12	0	18.7	10	3.9	32	42	24	16	6	9	13	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.6	1018.1	43	25	34.0	-3.8	71	2	11	25+	0	23	20	60	2.32	-0.15	1.17	10	0	19.0	10	3.7	29	37	W	21	6	9	13	6.2	56
FLORIDA																																
APALACHICOLA U	13			61	45	53.3	-3.5	74	18	26	26	0	2			2.70	-1.21	0.82	11	4	0.0	0			33	N	12	7	7	14	6.4	52
DAYTONA BEACH	31	1019.0	1020.4	69	48	58.5	-2.1	82	18	28	26	0	2	48	74	3.98	1.23	1.37	7	2	0.0	0	2.7	30	29	35	13	9	8	11	6.0	
FORT MYERS	15	1019.6	1020.0	74	52	63.1	-2.1	82	20	32	26	0	1	53	74	2.15	-0.06	0.96	7	0	0.0	0	1.1	4	30	34	9	9	12	7	4.9	
JACKSONVILLE	20	1019.3	1020.2	66	43	54.6	-2.9	81	20	22	26	0	3	42	68	4.35	1.44	1.93	8	0	0.0	0	2.5	29	32	NW	25+	9	6	13	6.3	50
KEY WEST	4	1018.6	1019.2	76	67	71.4	1.0	81	7	49	26	0	0	62	75	1.79	-0.19	1.06	6	2	0.0	0	5.4	7	32	N	9	10	12	6	4.8	74
LAKELAND U	214			71	51	60.6	-2.5	82	20	28	26	0	1			3.72	1.21	1.77	7		0.0	0						11	10	7	5.3	69
MIAMI	7	1019.0	1019.2	78	60	68.9	1.0	86	7	36	26	0	0	58	70	1.14	-0.73	0.46	6	2	0.0	0	1.5	9	29	26	9	4	16	8	5.8	
ORLANDO	108	1015.9	1020.2	71	49	60.0	-1.9	84	18	28	26	0	2	48	71	5.49	3.07	2.30	7	2	0.0	0	2.2	30	27	2	13	10	6	12	5.8	
PENSACOLA	112	1016.9	1020.9	61	42	51.6	-4.5	77	17	25	8	0	4	42	72	5.47	1.22	4.19	11		T	0	2.3	1	34	N	12	5	10	13	6.6	57
TALLAHASSEE	55	1018.3	1020.6	65	39	52.0	-3.6	79	17	21	26	0	7	43	76	5.60	1.42	2.63	11	1	0.0	0	1.6	32	23	3	12	7	6	15	6.4	
TAMPA	19	1020.0	1020.2	70	49	59.5	-3.2	81	20	27	26	0	1	50	74	4.30	1.46	1.61	6	2	0.0	0	1.0	1	23	19	6	9	11	8	5.7	65
WEST PALM BEACH	15	1018.6	1019.5	76	55	65.5	-2.1	86	12+	35	26	0	0	55	73	3.01	0.66	2.16	5	1	0.0	0	0.2	7	35	3	13	5	11	12	6.2	
GEORGIA																																
ATHENS	802	989.8	1019.5	51	33	42.1	-4.0	70	1	8	25	0	13	30	67	4.14	-0.56	1.03	10	0	3.0	2	3.1	27	23	35	24+	9	4	15	6.4	
ATLANTA	1010	982.1	1019.8	51	33	41.8	-4.3	69	1	9	25	0	13	30	67	3.75	-0.76	1.24	9	0	2.0	1	3.8	29	27	S	15	7	7	14	6.4	41
AUGUSTA	145	1014.2	1019.7	56	33	44.3	-5.0	74	1	12	26	0	14	32	66	3.86	0.34	1.82	10	0	3.3	2	2.6	27	23	27	24	8	3	17	6.6	
COLUMBUS	385			58	36	47.1	-2.6	75	17	17	25	0	10	36		3.34	-1.29	1.23	10		T	T	2.2	30	23	31	21	7	6	15	6.6	
MACON	354	1007.5	1020.6	57	36	46.5	-4.6	72	1	14	25	0	10	34	67	3.16	-1.10	1.32	10	0	1.0	T	1.9	29	25	SW	15	7	4	17	6.6	57
ROME	637			51	28	39.7	-4.7	71	1	8	25	0	19			4.18	-1.12	1.20	10		0.1	T										
SAVANNAH	46	1018.6	1020.3	61	38	49.6	-3.5	80	17	16	26	0	7	37	69	2.80	-0.88	0.76	12	0	0.0	0	2.0	29	27	NW	24	7	5	16	6.6	46
HAWAII																																
HILO	27	1016.3	1017.5	82	66	73.9	3.3	85	6+	55	21	0	0	64	76	10.35	-2.59	4.08	19	0	0.0	0	2.6	18	20	E	15	7	8	13	6.7	47
HONOLULU	7	1016.3	1016.8	81	67	73.9	1.5	84	9+	62	26	0	0	63	72	2.53	-0.77	1.00	11	1	0.0	0	7.9	7	33	NE	28	4	15	9	6.3	40
KAHULUI	48	1014.6	1016.8	80	64	72.1	0.4	83	7	58	17+	0	0	62	72	2.13	-0.41	1.30	7	0	0.0	0	8.4	7	31	NE	13	7	13	8	5.9	66
LIHUE	103	1012.9	1017.9	77	67	71.8	1.1	80	18	60	4	0	0	65	80	6.59	1.27	2.71	16	2	0.0	0	7.5	7	23	E	28+	2	12	14	7.0	46
IDAHO																																
BOISE	2838	921.1	1023.4	48	29	38.3	3.8	62	28+	23	21+	0	24	27	68	0.35	-0.98	0.11	6	0	1.9	1	1.4	14	30	NW	10	6	8	14	6.5	70
IDAHO FALLS 46W R	4938			36	13	24.8	4.4	48	13	1	8	0	27			0.01	-0.76	0.01	1	0	0.2	2	4.1	25	37	SW	18					
LEWISTON	1413			51	32	41.3	5.4	63	27	25	20	0	16			0.29	-0.68	0.17	5		1.0	T						5	3	20	7.8	
POCATELLO	4454	865.9	1022.4	43	23	33.1	5.9	55	24+	12	20	0	27	21	65	0.18	-0.74	0.05	6	0	3.5	2	8.4	22	33	S	18+	6	6	16	6.8	64
ILLINOIS																																
CAIRO U	314			44	26	35.1	-5.6	67	1	8	25	0	23			2.69	-0.98	1.12	7		5.9	5			47	SW	15	9	7	12	5.8	57
CHICAGO O HARE	658	992.2	1017.8	29	11	19.8	-6.4	49	15	-17	12	0	27	10	64	1.82	0.31	0.83	12	0	21.5	27	4.1	26	45	25	15	7	7	14	6.3	
CHICAGO MIDWAY	607	994.2		30	14	22.0	-5.7	47	15	-5	25+	0	27	12	64	1.86	0.26	0.68	11	0	22.5	28	5.5	25	51	SW	15	7	5	16	6.4	46
MOLINE	582	995.9	1018.6	29	9	18.7	-7.0	52	14	-10	25+	0	27	10	65	1.11	-0.24	0.42	9	0	13.2	8	4.8	27	39	NW	23	8	8	12	6.1	52
PEORIA	652	993.9	1019.0	31	13	21.8	-6.6	53	15+	-9	25	0	27	13	68	1.07	-0.64	0.79	7	1	3.6	5	4.1	26	46	NW	23	7	8	13	6.4	51
ROCKFORD	724	989.5	1017.8	27	7	16.9	-7.5	45	14	-11	25	0	28	10	71	0.92	-0.52	0.38	7	0	11.6	6	4.2	27	29	33	15	10	6	12	5.6	
SPRINGFIELD	588	995.9	1019.2	35	18	26.4	-5.2	62	15	-2	25	0	27	18	72	0.91	-0.91	0.51	8	0	3.7	2	4.6	25	47	W	23+	8	7	13	5.9	54

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1005.8	1020.4	42	21	31.7	- 5.9	70	1	- 3	25	0	25	22	68	2.13	- 1.05	0.97	11	1	5.1	3	3.6	25	39	W	15	7	10	11	6.0	52
FORT WAYNE	791	986.8	1018.0	30	14	21.9	- 6.4	52	15	-13	8	0	27	13	69	1.82	- 0.42	0.73	11	1	12.5	5	6.1	26	61	W	15	7	8	13	6.4	46
INDIANAPOLIS	792	988.5	1018.7	38	18	27.7	- 3.4	63	14	- 4	25	0	27	16	63	1.84	- 0.44	1.01	8	1	8.1	2	4.5	26	49	W	15	7	8	13	6.3	52
SOUTH BEND	773	988.2	1017.3	29	13	21.1	- 5.7	48	15+	- 9	7	0	27	15	75	2.26	0.38	0.60	14	0	31.6	20	5.4	25	41	26	15	5	5	18	7.4	
IOWA																																
BURLINGTON	692			32	13	22.9	- 4.9	54	14	- 9	25	0	27	13	64	0.87	- 0.52		3	0	1.8		4.7	28	29	32	23+	11	6	11	5.9	
DES MOINES	938	983.1	1019.3	33	11	22.2	- 1.2	65	14	- 6	16	0	28	14	71	0.28	- 0.82	0.22	4	0	2.3	2	4.8	31	43	NW	23	8	7	13	6.5	63
DUBUQUE	1056	977.0		25	5	14.7	- 7.3	49	14	-15	25	0	28			1.29	- 0.11	0.45	9		12.5	5						7	9	12	6.2	
SIOUX CITY	1095	977.7	1019.3	34	10	22.0	- 0.2	63	13	-10	16	0	27	11	66	0.28	- 0.61	0.15	7	0	3.0	2	3.8	32	45	NW	23	4	9	15	7.1	65
WATERLOO	868	985.1	1018.4	27	5	16.1	- 5.3	55	14	-14	25	0	28	10	75	0.52	- 0.40	0.13	9	0	7.0	2	3.8	30	32	32	23	5	11	12	6.6	
KANSAS																																
CONCORDIA	1470	964.4	1019.1	46	18	31.8	0.2	75	14	3	18	0	28	17	58	0.20	- 0.71	0.16	4	0	0.7	T	3.1	28	43	N	5	16	4	8	3.9	72
DODGE CITY	2582	925.5	1018.6	52	22	36.6	1.6	77	14	12	6	0	26	16	50	0.01	- 0.69	0.01	1	0	0.1	0	2.6	28	41	S	25	14	7	7	4.5	66
GOODLAND	3650	888.3	1018.0	49	17	33.1	2.2	72	14	8	15+	0	28	14	52	0.02	- 0.49	0.02	1	0	0.4	T	6.7	28	38	36	5	14	8	6	4.2	
TOPEKA	876	987.1	1020.0	46	21	33.4	0.3	73	14+	8	6	0	25	18	57	0.21	- 0.84	0.10	4	0	1.9	1	3.0	28	47	NW	23	10	11	7	5.0	70
WICHITA	1321	970.5	1019.8	49	23	36.3	0.0	76	14	9	6	0	25	18	53	0.09	- 0.83	0.09	1	0	T	T	2.0	28	42	N	23	11	8	9	4.8	60
KENTUCKY																																
COVINGTON	869	986.1	1019.0	37	18	27.5	- 5.6	61	14	- 7	25	0	27	17	67	1.86	- 1.05	0.78	12	2	7.3	2	5.8	26	40	29	15	6	9	13	6.5	
LEXINGTON	966	983.1	1019.7	40	21	30.2	- 5.6	63	14	- 3	25	0	25	20	68	2.29	- 1.13	0.70	13	1	11.1	7	5.6	23	31	28	15	7	7	14	6.8	
LOUISVILLE	477	1001.4	1019.7	40	22	30.9	- 4.9	63	15+	0	25	0	25	20	66	2.01	- 1.28	0.76	11	2	7.8	5	3.1	26	61	NW	15	7	6	15	6.8	51
LOUISIANA																																
ALEXANDRIA	92	1017.3	1021.5	59	34	46.6	- 6.2	77	1	22	25+	0	13	38	75	4.11	- 0.86	1.74	7	1	T	0	2.1	3	25	2	11	10	3	15	6.0	
BATON ROUGE	64	1018.3	1021.0	62	39	50.7	- 4.7	79	1	24	8	0	8	39	68	4.82	0.40	1.81	11	1	0.0	0	1.8	2	22	22	14	8	6	14	6.1	
LAKE CHARLES	9	1020.0	1021.0	65	42	53.5	- 2.8	79	11	28	8	0	4	44	74	2.26	- 2.25	1.15	8	1	0.0	0	2.1	8	26	3	6	7	6	15	6.1	
NEW ORLEANS	3	1020.0	1020.7	63	42	52.5	- 4.6	79	17	30	26+	0	6	44	73	6.80	2.81	5.58	11	2	0.0	0	1.8	2	27	35	6	11	4	13	5.6	
SHREVEPORT	254	1011.5	1020.8	58	35	46.5	- 3.8	76	15	23	8	0	9	34	67	2.91	- 1.18	1.28	8	1	T	0	0.4	2	22	35	6	11	3	14	5.6	53
MAINE																																
CARIBOU	624	987.8		19	- 5	6.7	- 5.8	38	11	-29	20	0	28			1.75	- 0.27	0.60	11		26.0	36						6	4	18	7.1	
PORTLAND	47	1011.2	1013.7	30	5	17.2	- 5.6	51	15	-22	13	0	28	8	64	4.63	0.83	1.60	13	0	45.8	32	4.1	29	41	W	16	8	8	12	6.1	53
MARYLAND																																
BALTIMORE	148	1011.5	1017.2	41	21	30.7	- 5.0	71	2	- 1	8	0	26	18	61	2.25	- 0.64	1.21	11	0	20.1	11	5.2	28	49	W	16	7	10	11	6.0	62
MASSACHUSETTS																																
BLUE HILL OBS R	629			32	15	23.5	- 3.9	56	15	-10	13	0	27			4.79	1.06	1.51	15		45.2	16			59	W	16					52
BOSTON	15	1013.2	1014.3	34	19	26.4	- 3.9	58	15	- 3	13	0	25	15	64	4.05	0.73	1.35	15	0	23.5	9	8.5	29	50	W	16	8	5	15	6.2	55
NANTUCKET	43	1013.9	1014.3	36	22	29.0	- 2.4	50	16	5	13	0	27	21	72	4.70	0.94	0.94	13	0	28.6	14	5.6	29	47	SW	16+	4	9	15	7.0	50
PITTSFIELD	1170			29	7	18.3	- 4.0	56	15	-16	13	0	27			3.35	0.84	0.90	13		35.0	19										
WORCESTER	986	975.6	1014.2	30	11	20.5	- 4.4	52	15	-12	13	0	28	9	63	3.15	0.23	0.93	13	0	35.5	16	8.2	28	46	29	21	8	6	14	6.1	
MICHIGAN																																
ALPENA	689	989.5	1015.9	25	1	12.5	- 6.1	39	14+	-18	12+	0	28	4	64	2.11	0.50	0.99	14	0	33.4	30	2.8	28	31	NE	15	8	5	15	6.6	47
DETROIT	619			30	16	23.1	- 4.1	50	14	0	12+	0	27	14	71				7	1			5.2	26	35	28	16					
DETROIT M WAYNE CO	633	991.2	1016.3	31	16	23.8	- 3.3	52	15	- 4	8	0	27	15	69	1.28	- 0.67	0.48	10	1	11.0	8	4.7	27	52	SW	16	9	5	14	6.1	50
DETROIT WILLOW RUN	711	987.5	1016.9	29	14	21.5	- 5.9	47	15	- 5	8	0	28	11	65	1.16	- 0.79	0.49	11	1	10.7	8	6.2	26	44	26	16	8	5	15	6.3	
FLINT	770	987.1	1016.3	28	9	18.3	- 6.5	43	14	-22	12	0	28	10	68	1.21	- 0.55	0.56	14	1	16.3	23	5.7	25	31	26	16	6	8	14	6.6	
GRAND RAPIDS	784	986.1	1016.3	29	11	20.4	- 3.9	48	14	-16	12	0	28	14	74	1.13	- 0.62	0.35	18	0	17.5	15	3.9	25	36	SW	15	3	9	16	7.3	38
HOUGHTON LAKE	1149	971.9	1016.0	24	- 1	11.9		47	14	-24	12	0	28	7	75	0.88		0.34	13	0	14.3	11	3.1	28	29	25	10	5	10	13	6.6	
LANSING	841	983.1	1016.2	28	8	17.8	- 6.4	44	15+	-24	12	0	28	12	75	1.41	- 0.54	0.65	16	0	15.1	21	5.2	26	56	W	16	5	11	12	6.5	58
MARQUETTE U	677			20	6	13.1	- 6.6	38	26	-12	12	0	28			1.35	- 0.30	0.40	17		23.5	33			40	S	3	3	6	19	7.7	50
MUSKEGON	627	992.6	1016.6	28	14	21.0	- 4.7	42	14	- 6	7	0	28	14	71	1.49	- 0.31	0.32	20	0	26.8	11	3.5	28	32	21	15	3	3	22	8.1	
SAULT STE MARIE	721	988.2	1016.1	18	- 3	7.7	- 8.0	33	10	-25	12+	0	28	- 1	65	1.72	0.22	0.49	16	0	25.8	28	2.1	33	32	W	4	9	4	15	6.3	56
MINNESOTA																																
DULUTH	1428	963.8	1018.4	16	- 9	3.7	- 7.1	35	4	-28	12	0	28	- 6	62	0.24	- 0.72	0.06	8	0	2.7	26	3.7	31	49	NW	4	6	10	12	6.6	58

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	973.6	1019.9	12	-17	-2.6	-9.7	37	13	-39	6	0	28	-13	59	0.72	0.01	0.26	8	0	8.8	21	2.3	31	24	36	10	7	8	13	6.0	
MINNEAPOLIS	834	986.8	1019.1	20	-3	8.7	-7.0	39	14+	-23	25	0	28	1	67	1.59	0.81	0.87	10	0	23.7	31	3.1	33	32	NW	4	7	9	12	6.2	50
ROCHESTER	1297	968.2	1018.5	21	0	10.5	-5.7	39	14	-18	24	0	28	4	75	0.76	-0.04	0.26	12	0	13.4	8	4.2	28	39	30	10	6	9	13	6.5	
ST CLOUD	1034	978.7	1018.9	18	-7	5.4	-8.0	43	13	-27	16+	0	28		66	0.75	-0.05	0.20	9		12.5	19						7	8	13	6.3	
MISSISSIPPI																																
JACKSON	310	1009.1	1021.2	56	32	44.2	-6.3	76	1	17	8	0	16	35	74	3.56	-1.40	0.91	9	2	T	T	1.8	35	29	SW	15	9	4	15	6.0	51
MERIDIAN	290	1010.2	1021.4	58	34	45.8	-4.8	74	15	18	8	0	16	32	63	3.65	-1.44	1.24	8	1	T	0	1.5	32	21	17	27+	7	7	14	6.3	
MISSOURI																																
COLUMBIA	778	989.8	1019.3	42	21	31.3	-2.5	69	14	1	25	0	25	18	62	0.71	-1.10	0.33	5	0	1.7	1	3.7	27	43	NW	23+	9	9	10	5.4	74
KANSAS CITY	742	991.9	1019.8	44	23	33.6	-2.2	71	13	9	24+	0	23	20	62	0.35	-0.89	0.23	3	0	0.9	2	2.8	26	31	NW	23	7	13	8	5.3	63
SAINT JOSEPH	811			43	19	30.9	-0.2	71	14	1	6	0	26	18	66	0.17	-0.92	0.12	2	0	1.3	T	3.1	27	37	32	5	14	6	8	4.9	
ST LOUIS	535	998.6	1019.9	42	21	31.3	-3.4	71	14	1	25	0	25	19	64	1.72	-0.32	0.99	9	1	0.9	T	4.6	27	46	NW	23	.8	7	13	5.9	60
SPRINGFIELD	1268	973.2	1020.1	45	20	32.6	-4.5	67	14	5	25	0	25	19	61	1.61	-0.51	0.78	5	1	1.9	2	2.8	26	33	N	23	8	10	10	5.2	65
MONTANA																																
BILLINGS	3567	890.3	1016.9	44	24	34.3	8.6	61	28+	4	15+	0	19	17	52	0.39	-0.21	0.21	7	0	3.7	2	10.6	27	51	NW	21	2	9	17	7.5	58
GLASGOW	2284	932.6		25	5	15.1	1.5	41	28+	-15	23	0	28			0.25	-0.16	0.06	11		4.3	6						5	6	17	7.2	
GREAT FALLS	3662	886.6	1017.4	43	22	32.1	8.3	60	28+	4	17+	0	21		55	0.28	-0.46	0.09	6	0	2.8	1	11.1	24	47	SW	4	3	3	22	8.0	48
HAVRE	2582	922.1	1017.2	33	13	23.2	6.9	52	27	-5	18	0	27	17	77	0.46	0.03	0.14	7	0	6.1	3	4.2	24	37	NW	21	4	6	18	7.7	51
HELENA	3828	880.8	1019.3	43	23	32.7	9.5	61	28	9	22	0	22	20	60	0.62	0.19	0.50	7	0	10.5	8	6.1	27	45	W	11	3	5	20	7.9	49
KALISPELL	2965	912.3	1019.7	39	22	30.3	5.8	55	28	0	20	0	25	24	77	0.42	-0.58	0.23	9	0	5.8	4	4.6	18	25	15	13	2	5	21	8.3	
MILES CITY	2629	921.4	1017.5	38	14	25.7	5.4	58	28	-9	24+	0	27	17	70	0.87	0.50		13	0	5.8		5.8	29								
MISSOULA	3190	906.5	1021.0	42	27	34.5	9.5	60	28	16	20	0	24	25	71	0.27	-0.60	0.15	6	0	2.2	1	2.6	29	33	SW	18	1	5	22	8.4	41
NEBRASKA																																
GRAND ISLAND	1841	950.6	1019.1	43	14	28.8	2.7	74	14	1	18+	0	28	15	62	0.07	-0.67	0.05	3	0	1.0	1	5.0	30	40	34	21	10	12	6	5.4	
LINCOLN U	1150			42	17	29.3	0.6	75	14	0	16	0	26			0.14	-0.95	0.07	5		0.5	T			37	NW	23	10	11	7	4.9	71
NORFOLK	1544			37	10	23.3	0.4	65	13	-11	16	0	28			0.06	-0.72	0.04	2		0.6	1						6	12	10	6.1	
NORTH PLATTE	2775	917.4	1018.2	46	16	30.8	2.9	71	28	4	15	0	28	13	54	0.03	-0.49	0.02	2	0	0.8	1	5.2	31	42	NW	21	5	17	6	5.3	74
OMAHA	977	982.7	1019.5	41	16	28.4	1.9	72	14	-2	16	0	25	15	61	0.16	-0.79	0.06	4	0	0.8	1	3.3	32	41	NW	21	6	11	11	6.2	63
SCOTTSBLUFF	3957	878.8	1018.0	47	17	32.0	3.0	69	28	4	15	0	27	16	55	0.04	-0.36	0.04	2	0	0.6	1	11.3	30	43	28	18	11	10	7	5.2	
VALENTINE	2587			41	12	26.2	3.2	68	28	-13	18	0	27			0.08	-0.48	0.07	3		0.9	1			42	NW	9	7	12	9	6.0	78
NEVADA																																
ELKO	5050	849.0	1024.4	43	20	31.5	3.5	60	28	6	8+	0	26	22	72	0.08	-0.81	0.04	3	0	1.2	4	1.2	27	17	14	24+	10	5	13	5.8	
ELY	6253	811.7	1023.9	43	13	28.4	1.8	59	28	0	15	0	28	16	64	0.10	-0.60	0.07	4	0	2.1	3	3.4	20	34	NW	10	8	12	8	5.1	69
LAS VEGAS	2162	943.1	1020.7	64	37	50.6	2.8	75	5	29	21	0	7	18	30	0.00	-0.44	0.00	0	0	0.0	0	2.5	31	46	SW	14	15	9	4	3.3	94
RENO	4404	871.0	1023.3	56	25	40.3	4.7	74	28	13	21	0	27	23	58	T	-1.02	T	0	0	T	0	0.8	22	42	SW	13	8	5	15	6.0	82
WINNEMUCCA	4299	872.7	1023.9	52	23	37.4	5.1	66	28	10	21+	0	26	21	59	0.08	-0.86	0.04	3	0	0.4	T	0.9	22	32	NW	14	9	9	10	5.7	63
NEW HAMPSHIRE																																
CONCORD	342	1001.4	1014.5	30	5	17.5	-5.2	53	15	-23	13	0	28	10	72	2.36	-0.12	0.84	12	0	32.6	23	4.8	30	36	W	16	6	9	13	6.1	60
MT WASHINGTON OBS	6262			8	-11	-1.6	-7.2	31	16	-41	12	0	28			7.28	2.07	2.74	19	0	52.1	12			124Y	W	16	5	5	18	7.8	33
NEW JERSEY																																
ATLANTIC CITY	64	1014.6	1016.9	40	19	29.2	-5.5	63	2	-7	13	0	26	20	68	3.24	0.11	0.85	15	0	35.2	17	5.1	29	35	29	21+	5	6	17	6.8	42
ATLANTIC CITY U	11			40	25	32.5	-3.2	57	16+	10	13	0	22			2.98	-0.40	0.80	12						47	W	16					
NEWARK	7	1015.6	1016.5	37	22	29.4	-3.3	59	2	4	13	0	25	17	60	3.00	0.20	1.22	10	1	25.4	14	5.8	29	33	30	25	6	8	14	6.4	
TRENTON U	56			38	23	30.3	-3.1	60	2	6	13	0	25			2.45	-0.14	1.12	13		24.3	14			42	SW	16	6	10	12	6.4	51
NEW MEXICO																																
ALBUQUERQUE	5311	839.1	1018.6	55	26	40.5	0.6	70	14	17	21+	0	24	11	35	0.44	0.06	0.44	2	0	1.0	1	1.3	2	56	E	5	15	7	6	4.0	78
CLAYTON	4969			54	20	36.8	0.8	71	14	5	8	0	27			0.05	-0.32	0.02	3		0.6	T						15	5	8	4.0	
RATON	6379			50	15	32.6	-0.1	65	13	-5	8	0	27			0.06	-0.36	0.05	3		1.2	1						16	3	9	4.0	
ROSWELL	3617	893.0		64	25	44.3	2.2	84	14	10	9	0	23	14	35	0.20	-0.22	0.18	3	0	2.0	1	1.3	28	45	NW	9	11	9	8	4.8	72
SILVER CITY	5373			59	28	43.4	0.0	69	14	10	8	0	21			0.14	-0.55	0.11	2		T	0						14	9	5	3.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1005.1	1016.3	29	7	18.0	- 5.7	53	15	-14	8	0	27	7	60	1.76	- 0.44	0.60	13	0	16.3	6	4.0	28	45	NW	16	2	12	14	7.3	49
BINGHAMTON	1590	953.9	1015.1	27	10	18.5	- 5.3	50	15	- 8	13	0	27	11	73	1.60	- 0.58	0.41	18	0	19.4	7	5.1	26	42	W	16	1	7	20	8.4	39
BUFFALO	705	988.8	1015.6	28	13	20.6	- 3.5	52	15	- 7	8	0	27	13	72	1.39	- 1.33	0.42	23	1	19.8	6	7.4	25	62	SW	16	1	3	24	8.6	39
NEW YORK U	132	1012.2	1015.4	37	22	29.2	- 4.2	60	15	4	13	0	25	18	66	2.68	- 0.16	1.06	10	2	23.6	14	4.4	30	39	NW	16					46
J.F. KENNEDY	13	1015.2	1016.1	35	20	27.8	- 3.8	52	16	0	13	0	26	19	71	2.48	- 0.45	0.70	9	0	19.9	10	5.5	30	46	25	16	7	7	14	6.4	
NEW YORK LA GUARDIA	11	1014.2	1016.2	38	24	30.6	- 3.0	59	15+	8	13+	0	23	18	61	2.36	- 0.73	0.84	12	1	20.0	13	6.2	30	45	W	16	7	5	16	6.6	
ROCHESTER	547	995.3	1016.4	30	12	21.4	- 3.5	50	16+	- 7	13+	0	26	11	63	1.67	- 0.86	0.72	16	0	27.6	9	5.6	25	57	SW	16	0	6	22	8.7	43
SYRACUSE	410	1000.0	1015.7	30	8	19.2	- 5.1	49	16	-22	13	0	26	10	66	1.49	- 1.64	0.41	17	0	21.0	8	5.8	27	62	W	16	1	9	18	8.0	41
NORTH CAROLINA																																
ASHEVILLE	2140	940.1	1018.0	46	24	35.0	- 3.9	67	1	- 2	25	0	22	25	72	2.20	- 1.83	0.88	10	0	4.2	2	3.0	34	35	34	24	12	3	13	5.6	66
CAPE HATTERAS R	7	1017.6	1017.9	53	37	45.0	- 1.5	66	7+	19	25	0	6	36	72	4.51	0.58	2.21	11	3	0.0	0	6.6	29	39	NE	9	8	6	14	6.4	48
CHARLOTTE	736	990.5	1018.6	50	30	40.0	- 4.2	69	15+	7	26+	0	18	26	64	3.79	0.24	1.20	10	0	5.4	5	2.5	26	29	SW	15	11	2	15	5.8	68
GREENSBORO	897	986.1	1018.6	49	28	38.2	- 2.8	73	1	6	25	0	21	26	66	2.76	- 0.54	1.36	8	0	2.7	3	3.4	26	32	NW	24	11	3	14	5.7	59
RALEIGH	434	1002.4	1018.6	49	29	38.9	- 4.1	74	1	8	25	0	20	26	63	3.80	0.57	1.20	11	0	9.1	9	4.2	28	28	32	24	10	4	14	5.9	53
WILMINGTON	28	1018.0	1019.2	59	36	47.5	- 1.2	76	17+	18	25	0	9	33	62	4.14	0.72	2.11	11	0	T	0	3.8	29	30	W	23	8	6	14	6.3	58
NORTH DAKOTA																																
BISMARCK	1647	956.7	1019.7	21	- 3	9.2	- 4.3	42	13+	-26	18	0	28	2	67	0.68	0.25	0.21	12	0	13.9	9	4.0	33	47	NW	22	4	9	15	7.1	64
FARGO	896	985.1	1020.1	15	- 8	3.8	- 6.9	42	13	-26	18+	0	28	- 4	68	0.21	- 0.30	0.05	10	0	2.6	8	4.0	35	48	N	23	4	6	18	7.3	68
WILLISTON	1899			22	- 1	10.5	- 1.9	41	28	-27	15	0	28			1.48	1.00	0.37	12		15.0	11			40	NW	9	7	5	16	6.8	76
OHIO																																
AKRON	1208	970.9	1016.9	34	16	24.9	- 3.8	59	15	- 3	8	0	26	17	72	2.47	0.17	0.58	16	2	19.7	9	5.5	25	35	22	15	4	6	18	7.6	
CINCINNATI OBS	761			38	20	29.0	- 6.1	63	14	- 3	25	0	26			1.75	- 1.05	0.83	10		5.0	3			47	SW	15					50
CLEVELAND	777	986.8	1017.1	33	19	25.9	- 2.6	59	15	- 7	8	0	25	16	66	2.35	0.02	0.65	17	1	18.5	7	5.3	24	53	W	16+	4	3	21	8.0	43
COLUMBUS	812	987.5	1018.6	34	18	25.8	- 5.3	60	15	- 2	26+	0	26	19	74	2.46	0.15	0.76	15	1	15.6	6	4.7	24	54	W	16	3	9	16	7.3	53
DAYTON	1002	980.7	1018.3	34	16	25.1	- 5.8	59	14	- 4	25	0	27	16	71	1.38	- 0.94	0.66	9	1	8.7	4	6.0	24	60	SW	16	7	8	13	6.3	55
MANSFIELD	1295			32	15	23.8	- 4.0	55	15	- 3	8	0	26	15	70	1.33	- 1.27	0.46	12	1	12.8	6	6.7	24				4	7	17	7.5	
TOLEDO	676	991.5	1017.6	31	15	23.0	- 4.3	55	15	-14	8	0	27	15	72	2.12	0.24	0.74	18	1	14.4	7	5.4	26	56	SW	16	7	5	16	6.6	48
YOUNGSTOWN	1178	972.6	1016.9	30	14	22.0	- 5.6	56	15	- 5	8	0	26	14	74	2.53	0.03	0.60	18	2	22.7	6	5.0	26	43	27	15	3	7	18	7.7	
OKLAHOMA																																
OKLAHOMA CITY	1285	972.6	1020.0	55	29	41.7	0.4	72	14	17	6	0	22	23	53	0.20	- 1.17	0.17	4	1	0.1	T	0.4	15	37	NW	6	11	7	10	5.0	76
TULSA	650	995.6	1020.6	52	26	38.9	- 1.7	72	13	14	25	0	21	22	58	0.65	- 1.12	0.45	5	1	0.9	1	1.7	23	35	SW	15+	11	9	8	4.9	66
OREGON																																
ASTORIA	8	1022.4	1023.3	50	36	43.2	0.4	56	27	29	20+	0	10	39	85	6.07	- 3.82	1.49	20	0	T	0	4.0	22	29	30	17	2	5	21	8.3	
BURNS U	4151	877.4	1023.7	46	24	34.9	5.2	58	28+	14	20	0	27	25	71	0.42	- 0.85	0.23	4		6.5	4	3.2	30				9	6	13	5.8	
EUGENE	359	1010.5	1024.4	53	36	44.6	2.0	62	27	28	20	0	5	39	84	2.13	- 2.84	0.57	11	0	0.7	T	2.6	19	21	18	15+	2	9	17	7.7	
MEACHAM	4050	879.4	1022.8	39	25	32.2	3.1	49	27+	15	20	0	26	23	71	2.34	- 1.66	0.89	11		27.8	19	3.5	24				4	1	23	8.4	
MEDFORD	1298	976.6	1025.5	51	30	40.5	0.4	61	23	25	23+	0	22	34	82	1.14	- 1.26	0.71	8	0	3.4	2	0.3	1	18	28	24	7	2	19	7.1	
PENDLETON	1482	967.5	1022.4	52	33	42.5	5.1	64	28	25	20	0	15	31	66	0.15	- 1.03	0.06	4	0	0.4	T	4.8	24	37	26	17	6	2	20	7.2	
PORTLAND	21	1022.7	1024.0	53	35	43.7	1.7	62	27	27	20	0	11	38	83	2.02	- 2.20	0.39	12	0	T	0	3.1	19	35	SW	15	1	7	20	8.3	43
SALEM	196	1016.6	1024.2	53	32	42.6	0.7	62	27	21	20	0	14	37	83	2.06	- 3.25	0.49	9	0	T	0	4.5	19	29	18	15+	3	8	17	7.6	
SEXTON SUMMIT R	3836	888.3	1023.1	47	34	40.4	4.3	57	12	22	14	0	12			1.21	- 2.91	0.79	9		12.7	10			32	19	13	10	5	13	5.8	
PACIFIC AREA																																
CANTON ISLAND	8			86	77	81.7	- 1.3	88	27+	75	22	0	0			0.09	- 2.04	0.04	3		0.0	0						11	13	4	4.3	
ENIWETOK	13	1009.5	1010.1	86	77	81.4	0.5	88	7+	71	23	0	0	73	77	1.48	- 0.36	0.68	12		0.0	0	16.0	6								
TAGUAC GUAM R	361			83	70	76.6	- 1.7	86	12	64	7	0	0			4.45	0.96	0.90	18		0.0	0			27	E	22					52
JOHNSTON	7	1013.2	1014.0	80	74	76.9	- 0.1	82	22+	69	15	0	0	68	75	2.54	1.01	1.31	11	2	0.0	0	12.4	9	30	SE	28	14	9	5	4.5	73
KOROR R	94	1005.1	1008.7	87	76	81.4	1.1	88	28+	73	13	0	0	75	83	3.74	- 3.39	0.96	16	2	0.0	0	6.0	9	19	NE	21+	0	0	28	10.0	58
KWAJALEIN	8	1008.8	1009.6	86	77	81.5	1.5	87	28+	74	26+	0	0	73	77	4.42	2.27	1.42	13	0	0.0	0	18.0	6	31	11	26+	7	10	11	6.1	
MAJURO	10	1008.8	1009.3	85	77	80.8	0.4	86	28+	73	5	0	0	74	78	9.72	1.17	3.54	20	0	0.0	0	12.2	7	26	NE	17	5	11	12	6.8	52
MARCUS ISLAND	20	1015.2	1017.1	75	65	70.1	- 1.1	80	28+	61	21+	0	0	59	69	2.32	- 0.39	0.90	8	0	0.0	0	5.2	4	29	N	20	5	14	9	5.9	61
PAGO PAGO	12	1009.8	1010.0	87	73	80.0		90	22	70	8+	1	0	74	84	8.60		1.81	21	6	0.0	0	3.9	8	30	E	17	1	7	20	8.5	60
PONAPE R	123	1003.1	1008.6	86	75	80.6	0.1	90	1	70	23+	1	0	73	80	18.83	9.09	4.01	22	0	0.0	0	8.2	8	26	NE	18	0	6	22	8.7	54
TRUK MOEN ISLAND	5	1008.5	1008.7	86	77	81.3	0.6	87	28+	73	19+	0	0	74	78	6.38	0.09	3.24	19	0	0.0	0	11.5	6	24	NE	24+	1	1	26	9.2	83
WAKE	11	1013.9	1014.3	81	72	76.3	- 0.8	83	13+	67	8	0	0	66	73	1.90	0.55	0.85	16	0	0.0	0	11.5	7	33	3	23	5	16	7	5.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1007.1	1008.9	86	75	80.3	- 0.1	88	12	70	27	0	0	75	82	6.25	1.61	3.21	18	1	0.0	0	8.8	6	22	NE	20+	0	0	28	9.9	71
PENNSYLVANIA																																
ALLENTOWN	387	1002.4	1016.8	34	15	24.3	- 4.9	52	15	- 7	9	0	28	14	65	1.98	- 0.66	0.96	13	0	19.7	12	4.9	29	39	26	16	4	9	15	6.6	
ERIE	731	988.8	1016.6	32	16	24.2	- 2.2	54	15	- 1	8	0	26	15	68	1.67	- 0.65	0.62	18	2	13.5	3	5.9	24	40	27	16	2	7	19	8.1	
HARRISBURG	338	1004.1	1017.2	36	18	26.9	- 5.7	59	16+	- 2	9+	0	27	13	58	1.54	- 0.77	0.69	12	0	16.5	10	4.4	30	39	NW	25	5	8	15	6.7	66
PHILADELPHIA	5	1015.9	1017.1	37	21	29.0	- 4.2	60	2	4	13+	0	27	17	62	1.82	- 0.98	0.59	12	0	18.4	11	4.2	30	40	W	16	5	7	16	6.9	54
PITTSBURGH	1137	971.6	1017.1	35	17	25.6	- 3.6	60	16+	- 6	8	0	25	17	71	2.54	0.35	0.57	16	1	21.7	8	6.4	25	58	26	16	3	6	19	8.0	29
READING U	266			37	20	28.8	- 4.6	60	15	4	9	0	27			1.66	- 0.98	0.83	14		17.6	13			56	W	16	5	12	11	6.1	54
SCRANTON	930	981.0	1016.5	32	15	23.5	- 4.8	56	15	- 6	8	0	27	15	70	0.89	- 1.10	0.26	11	0	14.4	7	3.7	26	41	SW	16	3	8	17	7.5	52
WILLIAMSPORT	524	997.0	1016.8	32	15	23.5	- 5.7	57	15	- 9	8	0	28	16	72	1.49	- 1.02	0.36	13	0	17.6	7	3.1	27	40	26	16	3	10	15	7.2	
RHODE ISLAND																																
BLOCK ISLAND	110			35	22	28.7	- 2.2	50	16	2	13	0	26			2.18	- 1.11	0.58	10		15.6	8						6	11	11	6.3	
PROVIDENCE	51	1012.5	1015.0	35	17	25.7	- 4.0	56	15	- 5	13	0	27	15	63	2.51	- 0.59	0.68	15	0	23.1	9	6.4	29	46	22	16	9	6	13	6.0	49
SOUTH CAROLINA																																
CHARLESTON	40	1017.6	1019.4	60	37	48.5	- 3.0	77	16	14	26	0	6	34	63	3.12	- 0.17	1.13	10	0	T	0	2.6	27	43Y	W	23	7	5	16	6.8	48
CHARLESTON U	9			57	42	49.5	- 2.8	72	2	22	26+	0	2			2.80	- 0.27	0.92	11		0.0	0			31	W	24					
COLUMBIA	241	1011.2	1019.6	54	32	43.0	- 5.4	74	1	9	26	0	14	32	68	4.36	0.62	1.99	10	0	3.4	3	2.6	28	23	27	24	8	5	15	6.3	65
GNVLE-SPARTANBURG	957	984.1	1019.4	50	32	41.0	- 4.1	70	1	8	25	0	14	27	62	3.32	- 0.75	1.11	11	0	1.5	1	2.6	27	30	NW	25	9	3	16	6.2	48
SOUTH DAKOTA																																
ABERDEEN	1296	970.2	1019.6	24	- 1	11.7	- 3.3	47	13	-22	2	0	28	3	66	0.42	- 0.23	0.16	9	0	8.8	3	3.1	36	52	6	5	4	5	19	7.3	
HURON	1282	970.2	1019.3	28	2	14.8	- 1.8	58	13	-25	18	0	28	7	70	0.77	0.17	0.18	12	0	17.5	11	3.3	31	53	NW	23	4	5	19	7.3	71
RAPID CITY	3162	902.8	1017.5	40	15	27.5	3.4	65	28	- 6	18	0	25	16	67	0.59	0.11	0.24	10	0	7.4	3	7.1	32	52	NW	21	10	8	10	5.6	67
SIOUX FALLS	1418	964.8	1018.9	28	2	15.3	- 3.8	54	13	-18	16	0	28	7	68	0.44	- 0.49	0.13	11	0	11.8	5	3.4	32	35	34	23	4	7	17	7.1	
TENNESSEE																																
BRISTOL	1507	963.4	1019.3	44	24	33.7	- 6.3	67	1	- 1	25	0	21	24	70	4.14	0.58	1.47	11	0	4.8	3	4.4	27	30	30	16	6	6	16	6.9	
CHATTANOOGA	665	994.9	1020.3	48	29	38.2	- 6.2	70	1	6	25	0	19	29	72	4.10	- 1.27	1.35	9	0	1.8	2	1.9	31	30	NW	24+	8	5	15	6.4	47
KNOXVILLE	980	983.4	1019.4	47	30	38.1	- 5.0	70	1	5	25	0	17	27	69	4.58	- 0.23	1.48	10	0	5.7	3	4.5	28	37	W	16	6	8	14	6.6	45
MEMPHIS	258	1011.2	1021.6	49	29	39.2	- 4.9	72	1	14	25	0	18	25	61	2.33	- 2.36	0.90	7	1	T	T	2.4	29	36	S	15	10	3	15	5.8	55
NASHVILLE	590	998.0	1020.4	48	27	37.5	- 4.5	72	1	5	25	0	21	24	61	1.78	- 2.73	0.70	9	1	T	T	2.8	26	36	SW	15	7	8	13	6.4	54
OAK RIDGE R	905			46	27	36.3	- 4.8	69	1	3	25	0	19			3.77	- 2.03	1.17	8		8.2	6			47Y		23	7	5	16	6.8	
TEXAS																																
ABILENE	1762	956.7	1019.2	61	33	46.6	- 1.8	80	1	21	24	0	16	27	49	0.24	- 0.85	0.19	2	0	T	0	2.0	18	40	NE	11	8	6	14	5.9	71
AMARILLO	3604	891.6	1017.0	56	25	40.6	- 0.7	79	14	13	24	0	25	17	44	0.15	- 0.47	0.08	3	0	1.1	T	3.7	28	41	NE	22	17	5	6	3.5	82
AUSTIN	597	998.0	1020.4	63	40	51.4	- 2.4	77	1	22	7	0	6	33	55	1.52	- 1.06	0.82	5	1	2.0	2	1.5	2	43	N	6	8	9	11	5.8	57
BROWNSVILLE	19	1018.6	1019.1	71	51	60.9	- 3.1	85	11	33	9+	0	0	52	77	1.05	- 0.43	0.88	6	0	0.0	0	2.9	11	45	N	6	9	5	14	6.1	52
CORPUS CHRISTI	41	1018.3	1019.8	68	47	57.4	- 3.0	83	11	32	9	0	1	47	73	2.38	0.68	2.04	5	1	0.0	0	4.4	10	52	N	6	7	4	17	6.8	43
DALLAS	481	1002.7	1020.5	60	36	48.0	- 1.5	79	15	24	7	0	8	30	55	0.75	- 1.80	0.44	4	0	0.0	0	1.5	15	35	NE	11	11	4	13	5.4	60
DEL RIO	1026	983.1	1019.7	67	42	54.2	- 2.0	80	10	24	7	0	6	30	46	0.29	- 0.59	0.18	3	1	0.6	T	3.0	10	28	2	6	6	8	14	6.3	
EL PASO	3918	883.8	1017.3	63	33	48.0	- 1.1	78	14	17	9	0	15	16	31	0.04	- 0.37	0.02	2	0	T	0	1.9	27	45	W	10	13	6	9	4.5	87
FORT WORTH	537	999.7	1020.5	60	34	46.8	- 2.4	78	5	20	7	0	13	29	53	0.32	- 1.92	0.19	5	0	T	T	1.0	16	30	34	1	11	4	13	5.5	
GALVESTON U	7			61	48	54.6	- 2.2	70	15	34	8+	0	0			2.26	- 0.62	1.71	6		0.0	0			33	N	6					58
HOUSTON U	41			65	46	55.4	- 1.7	76	15+	31	7	0	2			1.74	- 1.47	1.11	5		0.0	0										
HOUSTON	50	1018.3	1020.3	67	42	54.5	- 1.3	80	1	28	7	0	4	41	66	2.17	- 1.27	1.84	7	1	0.0	0	0.6	11	32	2	6	8	5	15	6.3	54
LUBBOCK	3254	904.8	1018.2	58	25	41.5	- 1.6	79	14	12	24	0	25	15	39	0.14	- 0.43	0.07	5	0	0.7	1	1.9	29	33	25	9	11	9	8	4.6	
MIDLAND	2851	918.1	1017.9	62	31	46.4	- 1.9	81	14	21	9+	0	18	20	42	0.03	- 0.57	0.02	2	1	T	T	0.9	23	36	4	5+	9	10	9	5.4	
PORT ARTHUR	16	1020.0	1020.8	65	42	53.4	- 2.6	77	16	27	8+	0	4	44	74	2.06	- 2.39	1.68	7	1	T	0	1.6	7	49	NE	6	7	6	15	6.3	55
SAN ANGELO	1903	951.2	1019.0	63	34	48.5	- 2.0	82	1	19	7	0	15	25	43	0.17	- 0.73	0.12	3	0	T	T	2.4	22	38	4	6	8	9	11	5.6	
SAN ANTONIO	788	991.9	1020.3	64	39	51.8	- 3.6	77	10	23	7	0	9	33	54	0.48	- 1.17	0.34	3	0	T	T	2.0	3	35	NW	11	10	4	14	6.0	58
VICTORIA	104	1016.3	1020.4	67	44	55.5	- 2.5	80	11	27	7	0	3	42	65	1.41	- 0.93	0.86	5	1	0.0	0	1.9	7	51Y	NNW	6	8	5	15	6.3	
WACO	501	1002.4	1020.8	61	36	48.7	- 2.8	76	15	20	7	0	11	31	54	0.77	- 1.65	0.47	5	0	T	0	0.9	19	35	35	6+	9	7	12	5.5	
WICHITA FALLS	994	982.4	1019.9	61	30	45.5	- 1.3	80	14	18	24	0	20	24	49	0.20	- 1.18	0.14	2	0	T	0	1.6	11	44	2	5	10	7	11	5.2	
UTAH																																
MILFORD	5028	850.0		47	20	33.6	3.9	66	28	6	15	0	27			0.20	- 0.50	0.17	2		1.7	2						15	6	7	4.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	875.7	1022.9	48	27	37.5	5.0	63	24	18	20	0	23	23	62	0.67	- 0.51	0.34	4	0	4.5	2	3.1	14	35	NW	10	6	10	12	6.3	65
WENDOVER	4237			48	27	37.3	4.5	61	13	17	21	0	24			0.01	- 0.29	0.01	1		T	T										
VERMONT																																
BURLINGTON	332	1001.7	1014.9	23	1	11.7	- 5.7	42	16	-25	13	0	28	2	62	0.77	- 1.02	0.27	10	0	12.6	8	2.1	25	38	NW	16+	2	6	20	8.0	50
VIRGINIA																																
LYNCHBURG	916	983.1		44	24	34.3	- 4.6	69	1	6	25	0	23	20	60	2.13	- 0.52	0.78	7	0	14.7	6	4.0	26	31	SW	2	10	9	9	5.3	59
NORFOLK	22	1016.6	1017.8	48	32	39.9	- 1.7	70	16+	16	25	0	16	28	67	3.56	0.35	1.42	10	0	5.1	5	3.9	29	35	W	16	8	8	12	6.0	75
RICHMOND	164	1012.2	1018.2	46	24	34.8	- 5.1	72	2	7	8	0	24	23	66	3.35	0.45	1.25	9	0	17.1	8	3.1	27	30	NW	16+	6	9	13	6.1	65
ROANOKE	1149	974.6	1017.6	45	25	34.8	- 4.4	69	1	4	25	0	23	20	57	2.51	- 0.35	1.06	10	0	15.6	7	4.8	28	32	30	28	7	12	9	5.5	
WALLOPS ISLAND	9	1018.0	1018.2	42	27	34.6		64	16	16	25+	0	23	25	72	3.64		1.15	14	0	12.9	6	5.4	30	53Y	WNW	25	5	11	12	6.3	
WASHINGTON																																
OLYMPIA	195	1015.2	1022.6	49	33	41.3	0.4	58	27	26	20	0	15	36	83	3.58	- 3.04	1.24	16	0	T	0	6.5	21	26	19	12	1	6	21	8.4	
QUILLAYUTE	179	1013.9	1021.6	48	36	42.3	1.9	56	7	26	20	0	8	40	92	16.80	4.52	3.35	22	0	T	T	2.6	20	24	NW	17+	2	4	22	8.6	27
SEATTLE TACOMA	400	1005.4	1022.2	49	37	42.8	2.0	56	27	30	20+	0	3	37	80	2.72	- 1.52	0.95	14	0	T	0	5.7	20	30	24	17	2	3	23	8.6	44
SPOKANE	2356	934.0	1019.8	44	29	36.2	6.2	56	27	19	19	0	21	28	75	0.40	- 1.46	0.12	6	1	3.1	1	6.5	21	38	SW	28	4	10	14	6.7	52
STAMPEDE PASS R	3958	881.1		35	26	30.4	3.8	40	27+	21	20+	0	27			15.51	5.36	3.10	19		102.0	132						3	2	23	8.7	
WALLA WALLA U	949			53	37	45.1	6.7	60	28+	29	19	0	5			0.36	- 1.16	0.14	5		0.6	T			30	W	13	6	2	20	7.4	39
YAKIMA	1052	982.1	1021.5	55	28	41.3	7.3	62	28+	19	20	0	25	27	61	T	- 0.87	T	0	0	0.0	0	4.9	27	48	28	17	8	8	12	5.9	
WEST INDIES																																
SAN JUAN P.R.	13	1015.2	1017.7	82	70	76.3	1.9	88	24	64	6	0	0	67	76	2.93	0.03	1.52	12	0	0.0	0	8.1	9	31	NE	27	3	22	3	5.3	76
SWAN ISLAND	28			83	74	78.4	0.0	85	24	70	13	0	0			1.76	0.60	0.71	6		0.0	0						15	9	4	4.1	
WEST VIRGINIA																																
BECKLEY	2504	926.5	1018.7	38	19	28.6		62	15	- 5	25	0	24	20	71	2.85		0.70	16	0	26.6	6	6.3	25	32	21	16	5	7	16	6.9	
CHARLESTON	939	983.4	1018.4	42	21	31.6	- 5.9	67	16+	0	8	0	24	21	70	2.95	- 0.58	0.55	15	1	20.6	7	5.5	24	37	22	16	4	9	15	7.3	
ELKINS	1970	944.1	1017.4	40	15	27.6	- 5.4	64	2	- 4	25	0	26	19	71	3.03	- 0.24	0.85	15	0	28.1	7	6.0	28	35	25	24+	4	7	17	7.5	
HUNTINGTON	827	987.8	1019.0	42	22	32.0	- 5.7	67	15	- 1	25	0	24	21	67	2.53	- 0.51	0.70	14	1	11.7	5	4.2	24	41	26	23	4	8	16	7.4	
PARKERSBURG U	615			40	21	30.5	- 5.0	64	16+	0	25+	0	25			1.98	- 0.85	0.70	12		10.5	4			45	W	16					50
WISCONSIN																																
GREEN BAY	682	990.5	1017.3	23	3	13.2	- 4.9	43	14	-18	12	0	28	7	73	0.84	- 0.24	0.25	9	0	9.9	9	4.1	30	42	N	15	9	2	17	6.7	51
LA CROSSE	651	992.6	1018.6	25	0	12.3	- 7.1	47	14	-24	7	0	28	2	61	1.11	0.06	0.35	10	0	15.2	9	2.3	28	26	28	10	6	9	13	6.5	
MADISON	858	984.8	1017.7	25	4	14.7	- 4.8	49	14	-15	25+	0	28	6	64	1.17	0.04	0.36	9	0	13.9	7	3.8	29	29	N	23+	8	8	12	6.0	58
MILWAUKEE	672	990.9	1017.4	26	9	17.5	- 4.9	45	14	- 8	25	0	28	13	76	1.31	- 0.09	0.51	12	0	27.1	13	5.2	28	37	N	5	7	6	15	6.3	56
WYOMING																																
CASPER	5338	836.1	1018.5	38	17	27.7	1.4	55	28+	- 2	22	0	27	15	60	0.65	0.06	0.23	9	0	10.6	4	11.8	23	37	22	8	9	10	9	5.7	
CHEYENNE	6126	809.7	1017.4	42	20	31.1	3.8	61	28	8	15	0	26	12	47	0.54	- 0.02	0.21	12	0	8.0	4	14.5	30	63	NW	21	11	10	7	5.1	71
LANDER	5563	828.0	1019.0	40	15	27.8	3.7	59	4	1	16	0	28	15	63	1.18	0.49	0.63	9	0	21.4	10	2.5	23	47	SW	13	5	10	13	6.2	79
SHERIDAN	3964	877.4	1018.2	41	18	29.5	5.7	65	28	- 4	15	0	26	15	57	1.28	0.54	0.44	10	0	20.4	7	6.8	29	48	NW	18	5	4	19	7.2	57

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	998.0	1021.1	11.7	- 0.6	5.4	-3.8	22.8	1	-11.1	25	0	16	- 0.6	69	120	- 14	28	12	1	20	25	0.9	30	13.0	SW	15	8	4	16	6.4	45
HUNTSVILLE	183	997.3	1020.9	10.0	- 1.1	4.5	-2.8	23.3	1	-13.9	25	0	15	- 2.2	66	102	- 30	46	8	0	25	25	0.5	33	11.2	21	15	7	6	15	6.6	
MOBILE	64	1012.5	1020.7	17.2	5.6	11.2	-1.7	26.1	17	- 3.9	26+	0	5	3.9	64	156	39	86	10	0	T	0	0.8	36	10.3	35	20+	6	8	14	6.2	
MONTGOMERY	59	1013.5	1020.9	14.4	3.3	8.9	-1.3	25.6	17	- 6.7	26	0	8	1.7	65	113	3	53	10	0	T	0	1.0	29	9.8	N	12	7	6	15	6.6	45
ALASKA												B																				
ANCHORAGE	35	999.7	1004.8	- 5.0	-14.4	- 9.8	-2.4	3.3	6	-27.8	14	0	28	-15.0	64	26	8	9	8	0	414	584	0.7	4	15.6	16	6	5	6	17	7.2	50
ANNETTE	34	1005.8	1010.0	6.7	1.7	4.0	2.3	8.3	20	- 1.1	21	0	9	1.7	87	389	172	45	26	0	450	102	3.9	16	16.5	15	26	0	1	27	9.6	
BARROW	9	1016.3	1016.8	-23.9	-30.0	-26.8	1.1	- 9.4	19	-38.3	15	0	28	-31.7	64	1	- 4	T	2	0	10	305	2.6	8	10.7	27	23+	12	5	11	4.9	
BARTER ISLAND	12	1015.6	1017.5	-25.6	-32.8	-29.3	-0.6	- 7.2	21	-41.7	14	0	28	-32.8	70	2	- 7	2	2	0	25	305	1.7	11	21.5	27	23	15	5	8	4.2	
BETHEL	38	998.0	1003.7	- 8.3	-16.7	-12.4	0.8	2.2	6	-31.7	13	0	28	-15.0		6	- 22	3	7	0	71	432	2.4	9	20.6	15	6	6	3	19	7.1	
COLD BAY	29	996.6	1000.6	0.6	- 4.4	- 1.9	0.3	4.4	5+	-15.0	1	0	28	- 4.4	84	66	- 15	12	22	0	391	127	3.0	19	32.6	16	19	0	8	20	8.2	
FAIRBANKS	133	992.6	1010.9	-15.0	-28.3	-21.6	-2.2	- 2.2	6	-41.1	15	0	28	-28.3	52	6	- 7	2	10	0	132	610	0.5	1	7.6	25	23	4	5	19	7.9	
JUNEAU	4	1006.4	1007.2	1.7	- 3.3	- 0.9	2.0	5.6	7	-18.3	16	0	23	- 2.2	88	120	43	18	23	0	813	406	3.9	11	13.9	12	28+	1	4	23	9.0	22
KING SALMON	15	1001.7	1003.8	- 5.0	-13.9	- 9.4	-1.3	2.8	5	-29.4	1	0	27	-13.3		14	- 10	6	12	0	130	76	1.4	9	18.3	12	20	6	5	17	6.9	
KOTZEBUE	3	1009.1	1009.8	-15.6	-23.3	-19.2	0.8	- 1.7	21+	-37.2	14+	0	28	-22.2	76	3	- 5	1	7	0	89	711	4.8	10	19.2	12	20+	11	5	12	5.4	
MC GRATH	105	995.6	1008.9	-11.7	-25.0	-18.1	-0.4	2.8	20	-41.1	15	0	28	-22.2	67	12	- 17	4	10	0	297	660	0.3	24	11.2	18	19	8	6	14	6.1	
NOME	4	1004.4	1005.3	-10.0	-18.9	-14.3	0.4	- 0.6	20+	-36.1	13	0	28	-16.7	81	7	- 17	2	9	0	122	610	3.9	7	16.1	9	19	8	3	17	6.8	35
ST. PAUL ISLAND	7	995.6	996.5	0.0	- 4.4	- 2.3	2.6	3.3	14	-12.8	1	0	27	- 4.4	84	42	10	7	22	0	386	178	1.7	15	24.6	19	17	0	8	20	8.2	
SHEMYA	37	990.9	994.7	1.1	- 3.3	- 1.3	-0.7	3.3	23	- 8.3	5+	0	26	- 3.9	84	42	- 16	22	19	0	333	229	1.8	2	23.2	5	16	1	11	16	8.1	
YAKUTAT	9	1002.4	1003.5	0.0	- 8.9	- 4.2	-2.3	3.3	7+	-21.7	16+	0	28	- 4.4	92	264	56	66	22	0	1631	1676	2.5	11	14.8	14	7	1	2	25	9.1	
ARIZONA																																
FLAGSTAFF	2131	788.0	1019.5	10.0	- 6.1	1.8	3.2	15.0	24	-11.1	15	0	27	-11.1	43	T	- 45	T	0	0	T	T	0.5	2	13.0	4	5	14	8	6	3.7	
PHOENIX	340	977.7	1017.1	22.8	3.9	13.2	1.2	28.3	4	- 1.1	17+	0	3	- 5.0	32	0	- 22	0	0	0	0	0	0.7	10	13.0Y	ENE	6	17	6	5	3.3	91
TUCSON	788	927.9	1016.4	21.7	4.4	13.1	1.5	28.3	13	- 1.1	9	0	2	- 7.2	27	3	- 18	3	2	0	0	0	1.2	15	13.0	SE	28	15	4	9	4.2	86
WINSLOW	1492	853.7	1021.4	13.9	- 5.6	4.1	1.1	21.7	13	-12.2	8	0	25	-13.3	32	T	- 12	T	1	0	T	T	1.2	26	19.7	22	14	16	6	6	3.5	
YUMA	59	1010.5	1017.7	24.4	7.2	15.9	1.8	29.4	28	1.7	17	0	0	- 5.6	27	0	- 9	0	0	0	0	0	2.1	36	13.4	N	6+	17	6	5	3.2	89
ARKANSAS																																
FORT SMITH	136	1003.7	1021.0	12.2	- 3.3	4.4	-2.1	24.4	5	-11.1	25	0	22	- 4.4	58	14	- 73	8	4	1	T	0	0.7	35	15.2	NW	15	9	8	11	5.8	59
LITTLE ROCK	78	1011.5	1021.4	11.1	- 1.7	4.7	-2.2	21.7	5+	- 8.9	7	0	22	- 2.2	65	59	- 51	33	8	1	T	T	0.9	28	16.1	SW	15	11	5	12	5.5	59
TEXARKANA	119	1007.8	1021.2	13.3	1.1	7.3	-1.9	23.3	15	- 6.7	7	0	12	- 0.6	62	46	- 56	20	7	0	0	0	0.4	20				11	4	13	5.4	
CALIFORNIA																																
BAKERSFIELD	145	1004.4	1022.5	15.0	4.4	9.8	-1.3	22.8	28	0.6	15	0	0	4.4	74	1	- 28	1	1	0	0	0	0.8	36	9.4	35	24+	6	10	12	6.2	
BISHOP	1252	878.4		16.1	- 3.3	6.4	1.3	21.7	9	- 8.9	15	0	26			T	- 25	T	0		T	T										
BLUE CANYON	1609			10.6	2.2	6.3	3.5	18.3	6	- 6.1	15	0	11			27	-232	15	5		104	660			13.0	2	5	11	6	11	5.3	
EUREKA U	13			12.2	5.0	8.7	-0.3	16.1	11	1.7	19	0	0			37	-103	15	8		0	0			17.0	NW	13	6	6	16	7.0	60
FRESNO	100	1010.5	1022.3	14.4	4.4	9.4	-0.9	24.4	28	- 0.6	15	0	1	6.1	83	6	- 50	6	1	0	0	0	0.3	33	10.7	NW	14	5	10	13	6.6	53
LONG BEACH	10	1018.0	1019.2	21.7	6.7	14.2	1.7	28.9	28	3.3	22+	0	0	3.3	56	1	- 58	1	1	0	0	0	0.7	27	8.0	10	20	14	8	6	3.9	
LOS ANGELES	30	1015.2	1018.7	21.1	9.4	15.3	2.4	28.9	28	6.7	21	0	0	6.1	60	1	- 72	1	1	0	0	0	0.5	28	13.4Y	N	14	14	7	7	4.0	
LOS ANGELES U	82			23.9	10.6	17.2	3.2	30.6	28	7.2	21	0	0			3	- 82	3	1		0	0			7.6	N	14	18	5	5	3.3	88
MT SHASTA R	1080			11.1	- 2.2	4.4	1.7	17.2	12	- 7.8	20	0	24			13	-137	10	4		99	51										
OAKLAND	2	1022.0	1022.3	15.0	7.8	11.3	0.9	19.4	10	4.4	22	0	0	5.6	70	7	- 75	7	3	0	0	0	0.7	34	10.3	27	13	9	7	12	5.8	
RED BLUFF	104	1009.8	1022.8	16.7	4.4	10.6	0.8	23.9	10+	- 0.6	21	0	1	2.8	66	11	- 73	11	2	0	0	0	1.5	34	13.4	NW	5	6	7	15	6.5	72
SACRAMENTO	5	1021.7	1022.4	13.9	3.9	9.1	-0.4	21.1	10	0.6	20+	0	0	5.0	82	10	- 66	10	2	0	0	0	0.3	30	13.0	SW	13	7	4	17	6.8	58
SANDBERG R	1377	865.2		12.2	3.9	8.1	2.8	17.8	28+	- 3.9	15	0	8	- 7.8	38	7	- 59	7	1		T	0	2.8	2	17.4	33	14	16	5	7	3.8	
SAN DIEGO	4	1017.6	1018.5	20.0	8.3	14.3	0.9	26.7	28	5.0	21	0	0	6.7	64	0	- 55	0	0	0	0	0	0.8	31	8.5	NW	1	17	4	7	3.6	88
SAN FRANCISCO	2	1021.3	1022.2	15.6	6.1	10.8	0.3	18.3	21	3.9	22+	0	0	4.4	69	2	- 86	2	3	0	0	0	0.8	32	14.3	NW	14	7	10	11	5.9	
SAN FRANCISCO U	16			15.6	8.3	11.8	0.1	18.9	28+	5.6	8	0	0			6	- 87	5	4		0	0			10.3	W	13					77
SANTA CATALINA	478			20.0	12.8	16.3	4.1	25.6	11	6.7	26	0	0			T	- 80	T	0	0	0	0						17	4	7	3.5	
SANTA MARIA	72			19.4	2.8	11.1	0.1	23.9	10	- 1.1	22+	0	4			13	- 51	12	3		0	0						17	6	5	3.5	
STOCKTON	7	1022.0	1023.0	13.9	3.9	8.9	-0.5	19.4	28+	- 0.6	21	0	2	5.6	82	8	- 54	8	4	0	0	0	0.3	19	10.7	29	14	6	3	19	7.3	
COLORADO																																
ALAMOSA	2297	770.4		5.0	-15.0	- 5.0	-0.3	12.2	25	-23.9	8	0	28			20	15	11	6		315	102						15	8	5	3.6	
COLORADO SPRINGS	1873	809.7	1018.8	8.9	- 7.8	0.6	0.8	17.2	28+	-13.9	8	0	27	-12.2	44	4	- 5	4	2	0	91	76	2.1	35	17.0	29	22+	11	8	9	4.8	
DENVER	1610	835.1	1016.4	10.0	- 6.7	1.7	2.0	20.6	28	-12.8	15	0	28	- 9.4	51	10	- 8	4	7	0	112	25	1.2	27	17.9	NW	4	10	11	7	4.8	78
GRAND JUNCTION	1480	854.7	1021.3	8.9	- 4.4	2.4	2.1	16.1	25	- 8.9	21+	0	25	- 9.4	46	6	- 12	5	3	0	T	T	0.7	8	25.0	W	14	14	6	8	4.4	72
PUEBLO	1428	855.4	1017.5	11.7	- 7.2	2.2	1.2	19.4	28	-15.0	8	0	27	-12.2	37	3	- 9	2	3	0	30	25	1.4	32	21.5	NW	15	14	5	9	4.3	85

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	°C.	C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1014.9	1015.6	1.7	- 6.7	- 2.6	-1.7	8.9	16	-18.9	13	0	28	- 8.9	65	64	- 11	29	10	0	610	356	3.1	30	23.2	27	16	7	7	14	6.5	
HARTFORD	52	1008.1	1015.1	1.1	- 9.4	- 4.2	-1.4	13.9	15	-25.0	8	0	26	- 9.4	68	51	- 24	16	12	0	640	356	2.0	32	23.7	SW	16	5	8	15	6.9	63
NEW HAVEN	2	1015.2		2.2	- 7.2	- 2.6	-1.2	11.1	16+	-19.4	13	0	28			73	- 8	20	11		643	356			18.3	W	16	5	10	13	6.4	62
DELAWARE																																
WILMINGTON	24	1014.2	1017.2	3.3	- 6.7	- 1.4	-2.4	17.8	2	-17.2	9	0	27	- 6.7	69	48	- 27	20	12	0	475	254	1.7	32	18.8	24	16	6	9	13	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.6	1018.1	6.1	- 3.9	1.1	-2.1	21.7	2	-11.7	25*	0	23	- 6.7	60	59	- 4	30	10	0	483	254	1.7	29	16.5	W	21	6	9	13	6.2	56
FLORIDA																																
APALACHICOLA U	4			16.1	7.2	11.8	-1.9	23.3	18	- 3.3	26	0	2			69	- 31	21	11	4	0	0			14.8	N	12	7	7	14	6.4	52
DAYTONA BEACH	9	1019.0	1020.4	20.6	8.9	14.7	-1.2	27.8	18	- 2.2	26	0	2	8.9	74	101	31	35	7	2	0	0	1.2	30	13.0	35	13	9	8	11	6.0	
FORT MYERS	5	1019.6	1020.0	23.3	11.1	17.3	-1.2	27.8	20	0.0	26	0	1	11.7	74	55	- 2	24	7	0	0	0	0.5	4	13.4	34	9	9	12	7	4.9	
JACKSONVILLE	6	1019.3	1020.2	18.9	6.1	12.6	-1.6	27.2	20	- 5.6	26	0	3	5.6	68	110	37	49	8	0	0	0	1.1	29	14.3	NW	26+	9	6	13	6.3	50
KEY WEST	1	1018.6	1019.2	24.4	19.4	21.9	0.6	27.2	7	9.4	26	0	0	16.7	75	45	- 5	27	6	2	0	0	2.4	7	14.3	N	9	10	12	6	4.8	74
LAKELAND U	65			21.7	10.6	15.9	-1.4	27.8	20	- 2.2	26	0	1			94	31	45	7		0	0						11	10	7	5.3	69
MIAMI	2	1019.0	1019.2	25.6	15.6	20.5	0.6	30.0	7	2.2	26	0	0	14.4	70	29	- 19	12	6	2	0	0	0.7	9	13.0	26	9	4	16	8	5.8	
ORLANDO	33	1015.9	1020.2	21.7	9.4	15.6	-1.1	28.9	18	- 2.2	26	0	2	8.9	71	139	78	58	7	2	0	0	1.0	30	12.1	2	13	10	6	12	5.8	
PENSACOLA	34	1016.9	1020.9	16.1	5.6	10.9	-2.5	25.0	17	- 3.9	8	0	4	5.6	72	139	31	106	11		T	0	1.0	1	15.2	N	12	5	10	13	6.6	57
TALLAHASSEE	17	1018.3	1020.6	18.3	3.9	11.1	-2.0	26.1	17	- 6.1	26	0	7	6.1	76	142	36	67	11	1	0	0	0.7	32	10.3	3	12	7	6	15	6.4	
TAMPA	6	1020.0	1020.2	21.1	9.4	15.3	-1.8	27.2	20	- 2.8	26	0	1	10.0	74	109	37	41	6	2	0	0	0.4	1	10.3	19	6	9	11	8	5.7	65
WEST PALM BEACH	5	1018.6	1019.5	24.4	12.8	18.6	-1.2	30.0	12+	1.7	26	0	0	12.8	73	76	17	55	5	1	0	0	0.1	7	15.6	3	13	5	11	12	6.2	
GEORGIA																																
ATHENS	244	989.8	1019.5	10.6	0.6	5.6	-2.2	21.1	1	-13.3	25	0	13	- 1.1	67	105	- 14	26	10	0	76	51	1.4	27	10.3	35	24*	9	4	15	6.4	
ATLANTA	308	982.1	1019.8	10.6	0.6	5.4	-2.4	20.6	1	-12.8	25	0	13	- 1.1	67	95	- 19	31	9	0	51	25	1.7	29	12.1	S	15	7	7	14	6.4	41
AUGUSTA	44	1014.2	1019.7	13.3	0.6	6.8	-2.8	23.3	1	-11.1	26	0	14	0.0	66	98	9	46	10	0	84	51	1.2	27	10.3	27	24	8	3	17	6.6	
COLUMBUS	117			14.4	2.2	8.4	-1.4	23.9	17	- 8.3	25	0	10	2.2		85	- 33	31	10		T	T	1.0	30	10.3	31	21	7	6	15	6.6	
MACON	108	1007.5	1020.6	13.9	2.2	8.1	-2.6	22.2	1	-10.0	25	0	10	1.1	67	80	- 28	34	10	0	25	T	0.8	29	11.2	SW	15	7	4	17	6.6	57
ROME	194			10.6	- 2.2	4.3	-2.6	21.7	1	-13.3	25	0	19			106	- 28	30	10		T	T										
SAVANNAH	14	1018.6	1020.3	16.1	3.3	9.8	-1.9	26.7	17	- 8.9	26	0	7	2.8	69	71	- 22	19	12	0	0	0	0.9	29	12.1	NW	24	7	5	16	6.6	46
HAWAII																																
HILO	8	1016.3	1017.5	27.8	18.9	23.3	1.8	29.4	6+	12.8	21	0	0	17.8	76	263	- 66	104	19	0	0	0	1.2	18	8.9	E	15	7	8	13	6.7	47
HONOLULU	2	1016.3	1016.8	27.2	19.4	23.3	0.8	28.9	9+	16.7	26	0	0	17.2	72	64	- 20	25	11	1	0	0	3.5	7	14.8	NE	28	4	15	9	6.3	40
KAHULUI	15	1014.6	1016.8	26.7	17.8	22.3	0.2	28.3	7	14.4	17+	0	0	16.7	72	54	- 10	33	7	0	0	0	3.8	7	13.9	NE	13	7	13	8	5.9	66
LIHUE	31	1012.9	1017.9	25.0	19.4	22.1	0.6	26.7	18	15.6	4	0	0	18.3	80	167	32	69	16	2	0	0	3.4	7	10.3	E	28+	2	12	14	7.0	46
IDAHO																																
BOISE	865	921.1	1023.4	8.9	- 1.7	3.5	2.1	16.7	28+	- 5.0	21+	0	24	- 2.8	68	9	- 25	3	6	0	48	25	0.6	14	13.4	NW	10	6	8	14	6.5	70
IDAHO FALLS 46W R	1505			2.2	-10.6	- 4.0	2.4	8.9	13	-17.2	8	0	27			T	- 19	T	1	0	5	51	1.8	25	16.5	SW	18					
LEWISTON	431			10.6	0.0	5.2	3.0	17.2	27	- 3.9	20	0	16			7	- 17	4	5		25	T						5	3	20	7.8	
POCATELLO	1358	865.9	1022.4	6.1	- 5.0	0.6	3.3	12.8	24+	-11.1	20	0	27	- 6.1	65	5	- 19	1	6	0	89	51	3.8	22	14.8	S	18+	6	6	16	6.8	64
ILLINOIS																																
CAIRO U	96			6.7	- 3.3	1.7	-3.1	19.4	1	-13.3	25	0	23			68	- 25	28	7		150	127			21.0	SW	15	9	7	12	5.8	57
CHICAGO O HARE	201	992.2	1017.8	- 1.7	-11.7	- 6.8	-3.6	9.4	15	-27.2	12	0	27	-12.2	64	46	8	21	12	0	546	686	1.8	26	20.1	25	15	7	7	14	6.3	
CHICAGO MIDWAY	185	994.2		- 1.1	-10.0	- 5.6	-3.2	8.3	15	-20.6	25+	0	27	-11.1	64	47	7	17	11	0	572	711	2.5	25	22.8	SW	15	7	5	16	6.4	46
MOLINE	177	995.9	1018.6	- 1.7	-12.8	- 7.4	-3.9	11.1	14	-23.3	25+	0	27	-12.2	65	28	- 6	11	9	0	335	203	2.1	27	17.4	NW	23	8	8	12	6.1	52
PEORIA	199	993.9	1019.0	- 0.6	-10.6	- 5.7	-3.7	11.7	15+	-22.8	25	0	27	-10.6	68	27	- 16	20	7	1	91	127	1.8	26	20.6	NW	23	7	8	13	6.4	51
ROCKFORD	221	989.5	1017.8	- 2.8	-13.9	- 8.4	-4.2	7.2	14	-23.9	25	0	28	-12.2	71	23	- 13	10	7	0	295	152	1.9	27	13.0	33	15	10	6	12	5.6	
SPRINGFIELD	179	995.9	1019.2	1.7	- 7.8	- 3.1	-2.9	16.7	15	-18.9	25	0	27	- 7.8	72	23	- 23	13	8	0	94	51	2.1	25	21.0	W	23+	8	7	13	5.9	54
INDIANA																																
EVANSVILLE	116	1005.8	1020.4	5.6	- 6.1	- 0.2	-3.3	21.1	1	-19.4	25	0	25	- 5.6	68	54	- 27	25	11	1	130	76	1.6	25	17.4	W	15	7	10	11	6.0	52
FORT WAYNE	241	986.8	1018.0	- 1.1	-10.0	- 5.6	-3.6	11.1	15	-25.0	8	0	27	-10.6	69	46	- 11	19	11	1	318	127	2.7	26	27.3	W	15	7	8	13	6.4	46
INDIANAPOLIS	241	988.5	1018.7	3.3	- 7.8	- 2.4	-1.9	17.2	14	-20.0	25	0	27	- 8.9	63	47	- 11	26	8	1	206	51	2.0	26	21.9	W	15	7	8	13	6.3	52
SOUTH BEND	236	988.2	1017.3	- 1.7	-10.6	- 6.1	-3.2	8.9	15+	-22.8	7	0	27	- 9.4	75	57	10	15	14	0	803	508	2.4	25	18.3	26	15	5	5	18	7.4	
IOWA																																
BURLINGTON	211			0.0	-10.6	- 5.1	-2.7	12.2	14	-22.8	25	0	27	-10.6	64	22	- 13		3	0	46		2.1	28	13.0	32	23*	11	6	11	5.9	
DES MOINES	286	983.1	1019.3	0.6	-11.7	- 5.4	-0.7	18.3	14	-21.1	16	0	28	-10.0	71	7	- 21	6	4	0	58	51	2.1	31	19.2	NW	23	8	7	13	6.5	63

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	°C.	°C.		C.				C.	%	Mm.	Mm	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DUBUQUE	322	977.0		- 3.9	-15.0	- 9.6	-4.1	9.4	14	-26.1	25	0	28			33	- 3	11	9		318	127						7	9	12	6.2	
SIOUX CITY	334	977.7	1019.3	1.1	-12.2	- 5.6	-0.1	17.2	13	-23.3	16	0	27	-11.7	66	7	- 15	4	7	0	76	51	1.7	32	20.1	NW	23	4	9	15	7.1	65
WATERLOO	265	985.1	1018.4	- 2.8	-15.0	- 8.8	-2.9	12.8	14	-25.6	25	0	28	-12.2	75	13	- 10	3	9	0	178	51	1.7	30	14.3	32	23	5	11	12	6.6	
KANSAS																																
CONCORDIA	448	964.4	1019.1	7.8	- 7.8	- 0.1	0.1	23.9	14	-16.1	18	0	28	- 8.3	58	5	- 18	4	4	0	18	T	1.4	28	19.2	N	5	16	4	8	3.9	72
DODGE CITY	787	925.5	1018.6	11.1	- 5.6	2.6	0.9	25.0	14	-11.1	6	0	26	- 8.9	50	T	- 18	T	1	0	T	0	1.2	28	18.3	S	25	14	7	7	4.5	66
GOODLAND	1113	888.3	1018.0	9.4	- 8.3	0.6	1.2	22.2	14	-13.3	15+	0	28	-10.0	52	1	- 12	1	1	0	10	T	3.0	28	17.0	36	5	14	8	6	4.2	
TOPEKA	267	987.1	1020.0	7.8	- 6.1	0.8	0.2	22.8	14+	-13.3	6	0	25	- 7.8	57	5	- 21	3	4	0	48	25	1.3	28	21.0	NW	23	10	11	7	5.0	70
WICHITA	403	970.5	1019.8	9.4	- 5.0	2.4	0.0	24.4	14	-12.8	6	0	25	- 7.8	53	2	- 21	2	1	0	T	T	0.9	28	18.8	N	23	11	8	9	4.8	60
KENTUCKY																																
COVINGTON	265	986.1	1019.0	2.8	- 7.8	- 2.5	-3.1	16.1	14	-21.7	25	0	27	- 8.3	67	47	- 27	20	12	2	185	51	2.6	26	17.9	29	15	6	9	13	6.5	
LEXINGTON	294	983.1	1019.7	4.4	- 6.1	- 1.0	-3.1	17.2	14	-19.4	25	0	25	- 6.7	68	58	- 29	18	13	1	282	178	2.5	23	13.9	28	15	7	7	14	6.8	
LOUISVILLE	145	1001.4	1019.7	4.4	- 5.6	- 0.6	-2.7	17.2	15+	-17.8	25	0	25	- 6.7	66	51	- 33	19	11	2	198	127	1.4	26	27.3	NW	15	7	6	15	6.8	51
LOUISIANA																																
ALEXANDRIA	28	1017.3	1021.5	15.0	1.1	8.1	-3.4	25.0	1	- 5.6	25+	0	13	3.3	75	104	- 22	44	7	1	T	0	0.9	3	11.2	2	11	10	3	15	6.0	
BATON ROUGE	20	1018.3	1021.0	16.7	3.9	10.4	-2.6	26.1	1	- 4.4	8	0	8	3.9	68	122	10	46	11	1	0	0	0.8	2	9.8	22	14	8	6	14	6.1	
LAKE CHARLES	3	1020.0	1021.0	18.3	5.6	11.9	-1.6	26.1	11	- 2.2	8	0	4	6.7	74	57	- 57	29	8	1	0	0	0.9	8	11.6	3	6	7	6	15	6.1	
NEW ORLEANS	1	1020.0	1020.7	17.2	5.6	11.4	-2.6	26.1	17	- 1.1	26+	0	6	6.7	73	173	71	142	11	2	0	0	0.8	2	12.1	35	6	11	4	13	5.6	
SHREVEPORT	77	1011.5	1020.8	14.4	1.7	8.1	-2.1	24.4	15	- 5.0	8	0	9	1.1	67	74	- 30	33	8	1	T	0	0.2	2	9.8	35	6	11	3	14	5.6	53
MAINE																																
CARIBOU	190	987.8		- 7.2	-20.6	-14.1	-3.2	3.3	11	-33.9	20	0	28			44	- 7	15	11		660	914						6	4	18	7.1	
PORTLAND	14	1011.2	1013.7	- 1.1	-15.0	- 8.2	-3.1	10.6	15	-30.0	13	0	28	-13.3	64	118	21	41	13	0	1163	813	1.8	29	18.3	W	16	8	8	12	6.1	53
MARYLAND																																
BALTIMORE	45	1011.5	1017.2	5.0	- 6.1	- 0.7	-2.8	21.7	2	-18.3	8	0	26	- 7.8	61	57	- 16	31	11	0	511	279	2.3	28	21.9	W	16	7	10	11	6.0	62
MASSACHUSETTS																																
BLUE HILL OBS R	192			0.0	- 9.4	- 4.7	-2.2	13.3	15	-23.3	13	0	27			122	27	38	15		1148	406			26.4	W	16					52
BOSTON	5	1013.2	1014.3	1.1	- 7.2	- 3.1	-2.2	14.4	15	-19.4	13	0	25	- 9.4	64	103	19	34	15	0	597	229	3.8	29	22.4	W	16	8	5	15	6.2	55
NANTUCKET	13	1013.9	1014.3	2.2	- 5.6	- 1.7	-1.3	10.0	16	-15.0	13	0	27	- 6.1	72	119	24	24	13	0	726	356	2.5	29	21.0	SW	16+	4	9	15	7.0	50
PITTSFIELD	357			- 1.7	-13.9	- 7.6	-2.2	13.3	15	-26.7	13	0	27			85	21	23	13		889	483										
WORCESTER	301	975.6	1014.2	- 1.1	-11.7	- 6.4	-2.4	11.1	15	-24.4	13	0	28	-12.8	63	80	6	24	13	0	902	406	3.7	28	20.6	29	21	8	6	14	6.1	
MICHIGAN																																
ALPENA	210	989.5	1015.9	- 3.9	-17.2	-10.8	-3.4	3.9	14+	-27.8	12+	0	28	-15.6	64	54	13	25	14	0	848	762	1.3	28	13.9	NE	15	8	5	15	6.6	47
DETROIT	189			- 1.1	- 8.9	- 4.9	-2.3	10.0	14	-17.8	12+	0	27	-10.0	71				7	1			2.3	26	15.6	28	16					
DETROIT M WAYNE CO	193	991.2	1016.3	- 0.6	- 8.9	- 4.6	-1.8	11.1	15	-20.0	8	0	27	- 9.4	69	33	- 17	12	10	1	279	203	2.1	27	23.2	SW	16	9	5	14	6.1	50
DETROIT WILLOW RUN	217	987.5	1016.9	- 1.7	-10.0	- 5.8	-3.3	8.3	15	-20.6	8	0	28	-11.7	65	29	- 20	12	11	1	272	203	2.8	26	19.7	26	16	8	5	15	6.3	
FLINT	235	987.1	1016.3	- 2.2	-12.8	- 7.6	-3.6	6.1	14	-30.0	12	0	28	-12.2	68	31	- 14	14	14	1	414	584	2.5	25	13.9	26	16	6	8	14	6.6	
GRAND RAPIDS	239	986.1	1016.3	- 1.7	-11.7	- 6.4	-2.2	8.9	14	-26.7	12	0	28	-10.0	74	29	- 16	9	18	0	445	381	1.7	25	16.1	SW	15	3	9	16	7.3	38
HOUGHTON LAKE	350	971.9	1016.0	- 4.4	-18.3	-11.2		8.3	14	-31.1	12	0	28	-13.9	75	22		9	13	0	363	279	1.4	28	13.0	25	10	5	10	13	6.6	
LANSING	256	983.1	1016.2	- 2.2	-13.3	- 7.9	-3.6	6.7	15+	-31.1	12	0	28	-11.1	75	36	- 14	17	16	0	384	533	2.3	26	25.0	W	16	5	11	12	6.5	58
MARQUETTE U	206			- 6.7	-14.4	-10.5	-3.7	3.3	26	-24.4	12	0	28			34	- 8	10	17		597	838			17.9	S	3	3	6	19	7.7	50
MUSKEGON	191	992.6	1016.6	- 2.2	-10.0	- 6.1	-2.6	5.6	14	-21.1	7	0	28	-10.0	71	38	- 8	8	20	0	681	279	1.6	28	14.3	21	15	3	3	22	8.1	
SAULT STE MARIE	220	988.2	1016.1	- 7.8	-19.4	-13.5	-4.4	0.6	10	-31.7	12+	0	28	-18.3	65	44	6	12	16	0	655	711	0.9	33	14.3	W	4	9	4	15	6.3	56
MINNESOTA																																
DULUTH	435	963.8	1018.4	- 8.9	-22.8	-15.7	-3.9	1.7	4	-33.3	12	0	28	-21.1	62	6	- 18	2	8	0	69	660	1.7	31	21.9	NW	4	6	10	12	6.6	58
INTERNATIONAL FALLS	359	973.6	1019.9	-11.1	-27.2	-19.2	-5.4	2.8	13	-39.4	6	0	28	-25.0	59	18	0	7	8	0	224	533	1.0	31	10.7	36	10	7	8	13	6.0	
MINNEAPOLIS	254	986.8	1019.1	- 6.7	-19.4	-12.9	-3.9	3.9	14+	-30.6	25	0	28	-17.2	67	40	21	22	10	0	602	787	1.4	33	14.3	NW	4	7	9	12	6.2	50
ROCHESTER	395	968.2	1018.5	- 6.1	-17.8	-11.9	-3.2	3.9	14	-27.8	24	0	28	-15.6	75	19	- 1	7	12	0	340	203	1.9	28	17.4	30	10	6	9	13	6.5	
ST CLOUD	315	978.7	1018.9	- 7.8	-21.7	-14.8	-4.4	6.1	13	-32.8	16+	0	28		66	19	- 1	5	9		318	483						7	8	13	6.3	
MISSISSIPPI																																
JACKSON	94	1009.1	1021.2	13.3	0.0	6.8	-3.5	24.4	1	- 8.3	8	0	16	1.7	74	90	- 36	23	9	2	T	T	0.8	35	13.0	SW	15	9	4	15	6.0	51
MERIDIAN	88	1010.2	1021.4	14.4	1.1	7.7	-2.7	23.3	15	- 7.8	8	0	16	0.0	63	93	- 37	31	8	1	T	0	0.7	32	9.4	17	27+	7	7	14	6.3	

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	989.8	1019.3	5.6	- 6.1	- 0.4	-1.4	20.6	14	-17.2	25	0	25	- 7.8	62	18	- 28	8	5	0	43	25	1.7	27	19.2	NW	23+	9	9	10	5.4	74
KANSAS CITY	226	991.9	1019.8	6.7	- 5.0	0.9	-1.2	21.7	13	-12.8	24+	0	23	- 6.7	62	9	- 23	6	3	0	23	51	1.3	26	13.9	NW	23	7	13	8	5.3	63
SAINT JOSEPH	247			6.1	- 7.2	- 0.6	-0.1	21.7	14	-17.2	6	0	26	- 7.8	66	4	- 23	3	2	0	33	T	1.4	27	16.5	32	5	14	6	8	4.9	
ST LOUIS	163	998.6	1019.9	5.6	- 6.1	- 0.4	-1.9	21.7	14	-17.2	25	0	25	- 7.2	64	44	- 8	25	9	1	23	T	2.1	27	20.6	NW	23	8	7	13	5.9	60
SPRINGFIELD	386	973.2	1020.1	7.2	- 6.7	0.3	-2.5	19.4	14	-15.0	25	0	25	- 7.2	61	41	- 13	20	5	1	48	51	1.3	26	14.8	N	23	8	10	10	5.2	65
MONTANA																																
BILLINGS	1087	890.3	1016.9	6.7	- 4.4	1.3	4.8	16.1	28+	-15.6	15+	0	19	- 8.3	52	10	- 5	5	7	0	94	51	4.7	27	22.8	NW	21	2	9	17	7.5	58
GLASGOW	696	932.6		- 3.9	-15.0	- 9.4	0.8	5.0	28+	-26.1	23	0	28			6	- 4	2	11		109	152						5	6	17	7.2	
GREAT FALLS	1116	886.6	1017.4	6.1	- 5.6	0.1	4.6	15.6	28+	-15.6	17+	0	21		55	7	- 12	2	6	0	71	25	5.0	24	21.0	SW	4	3	3	22	8.0	48
HAVRE	787	922.1	1017.2	0.6	-10.6	- 4.9	3.8	11.1	27	-20.6	18	0	27	- 8.3	77	12	1	4	7	0	155	76	1.9	24	16.5	NW	21	4	6	18	7.7	51
HELENA	1167	880.8	1019.3	6.1	- 5.0	0.4	5.3	16.1	28	-12.8	22	0	22	- 6.7	60	16	5	13	7	0	267	203	2.7	27	20.1	W	11	3	5	20	7.9	49
KALISPELL	904	912.3	1019.7	3.9	- 5.6	- 0.9	3.2	12.8	28	-17.8	20	0	25	- 4.4	77	11	- 15	6	9	0	147	102	2.1	18	11.2	15	13	2	5	21	8.3	
MILES CITY	801	921.4	1017.5	3.3	-10.0	- 3.5	3.0	14.4	28	-22.8	24+	0	27	- 8.3	70	22	13		13	0	147		2.6	29								
MISSOULA	972	906.5	1021.0	5.6	- 2.8	1.4	5.3	15.6	28	- 8.9	20	0	24	- 3.9	71	7	- 15	4	6	0	56	25	1.2	29	14.8	SW	18	1	5	22	8.4	41
NEBRASKA																																
GRAND ISLAND	561	950.6	1019.1	6.1	-10.0	- 1.8	1.5	23.3	14	-17.2	18+	0	28	- 9.4	62	2	- 17	1	3	0	25	25	2.2	30	17.9	34	21	10	12	6	5.4	
LINCOLN U	351			5.6	- 8.3	- 1.5	0.3	23.9	14	-17.8	16	0	26			4	- 24	2	5		13	T			16.5	NW	23	10	11	7	4.9	71
NORFOLK	471			2.8	-12.2	- 4.8	0.2	18.3	13	-23.9	16	0	28			2	- 18	1	2		15	25						6	12	10	6.1	
NORTH PLATTE	846	917.4	1018.2	7.8	- 8.9	- 0.7	1.6	21.7	28	-15.6	15	0	28	-10.6	54	1	- 12	1	2	0	20	25	2.3	31	18.8	NW	21	5	17	6	5.3	74
OMAHA	298	982.7	1019.5	5.0	- 8.9	- 2.0	1.1	22.2	14	-18.9	16	0	25	- 9.4	61	4	- 20	2	4	0	20	25	1.5	32	18.3	NW	21	6	11	11	6.2	63
SCOTTSBLUFF	1206	878.8	1018.0	8.3	- 8.3	0.0	1.7	20.6	28	-15.6	15	0	27	- 8.9	55	1	- 9	1	2	0	15	25	5.1	30	19.2	28	18	11	10	7	5.2	
VALENTINE	789			5.0	-11.1	- 3.2	1.8	20.0	28	-25.0	18	0	27			2	- 12	2	3		23	25			18.8	NW	9	7	12	9	6.0	78
NEVADA																																
ELKO	1539	849.0	1024.4	6.1	- 6.7	- 0.3	1.9	15.6	28	-14.4	8+	0	26	- 5.6	72	2	- 21	1	3	0	30	102	0.5	27	7.6	14	24+	10	5	13	5.8	
ELY	1906	811.7	1023.9	6.1	-10.6	- 2.0	1.0	15.0	28	-17.8	15	0	28	- 8.9	64	3	- 15	2	4	0	53	76	1.5	20	15.2	NW	10	8	12	8	5.1	69
LAS VEGAS	659	943.1	1020.7	17.8	2.8	10.3	1.6	23.9	5	- 1.7	21	0	7	- 7.8	30	0	- 11	0	0	0	0	0	1.1	31	20.6	SW	14	15	9	4	3.3	94
RENO	1342	871.0	1023.3	13.3	- 3.9	4.6	2.6	23.3	28	-10.6	21	0	27	- 5.0	58	T	- 26	T	0	0	T	0	0.4	22	18.8	SW	13	8	5	15	6.0	82
WINNEMUCCA	1310	872.7	1023.9	11.1	- 5.0	3.0	2.8	18.9	28	-12.2	21+	0	26	- 6.1	59	2	- 22	1	3	0	10	T	0.4	22	14.3	NW	14	9	9	10	5.7	63
NEW HAMPSHIRE																																
CONCORD	104	1001.4	1014.5	- 1.1	-15.0	- 8.1	-2.9	11.7	15	-30.6	13	0	28	-12.2	72	60	- 3	21	12	0	828	584	2.1	30	16.1	W	16	6	9	13	6.1	60
MT WASHINGTON OBS	1909			-13.3	-23.9	-18.7	-4.0	- 0.6	16	-40.6	12	0	28			185	53	70	19	0	1323	305			55.4Y	W	16	5	5	18	7.8	33
NEW JERSEY																																
ATLANTIC CITY	20	1014.6	1016.9	4.4	- 7.2	- 1.6	-3.1	17.2	2	-21.7	13	0	26	- 6.7	68	82	3	22	15	0	894	432	2.3	29	15.6	29	21+	5	6	17	6.8	42
ATLANTIC CITY U	3			4.4	- 3.9	0.3	-1.8	13.9	16+	-12.2	13	0	22			76	- 10	20	12						21.0	W	16					
NEWARK	2	1015.6	1016.5	2.8	- 5.6	- 1.4	-1.8	15.0	2	-15.6	13	0	25	- 8.3	60	76	5	31	10	1	645	356	2.6	29	14.8	30	25	6	8	14	6.4	
TRENTON U	17			3.3	- 5.0	- 0.9	-1.7	15.6	2	-14.4	13	0	25			62	- 4	28	13		617	356			18.8	SW	16	6	10	12	6.4	51
NEW MEXICO																																
ALBUQUERQUE	1619	839.1	1018.6	12.8	- 3.3	4.7	0.3	21.1	14	- 8.3	21+	0	24	-11.7	35	11	2	11	2	0	25	25	0.6	2	25.0	E	5	15	7	6	4.0	78
CLAYTON	1515			12.2	- 6.7	2.7	0.4	21.7	14	-15.0	8	0	27			1	- 8	1	3		15	T						15	5	8	4.0	
RATON	1944			10.0	- 9.4	0.3	-0.1	18.3	13	-20.6	8	0	27			2	- 9	1	3		30	25						16	3	9	4.0	
ROSWELL	1102	893.0		17.8	- 3.9	6.8	1.2	28.9	14	-12.2	9	0	23	-10.0	35	5	- 6	5	3	0	51	25	0.6	28	20.1	NW	9	11	9	8	4.8	72
SILVER CITY	1638			15.0	- 2.2	6.3	0.0	20.6	14	-12.2	8	0	21			4	- 14	3	2		T	0						14	9	5	3.6	
NEW YORK																																
ALBANY	84	1005.1	1016.3	- 1.7	-13.9	- 7.8	-3.2	11.7	15	-25.6	8	0	27	-13.9	60	45	- 11	15	13	0	414	152	1.8	28	20.1	NW	16	2	12	14	7.3	49
BINGHAMTON	485	953.9	1015.1	- 2.8	-12.2	- 7.5	-2.9	10.0	15	-22.2	13	0	27	-11.7	73	41	- 15	10	18	0	493	178	2.3	26	18.8	W	16	1	7	20	8.4	39
BUFFALO	215	988.8	1015.6	- 2.2	-10.6	- 6.3	-1.9	11.1	15	-21.7	8	0	27	-10.6	72	35	- 34	11	23	1	503	152	3.3	25	27.7	SW	16	1	3	24	8.6	39
NEW YORK U	40	1012.2	1015.4	2.8	- 5.6	- 1.6	-2.3	15.6	15	-15.6	13	0	25	- 7.8	66	68	- 4	27	10	2	599	356	2.0	30	17.4	NW	16					46
J.F. KENNEDY	4	1015.2	1016.1	1.7	- 6.7	- 2.3	-2.1	11.1	16	-17.8	13	0	26	- 7.2	71	63	- 11	18	9	0	505	254	2.5	30	20.6	25	16	7	7	14	6.4	
NEW YORK LA GUARDIA	3	1014.2	1016.2	3.3	- 4.4	- 0.8	-1.7	15.0	15+	-13.3	13+	0	23	- 7.8	61	60	- 19	21	12	1	508	330	2.8	30	20.1	W	16	7	5	16	6.6	
ROCHESTER	167	995.3	1016.4	- 1.1	-11.1	- 5.9	-1.9	10.0	16+	-21.7	13+	0	26	-11.7	63	42	- 22	18	16	0	701	229	2.5	25	25.5	SW	16	0	6	22	8.7	43
SYRACUSE	125	1000.0	1015.7	- 1.1	-13.3	- 7.1	-2.8	9.4	16	-30.0	13	0	26	-12.2	66	38	- 42	10	17	0	533	203	2.6	27	27.7	W	16	1	9	18	8.0	41
NORTH CAROLINA																																
ASHEVILLE	652	940.1	1018.0	7.8	- 4.4	1.7	-2.2	19.4	1	-18.9	25	0	22	- 3.9	72	56	- 46	22	10	0	107	51	1.3	34	15.6	34	24	12	3	13	5.6	66
CAPE HATTERAS R	2	1017.6	1017.9	11.7	2.8	7.2	-0.8	18.9	7+	- 7.2	25	0	6	2.2	72	115	15	56	11	3	0	0	3.0	29	17.4	NE	9	8	6	14	6.4	48
CHARLOTTE	224	990.5	1018.6	10.0	- 1.1	4.4	-2.3	20.6	15+	-13.9	26+	0	18	- 3.3	64	96	6	30	10	0	137	127	1.1	26	13.0	SW	15	11	2	15	5.8	68

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	C.	C.	°C.	C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	986.1	1018.6	9.4	- 2.2	3.4	-1.6	22.8	1	-14.4	25	0	21	- 3.3	66	70	- 14	35	8	0	69	76	1.5	26	14.3	NW	24	11	3	14	5.7	59
RALEIGH	132	1002.4	1018.6	9.4	- 1.7	3.8	-2.3	23.3	1	-13.3	25	0	20	- 3.3	63	97	14	30	11	0	231	229	1.9	28	12.5	32	24	10	4	14	5.9	53
WILMINGTON	9	1018.0	1019.2	15.0	2.2	8.6	-0.7	24.4	17+	- 7.8	25	0	9	0.6	62	105	18	54	11	0	T	0	1.7	29	13.4	W	23	8	6	14	6.3	58
NORTH DAKOTA																																
BISMARCK	502	956.7	1019.7	- 6.1	-19.4	-12.7	-2.4	5.6	13+	-32.2	18	0	28	-16.7	67	17	6	5	12	0	353	229	1.8	33	21.0	NW	22	4	9	15	7.1	64
FARGO	273	985.1	1020.1	- 9.4	-22.2	-15.7	-3.8	5.6	13	-32.2	18+	0	28	-20.0	68	5	- 8	1	10	0	66	203	1.8	35	21.5	N	23	4	6	18	7.3	68
WILLISTON	579			- 5.6	-18.3	-11.9	-1.1	5.0	28	-32.8	15	0	28			38	25	9	12		381	279			17.9	NW	9	7	5	16	6.8	76
OHIO																																
AKRON	368	970.9	1016.9	1.1	- 8.9	- 3.9	-2.1	15.0	15	-19.4	8	0	26	- 8.3	72	63	4	15	16	2	500	229	2.5	25	15.6	22	15	4	6	18	7.6	
CINCINNATI OBS	232			3.3	- 6.7	- 1.7	-3.4	17.2	14	-19.4	25	0	26			44	- 27	21	10		127	76			21.0	SW	15					50
CLEVELAND	237	986.8	1017.1	0.6	- 7.2	- 3.4	-1.4	15.0	15	-21.7	8	0	25	- 8.9	66	60	1	17	17	1	470	178	2.4	24	23.7	W	16+	4	3	21	8.0	43
COLUMBUS	247	987.5	1018.6	1.1	- 7.8	- 3.4	-2.9	15.6	15	-18.9	26+	0	26	- 7.2	74	62	4	19	15	1	396	152	2.1	24	24.1	W	16	3	9	16	7.3	53
DAYTON	305	980.7	1018.3	1.1	- 8.9	- 3.8	-3.2	15.0	14	-20.0	25	0	27	- 8.9	71	35	- 24	17	9	1	221	102	2.7	24	26.8	SW	16	7	8	13	6.3	55
MANSFIELD	395			0.0	- 9.4	- 4.6	-2.2	12.8	15	-19.4	8	0	26	- 9.4	70	34	- 32	12	12	1	325	152	3.0	24				4	7	17	7.5	
TOLEDO	206	991.5	1017.6	- 0.6	- 9.4	- 5.0	-2.4	12.8	15	-25.6	8	0	27	- 9.4	72	54	6	19	18	1	366	178	2.4	26	25.0	SW	16	7	5	16	6.6	48
YOUNGSTOWN	359	972.6	1016.9	- 1.1	-10.0	- 5.6	-3.1	13.3	15	-20.6	8	0	26	-10.0	74	64	1	15	18	2	577	152	2.2	26	19.2	27	15	3	7	18	7.7	
OKLAHOMA																																
OKLAHOMA CITY	392	972.6	1020.0	12.8	- 1.7	5.4	0.2	22.2	14	- 8.3	6	0	22	- 5.0	53	5	- 30	4	4	1	T	T	0.2	15	16.5	NW	6	11	7	10	5.0	76
TULSA	198	995.6	1020.6	11.1	- 3.3	3.8	-0.9	22.2	13	-10.0	25	0	21	- 5.6	58	17	- 28	11	5	1	23	25	0.8	23	15.6	SW	15+	11	9	8	4.9	66
OREGON																																
ASTORIA	2	1022.4	1023.3	10.0	2.2	6.2	0.2	13.3	27	- 1.7	20+	0	10	3.9	85	154	- 97	38	20	0	T	0	1.8	22	13.0	30	17	2	5	21	8.3	
BURNS U	1265	877.4	1023.7	7.8	- 4.4	1.6	2.9	14.4	28+	-10.0	20	0	27	- 3.9	71	11	- 22	6	4		165	102	1.4	30				9	6	13	5.8	
EUGENE	109	1010.5	1024.4	11.7	2.2	7.0	1.1	16.7	27	- 2.2	20	0	5	3.9	84	54	- 72	14	11	0	18	T	1.2	19	9.4	18	15+	2	9	17	7.7	
MEACHAM	1234	879.4	1022.8	3.9	- 3.9	0.1	1.7	9.4	27+	- 9.4	20	0	26	- 5.0	71	59	- 42	23	11		706	483	1.6	24				4	1	23	8.4	
MEDFORD	396	976.6	1025.5	10.6	- 1.1	4.7	0.2	16.1	23	- 3.9	23+	0	22	1.1	82	29	- 32	18	8	0	86	51	0.1	1	8.0	28	24	7	2	19	7.1	
PENDLETON	452	967.5	1022.4	11.1	0.6	5.8	2.8	17.8	28	- 3.9	20	0	15	- 0.6	66	4	- 26	2	4	0	10	T	2.1	24	16.5	26	17	6	2	20	7.2	
PORTLAND	6	1022.7	1024.0	11.7	1.7	6.5	0.9	16.7	27	- 2.8	20	0	11	3.3	83	51	- 56	10	12	0	T	0	1.4	19	15.6	SW	15	1	7	20	8.3	43
SALEM	60	1016.6	1024.2	11.7	0.0	5.9	0.4	16.7	27	- 6.1	20	0	14	2.8	83	52	- 83	12	9	0	T	0	2.0	19	13.0	18	15+	3	8	17	7.6	
SEXTON SUMMIT R	1169	888.3	1023.1	8.3	1.1	4.7	2.4	13.9	12	- 5.6	14	0	12			31	- 74	20	9		323	254			14.3	19	13	10	5	13	5.8	
PACIFIC AREA																																
CANTON ISLAND	2			30.0	25.0	27.6	-0.7	31.1	27+	23.9	22	0	0			2	- 52	1	3		0	0						11	13	4	4.3	
ENIWETOK	4	1009.5	1010.1	30.0	25.0	27.4	0.3	31.1	7+	21.7	23	0	0	22.8	77	38	- 9	17	12		0	0	7.2	6								
TAGUAC GUAM R	110			28.3	21.1	24.8	-0.9	30.0	12	17.8	7	0	0			113	24	23	18		0	0			12.1	E	22					52
JOHNSTON	2	1013.2	1014.0	26.7	23.3	24.9	-0.1	27.8	22+	20.6	15	0	0	20.0	75	65	26	33	11	2	0	0	5.5	9	13.4	SE	28	14	9	5	4.5	73
KOROR R	29	1005.1	1008.7	30.6	24.4	27.4	0.6	31.1	28+	22.8	13	0	0	23.9	83	95	- 86	24	16	2	0	0	2.7	9	8.5	NE	21+	0	0	28	10.0	58
KWAJALEIN	2	1008.8	1009.6	30.0	25.0	27.5	0.8	30.6	28+	23.3	26+	0	0	22.8	77	112	58	36	13	0	0	0	8.0	6	13.9	11	26+	7	10	11	6.1	
MAJURO	3	1008.8	1009.3	29.4	25.0	27.1	0.2	30.0	28+	22.8	5	0	0	23.3	78	247	30	90	20	0	0	0	5.5	7	11.6	NE	17	5	11	12	6.8	52
MARCUS ISLAND	6	1015.2	1017.1	23.9	18.3	21.2	-0.6	26.7	28+	16.1	21+	0	0	15.0	69	59	- 10	23	8	0	0	0	2.3	4	13.0	N	20	5	14	9	5.9	61
PAGO PAGO	4	1009.8	1010.0	30.6	22.8	26.7		32.2	22	21.1	8+	1	0	23.3	84	218		46	21	6	0	0	1.7	8	13.4	E	17	1	7	20	8.5	60
PONAPE R	37	1003.1	1008.6	30.0	23.9	27.0	0.1	32.2	1	21.1	23+	1	0	22.8	80	478	231	102	22	0	0	0	3.7	8	11.6	NE	18	0	6	22	8.7	54
TRUK MOEN ISLAND	2	1008.5	1008.7	30.0	25.0	27.4	0.3	30.6	28+	22.8	19+	0	0	23.3	78	162	2	82	19	0	0	0	5.1	6	10.7	NE	24+	1	1	26	9.2	83
WAKE	3	1013.9	1014.3	27.2	22.2	24.6	-0.4	28.3	13+	19.4	8	0	0	18.9	73	48	14	22	16	0	0	0	5.1	7	14.8	3	23	5	16	7	5.9	
YAP R	19	1007.1	1008.9	30.0	23.9	26.8	-0.1	31.1	12	21.1	27	0	0	23.9	82	159	41	82	18	1	0	0	3.9	6	9.8	NE	20+	0	0	28	9.9	71
PENNSYLVANIA																																
ALLENTOWN	118	1002.4	1016.8	1.1	- 9.4	- 4.3	-2.7	11.1	15	-21.7	9	0	28	-10.0	65	50	- 17	24	13	0	500	305	2.2	29	17.4	26	16	4	9	15	6.6	
ERIE	223	988.8	1016.6	0.0	- 8.9	- 4.3	-1.2	12.2	15	-18.3	8	0	26	- 9.4	68	42	- 17	16	18	2	343	76	2.6	24	17.9	27	16	2	7	19	8.1	
HARRISBURG	103	1004.1	1017.2	2.2	- 7.8	- 2.8	-3.2	15.0	16+	-18.9	9+	0	27	-10.6	58	39	- 20	18	12	0	419	254	2.0	30	17.4	NW	25	5	8	15	6.7	66
PHILADELPHIA	2	1015.9	1017.1	2.8	- 6.1	- 1.7	-2.3	15.6	2	-15.6	13+	0	27	- 8.3	62	46	- 25	15	12	0	467	279	1.9	30	17.9	W	16	5	7	16	6.9	54
PITTSBURGH	347	971.6	1017.1	1.7	- 8.3	- 3.6	-2.0	15.6	16+	-21.1	8	0	25	- 8.3	71	65	9	14	16	1	551	203	2.9	25	25.9	26	16	3	6	19	8.0	29
READING U	81			2.8	- 6.7	- 1.8	-2.6	15.6	15	-15.6	9	0	27			42	- 25	21	14		447	330			25.0	W	16	5	12	11	6.1	54
SCRANTON	283	981.0	1016.5	0.0	- 9.4	- 4.7	-2.7	13.3	15	-21.1	8	0	27	- 9.4	70	23	- 28	7	11	0	366	178	1.7	26	18.3	SW	16	3	8	17	7.5	52
WILLIAMSPORT	160	997.0	1016.8	0.0	- 9.4	- 4.7	-3.2	13.9	15	-22.8	8	0	28	- 8.9	72	38	- 26	9	13	0	447	178	1.4	27	17.9	26	16	3	10	15	7.2	
RHODE ISLAND																																
BLOCK ISLAND	34			1.7	- 5.6	- 1.8	-1.2	10.0	16	-16.7	13	0	26			55	- 28	15	10		396	203						6	11	11	6.3	
PROVIDENCE	16	1012.5	1015.0	1.7	- 8.3	- 3.5	-2.2	13.3	15	-20.6	13	0	27	- 9.4	63	64	- 15	17	15	0	587	229	2.9	29	20.6	22	16	9	6	13	6.0	49

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	°C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1017.6	1019.4	15.6	2.8	9.2	-1.7	25.0	16	-10.0	26	0	6	1.1	63	79	- 4	29	10	0	T	0	1.2	27	19.2Y	W	23	7	5	16	6.8	48
CHARLESTON U	3			13.9	5.6	9.7	-1.6	22.2	2	- 5.6	26+	0	2			71	- 7	23	11		0	0			13.9	W	24					
COLUMBIA	73	1011.2	1019.6	12.2	0.0	6.1	-3.0	23.3	1	-12.8	26	0	14	0.0	68	111	16	51	10	0	86	76	1.2	28	10.3	27	24	8	5	15	6.3	65
GNVLE SPARTANBURG	292	984.1	1019.4	10.0	0.0	5.0	-2.3	21.1	1	-13.3	25	0	14	- 2.8	62	84	- 19	28	11	0	38	25	1.2	27	13.4	NW	25	9	3	16	6.2	48
SOUTH DAKOTA																																
ABERDEEN	395	970.2	1019.6	- 4.4	-18.3	-11.3	-1.8	8.3	13	-30.0	2	0	28	-16.1	66	11	- 6	4	9	0	224	76	1.4	36	23.2	6	5	4	5	19	7.3	
HURON	391	970.2	1019.3	- 2.2	-16.7	- 9.6	-1.0	14.4	13	-31.7	18	0	28	-13.9	70	20	4	5	12	0	445	279	1.5	31	23.7	NW	23	4	5	19	7.3	71
RAPID CITY	964	902.8	1017.5	4.4	- 9.4	- 2.5	1.9	18.3	28	-21.1	18	0	25	- 8.9	67	15	3	6	10	0	188	76	3.2	32	23.2	NW	21	10	8	10	5.6	67
SIOUX FALLS	432	964.8	1018.9	- 2.2	-16.7	- 9.3	-2.1	12.2	13	-27.8	16	0	28	-13.9	68	11	- 12	3	11	0	300	127	1.5	32	15.6	34	23	4	7	17	7.1	
TENNESSEE																																
BRISTOL	459	963.4	1019.3	6.7	- 4.4	0.9	-3.5	19.4	1	-18.3	25	0	21	- 4.4	70	105	15	37	11	0	122	76	2.0	27	13.4	30	16	6	6	16	6.9	
CHATTANOOGA	203	994.9	1020.3	8.9	- 1.7	3.4	-3.4	21.1	1	-14.4	25	0	19	- 1.7	72	104	- 32	34	9	0	46	51	0.8	31	13.4	NW	24+	8	5	15	6.4	47
KNOXVILLE	299	983.4	1019.4	8.3	- 1.1	3.4	-2.8	21.1	1	-15.0	25	0	17	- 2.8	69	116	- 6	38	10	0	145	76	2.0	28	16.5	W	16	6	8	14	6.6	45
MEMPHIS	79	1011.2	1021.6	9.4	- 1.7	4.0	-2.7	22.2	1	-10.0	25	0	18	- 3.9	61	59	- 60	23	7	1	T	T	1.1	29	16.1	S	15	10	3	15	5.8	55
NASHVILLE	180	998.0	1020.4	8.9	- 2.8	3.1	-2.5	22.2	1	-15.0	25	0	21	- 4.4	61	45	- 69	18	9	1	T	T	1.3	26	16.1	SW	15	7	8	13	6.4	54
OAK RIDGE R	276			7.8	- 2.8	2.4	-2.7	20.6	1	-16.1	25	0	19			96	- 52	30	8		208	152			21.0Y		23	7	5	16	6.8	
TEXAS																																
ABILENE	537	956.7	1019.2	16.1	0.6	8.1	-1.0	26.7	1	- 6.1	24	0	16	- 2.8	49	6	- 22	5	2	0	T	0	0.9	18	17.9	NE	11	8	6	14	5.9	71
AMARILLO	1098	891.6	1017.0	13.3	- 3.9	4.8	-0.4	26.1	14	-10.6	24	0	25	- 8.3	44	4	- 12	2	3	0	28	T	1.7	28	18.3	NE	22	17	5	6	3.5	82
AUSTIN	182	998.0	1020.4	17.2	4.4	10.8	-1.3	25.0	1	- 5.6	7	0	6	0.6	55	39	- 27	21	5	1	51	51	0.7	2	19.2	N	6	8	9	11	5.8	57
BROWNSVILLE	6	1018.6	1019.1	21.7	10.6	16.1	-1.7	29.4	11	0.6	9+	0	0	11.1	77	27	- 11	22	6	0	0	0	1.3	11	20.1	N	6	9	5	14	6.1	52
CORPUS CHRISTI	12	1018.3	1019.8	20.0	8.3	14.1	-1.7	28.3	11	0.0	9	0	1	8.3	73	60	17	52	5	1	0	0	2.0	10	23.2	N	6	7	4	17	6.8	43
DALLAS	147	1002.7	1020.5	15.6	2.2	8.9	-0.8	26.1	15	- 4.4	7	0	8	- 1.1	55	19	- 46	11	4	0	0	0	0.7	15	15.6	NE	11	11	4	13	5.4	60
DEL RIO	313	983.1	1019.7	19.4	5.6	12.3	-1.1	26.7	10	- 4.4	7	0	6	- 1.1	46	7	- 15	5	3	1	15	T	1.3	10	12.5	2	6	6	8	14	6.3	
EL PASO	1194	883.8	1017.3	17.2	0.6	8.9	-0.6	25.6	14	- 8.3	9	0	15	- 8.9	31	1	- 9	1	2	0	T	0	0.8	27	20.1	W	10	13	6	9	4.5	87
FORT WORTH	164	999.7	1020.5	15.6	1.1	8.2	-1.3	25.6	5	- 6.7	7	0	13	- 1.7	53	8	- 49	5	5	0	T	T	0.4	16	13.4	34	1	11	4	13	5.5	
GALVESTON U	2			16.1	8.9	12.6	-1.2	21.1	15	1.1	8+	0	0			57	- 16	43	6		0	0										
HOUSTON U	12			18.3	7.8	13.0	-0.9	24.4	15+	- 0.6	7	0	2			44	- 37	28	5		0	0			14.8	N	6					58
HOUSTON	15	1018.3	1020.3	19.4	5.6	12.5	-0.7	26.7	1	- 2.2	7	0	4	5.0	66	55	- 32	47	7	1	0	0	0.3	11	14.3	2	6	8	5	15	6.3	54
LUBBOCK	992	904.8	1018.2	14.4	- 3.9	5.3	-0.9	26.1	14	-11.1	24	0	25	- 9.4	39	14	- 43	7	5	0	7	1	2.9	19	3.3	25	9	11	9	8	4.6	
MIDLAND	869	918.1	1017.9	16.7	- 0.6	8.0	-1.1	27.2	14	- 6.1	9+	0	18	- 6.7	42	1	- 14	1	2	1	T	T	0.4	23	16.1	4	5+	9	10	9	5.4	
PORT ARTHUR	5	1020.0	1020.8	18.3	5.6	11.9	-1.4	25.0	16	- 2.8	8+	0	4	6.7	74	52	- 61	43	7	1	T	0	0.7	7	21.9	NE	6	7	6	15	6.3	55
SAN ANGELO	580	951.2	1019.0	17.2	1.1	9.2	-1.1	27.8	1	- 7.2	7	0	15	- 3.9	43	4	- 19	3	3	0	T	T	1.1	22	17.0	4	6	8	9	11	5.6	
SAN ANTONIO	240	991.9	1020.3	17.8	3.9	11.0	-2.0	25.0	10	- 5.0	7	0	9	0.6	54	12	- 30	9	3	0	T	T	0.9	3	15.6	NW	11	10	4	14	6.0	58
VICTORIA	32	1016.3	1020.4	19.4	6.7	13.1	-1.4	26.7	11	- 2.8	7	0	3	5.6	65	36	- 24	22	5	1	0	0	0.8	7	22.8Y	NNW	6	8	5	15	6.3	
WACO	153	1002.4	1020.8	16.1	2.2	9.3	-1.6	24.4	15	- 6.7	7	0	11	- 0.6	54	20	- 42	12	5	0	T	0	0.4	19	15.6	35	6+	9	7	12	5.5	
WICHITA FALLS	303	982.4	1019.9	16.1	- 1.1	7.5	-0.7	26.7	14	- 7.8	24	0	20	- 4.4	49	5	- 30	4	2	0	T	0	0.7	11	19.7	2	5	10	7	11	5.2	
UTAH																																
MILFORD	1533	850.0		8.3	- 6.7	0.9	2.2	18.9	28	-14.4	15	0	27			5	- 13	4	2		43	51						15	6	7	4.4	
SALT LAKE CITY	1286	875.7	1022.9	8.9	- 2.8	3.1	2.8	17.2	24	- 7.8	20	0	23	- 5.0	62	17	- 13	9	4	0	114	51	1.4	14	15.6	NW	10	6	10	12	6.3	65
WENDOVER	1291			8.9	- 2.8	2.9	2.5	16.1	13	- 8.3	21	0	24			T	- 7	T	1		T	T										
VERMONT																																
BURLINGTON	101	1001.7	1014.9	- 5.0	-17.2	-11.3	-3.2	5.6	16	-31.7	13	0	28	-16.7	62	20	- 26	7	10	0	320	203	0.9	25	17.0	NW	16+	2	6	20	8.0	50
VIRGINIA																																
LYNCHBURG	279	983.1		6.7	- 4.4	1.3	-2.6	20.6	1	-14.4	25	0	23	- 6.7	60	54	- 13	20	7	0	373	152	1.8	26	13.9	SW	2	10	9	9	5.3	59
NORFOLK	7	1016.6	1017.8	8.9	0.0	4.4	-0.9	21.1	16+	- 8.9	25	0	16	- 2.2	67	90	9	36	10	0	130	127	1.7	29	15.6	W	16	8	8	12	6.0	75
RICHMOND	50	1012.2	1018.2	7.8	- 4.4	1.6	-2.8	22.2	2	-13.9	8	0	24	- 5.0	66	85	11	32	9	0	434	203	1.4	27	13.4	NW	16+	6	9	13	6.1	65
ROANOKE	350	974.6	1017.6	7.2	- 3.9	1.6	-2.4	20.6	1	-15.6	25	0	23	- 6.7	57	64	- 9	27	10	0	396	178	2.1	28	14.3	30	28	7	12	9	5.5	
WALLOPS ISLAND	3	1018.0	1018.2	5.6	- 2.8	1.4		17.8	16	- 8.9	25+	0	23	- 3.9	72	92		29	14	0	328	152	2.4	30	23.7Y	WNW	25	5	11	12	6.3	
WASHINGTON																																
OLYMPIA	59	1015.2	1022.6	9.4	0.6	5.2	0.2	14.4	27	- 3.3	20	0	15	2.2	83	91	- 77	31	16	0	T	0	2.9	21	11.6	19	12	1	6	21	8.4	
QUILLAYUTE	55	1013.9	1021.6	8.9	2.2	5.7	1.1	13.3	7	- 3.3	20	0	8	4.4	92	427	115	85	22	0	T	T	1.2	20	10.7	NW	17+	2	4	22	8.6	27
SEATTLE TACOMA	122	1005.4	1022.2	9.4	2.8	6.0	1.1	13.3	27	- 1.1	20+	0	3	2.8	80	69	- 39	24	14	0	T	0	2.5	20	13.4	24	17	2	3	23	8.6	44
SPOKANE	718	934.0	1019.8	6.7	- 1.7	2.3	3.4	13.3	27	- 7.2	19	0	21	- 2.2	75	10	- 37	3	6	1	79	25	2.9	21	17.0	SW	28	4	10	14	6.7	52
STAMPEDE PASS R	1206	881.1		1.7	- 3.3	- 0.9	2.1	4.4	27+	- 6.1	20+	0	27			394	136	79	19		2591	3353						3	2	23	8.7	
WALLA WALLA U	289			11.7	2.8	7.3	3.7	15.6	28+	- 1.7	19	0	5			9	- 29	4	5		15	T			13.4	W	13	6	2	20	7.4	39

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	°C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	982.1	1021.5	12.8	- 2.2	5.2	4.1	16.7	28+	- 7.2	20	0	25	- 2.8	61	T	- 22	T	0	0	0	0	2.2	27	21.5	28	17	8	8	12	5.9	
WEST INDIES																																
SAN JUAN P.R.	4	1015.2	1017.7	27.8	21.1	24.6	1.1	31.1	24	17.8	6	0	0	19.4	76	74	1	39	12	0	0	0	3.6	9	13.9	NE	27	3	22	3	5.3	76
SWAN ISLAND	9			28.3	23.3	25.8	0.0	29.4	24	21.1	13	0	0			45	15	18	6		0	0						15	9	4	4.1	
WEST VIRGINIA																																
BECKLEY	763	926.5	1018.7	3.3	- 7.2	- 1.9		16.7	15	-20.6	25	0	24	- 6.7	71	72		18	16	0	676	152	2.8	25	14.3	21	16	5	7	16	6.9	
CHARLESTON	286	983.4	1018.4	5.6	- 6.1	- 0.2	-3.3	19.4	16+	-17.8	8	0	24	- 6.1	70	75	- 15	14	15	1	523	178	2.5	24	16.5	22	16	4	9	15	7.3	
ELKINS	600	944.1	1017.4	4.4	- 9.4	- 2.4	-3.0	17.8	2	-20.0	25	0	26	- 7.2	71	77	- 6	22	15	0	714	178	2.7	28	15.6	25	24+	4	7	17	7.5	
HUNTINGTON	252	987.8	1019.0	5.6	- 5.6	0.0	-3.2	19.4	15	-18.3	25	0	24	- 6.1	67	64	- 13	18	14	1	297	127	1.9	24	18.3	26	23	4	8	16	7.4	
PARKERSBURG U	187			4.4	- 6.1	- 0.8	-2.8	17.8	16+	-17.8	25+	0	25			50	- 22	18	12		267	102			20.1	W	16					50
WISCONSIN																																
GREEN BAY	208	990.5	1017.3	- 5.0	-16.1	-10.4	-2.7	6.1	14	-27.8	12	0	28	-13.9	73	21	- 6	6	9	0	251	229	1.8	30	18.8	N	15	9	2	17	6.7	51
LA CROSSE	198	992.6	1018.6	- 3.9	-17.8	-10.9	-3.9	8.3	14	-31.1	7	0	28	-16.7	61	28	2	9	10	0	386	229	1.0	28	11.6	28	10	6	9	13	6.5	
MADISON	262	984.8	1017.7	- 3.9	-15.6	- 9.6	-2.7	9.4	14	-26.1	25+	0	28	-14.4	64	30	1	9	9	0	353	178	1.7	29	13.0	N	23+	8	8	12	6.0	58
MILWAUKEE	205	990.9	1017.4	- 3.3	-12.8	- 8.1	-2.7	7.2	14	-22.2	25	0	28	-10.6	76	33	- 2	13	12	0	688	330	2.3	28	16.5	N	5	7	6	15	6.3	56
WYOMING																																
CASPER	1627	836.1	1018.5	3.3	- 8.3	- 2.4	0.8	12.8	28+	-18.9	22	0	27	- 9.4	60	17	2	6	9	0	269	102	5.3	23	16.5	22	8	9	10	9	5.7	
CHEYENNE	1867	809.7	1017.4	5.6	- 6.7	- 0.5	2.1	16.1	28	-13.3	15	0	26	-11.1	47	14	- 1	5	12	0	203	102	6.5	30	28.2	NW	21	11	10	7	5.1	71
LANDER	1696	828.0	1019.0	4.4	- 9.4	- 2.3	2.1	15.0	4	-17.2	16	0	28	- 9.4	63	30	12	16	9	0	544	254	1.1	23	21.0	SW	13	5	10	13	6.2	79
SHERIDAN	1208	877.4	1018.2	5.0	- 7.8	- 1.4	3.2	18.3	28	-20.0	15	0	26	- 9.4	57	33	14	11	10	0	518	178	3.0	29	21.5	NW	18	5	4	19	7.2	57

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

FEBRUARY 1967

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	645	2460	2071
HUNTSVILLE	692	2635	2479
MOBILE	363	1312	1307
MONTGOMERY	474	1853	1885
ALASKA			
ANCHORAGE	1411	8394	7725
ANNETTE	716	4509	4767
BARROW	2280	13056	13360
BARTER ISLAND	2405	12795	13165
BETHEL	1546	9098	9160
COLD BAY	1017	6881	6425
FAIRBANKS	2014	11117	10695
JUNEAU	963	6558	6210
KING SALMON	1396	8770	7885
KOTZEBUE	1894	10384	10778
MC GRATH	1838	10876	10497
NOME	1643	9500	9584
ST. PAUL ISLAND	1033	6901	7174
SHEMYA	985	6236	6258
YAKUTAT	1132	7296	6143
ARIZONA			
FLAGSTAFF	824	4568	4973
PHOENIX	256	1237	1473
TUCSON	256	1204	1477
WINSLOW	711	3569	3794
YUMA	126	756	1058
ARKANSAS			
FORT SMITH	695	2740	2670
LITTLE ROCK	682	2588	2650
TEXARKANA	553	2099	2078
CALIFORNIA			
BAKERSFIELD	422	1815	1731
BISHOP	592	2923	3203
BLUE CANYON	598	3294	3542
EUREKA U	482	2959	3043
FRESNO	444	1933	1967
LONG BEACH	205	920	1168
LOS ANGELES	150	731	1183
LOS ANGELES U	81	493	938
MT SHASTA R	695	3773	3953
OAKLAND	349	1710	1992
RED BLUFF	387	1738	1959
SACRAMENTO	461	1993	2089
SANDBERG U	510	2636	2842
SAN DIEGO	197	852	994
SAN FRANCISCO	376	2078	2033
SAN FRANCISCO U	325	1931	1964
SANTA CATALINA	126	895	1180
SANTA MARIA	361	1868	1924
STOCKTON	466	1922	2106
COLORADO			
ALAMOSA	1172	5898	6205
COLORADO SPRINGS	889	4330	4545
DENVER	832	3964	4484
GRAND JUNCTION	795	4057	4358
PUEBLO	803	3947	4072
CONNECTICUT			
BRIDGEPORT	1047	3880	4019
HARTFORD	1126	4188	4577
NEW HAVEN	1046	4012	4193
DELAWARE			
WILMINGTON	991	3785	3690
DIST.OF COLUMBIA			
WASH NATL AP	859	3186	3236
FLORIDA			
APALACHICOLA U	320	1133	1095
DAYTONA BEACH	192	668	724
FORT MYERS	90	309	380
JACKSONVILLE	293	1113	1044
KEY WEST	13	25	99
LAKELAND U	155	521	562
MIAMI	41	137	195
ORLANDO	157	517	655
PENSACOLA	381	1404	1244
TALLAHASSEE	362	1334	1247
TAMPA	175	594	581
WEST PALM BEACH	70	247	222
GEORGIA			
ATHENS	634	2396	2335
ATLANTA	642	2511	2353
AUGUSTA	573	2163	1957
COLUMBUS	496	1830	1949
MACON	509	1951	1778
ROME	704	2770	2647
SAVANNAH	428	1630	1520
IDAHO			
BOISE	742	3889	4323
IDAHO FALLS 46W R	1122	5828	6156
LEWISTON	656	3291	4093
POCATELLO	898	4830	5113
ILLINOIS			
CAIRO U	833	3133	3040
CHICAGO O HARE	1257	4804	4834
CHICAGO MIDWAY	1198	4530	4526
MOLINE	1289	4831	4812
PEORIA	1205	4660	4534
ROCKFORD	1341	5142	5057
SPRINGFIELD	1074	4341	4152
INDIANA			
EVANSVILLE	928	3667	3510
FORT WAYNE	1201	4925	4616
INDIANAPOLIS	1040	4142	4242
SOUTH BEND	1220	4641	4682
IOWA			
BURLINGTON	1171	4618	4619
DES MOINES	1192	5020	5102
DUBUQUE	1405	5458	5466
SIOUX CITY	1196	5325	5226
WATERLOO	1365	5547	5483
KANSAS			
CONCORDIA	923	4249	4159
DODGE CITY	789	3820	3780
GOODLAND	889	4263	4472
TOPEKA	875	3962	3994
WICHITA	798	3518	3612
KENTUCKY			
COVINGTON	1043	4022	3946
LEXINGTON	967	3701	3568
LOUISVILLE	949	3628	3549
LOUISIANA			
ALEXANDRIA	507	1919	1592
BATON ROUGE	393	1407	1319
LAKE CHARLES	322	1219	1225
NEW ORLEANS	353	1302	1154
SHREVEPORT	511	1914	1799
MAINE			
CARIBOU	1629	6695	6950
PORTLAND	1330	5336	5311
MARYLAND			
BALTIMORE	955	3682	3558
MASSACHUSETTS			
BLUE HILL OBS R	1160	4387	4517
BOSTON	1075	3892	4031
NANTUCKET	1003	3991	3861
PITTSFIELD	1300	5323	5424
WORCESTER	1242	4859	4977
MICHIGAN			
ALPENA	1465	5987	5909
DETROIT	1169	4541	4512
DETROIT W WAYNE CO	1148	4628	4530
DETROIT WILLOW RUN	1212	5030	4544
FLINT	1302	5334	4932
GRAND RAPIDS	1242	4728	5024
HOUGHTON LAKE	1484	5981	
LANSING	1318	5184	4977
MARQUETTE U	1448	5944	5790
MUSKEGON	1230	4822	4719
SAULT STE MARIE	1600	6580	6283
MINNESOTA			
DULUTH	1714	7307	7117
INTERNATIONAL FALLS	1893	8156	7747
MINNEAPOLIS	1572	6377	6226
ROCHESTER	1521	6245	6121
ST CLOUD	1668	6869	6561
MISSISSIPPI			
JACKSON	574	2150	1817
MERIDIAN	530	2004	1898
MISSOURI			
COLUMBIA	937	3733	3873
KANSAS CITY	874	3473	3626
ST JOSEPH	950	4057	4219
ST LOUIS	940	3751	3748
SPRINGFIELD	902	3648	3490
MONTANA			
BILLINGS	852	4518	5122
GLASGOW	1396	6474	6676
GREAT FALLS	914	5052	5475
HAVRE	1164	6171	6362
HELENA	898	4851	5860
KALISPELL	964	5357	5919
MILES CITY	1194	5572	5712
MISSOULA	848	4719	5924
NEBRASKA			
GRAND ISLAND	1009	4733	4904
LINCOLN U	993	4515	4427
NORFOLK	1160	5277	5217
NORTH PLATTE	950	4915	4930
OMAHA	1120	4583	4748
SCOTTSBLUFF	917	4569	4840
VALENTINE	1081	5173	5429
NEVADA			
ELKO	932	5100	5300
ELY	1219	4995	5403
LAS VEGAS	397	1914	2257
RENO	685	3957	4547
WINNEMUCCA	767	4262	4835
NEW HAMPSHIRE			
CONCORD	1323	5232	5342
MT WASHINGTON OBS	1862	9342	9372
NEW JERSEY			
ATLANTIC CITY	996	3656	3503
ATLANTIC CITY U	903	3311	3331
NEWARK	991	3560	3760
TRENTON U	966	3556	3695
NEW MEXICO			
ALBUQUERQUE	682	3407	3384
CLAYTON	784	3653	3778
RATON	903	4321	4487
ROSWELL	577	2788	3080
SILVER CITY	597	2832	2839
NEW YORK			
ALBANY	1312	5043	5035
BINGHAMTON	1297	5127	5184
BUFFALO	1239	4869	4971
NEW YORK U	999	3557	3576
J.F. KENNEDY	1033	3688	3745
NEW YORK LA GUARDIA	960	3413	3517
ROCHESTER	1216	4618	4810
SYRACUSE	1275	4762	4889
NORTH CAROLINA			
ASHEVILLE	834	3569	3401
CAPE HATTERAS R	551	1991	1970
CHARLOTTE	695	2753	2532
GREENSBORO	742	2858	2972
RALEIGH	723	2707	2692
WILMINGTON	485	1790	1894
NORTH DAKOTA			
BISMARCK	1562	6952	6557
FARGO	1716	7292	6843
WILLISTON	1525	6803	6802
OHIO			
AKRON	1116	4462	4436
CINCINNATI OBS	1002	3877	3642
CLEVELAND	1087	4440	4555
COLUMBUS	1093	4244	4227
DAYTON	1112	4240	4187
MANSFIELD	1148	4735	4631
TOLEDO	1170	4768	4725
YOUNGSTOWN	1200	4880	4648
OKLAHOMA			
OKLAHOMA CITY	647	2707	2975
TULSA	724	2950	3061
OREGON			
ASTORIA	603	3239	3476
BURNS U	836	4595	4988
EUGENE	566	2788	3297
MEACHAM	915	5143	5299
MEDFORD	678	3221	3614
PENDLETON	621	3048	3846
PORTLAND	591	2856	3303
SALEM	620	2946	3309
SEXTON SUMMIT R	684	4038	4083
PENNSYLVANIA			
ALLENTOWN	1134	4481	4299
ERIE	1137	4366	4545
HARRISBURG	1061	4024	3953
PHILADELPHIA	1001	3785	3840
PITTSBURGH	1097	4397	4399
PITTSBURGH U	1013	3989	3975
READING U	1006	3724	3733
SCRANTON	1154	4479	4635
WILLIAMSPORT	1157	4706	4409
RHODE ISLAND			
BLOCK ISLAND	1012	3788	3872
PROVIDENCE	1093	4181	4265
SOUTH CAROLINA			
CHARLESTON	460	1731	1688
CHARLESTON U	427	1523	1479
COLUMBIA	605	2233	2046
GNVLE-SPARTANBURG	663	2583	2435
SOUTH DAKOTA			
ABERDEEN	1491	6457	6341
HURON	1404	6057	6123
RAPID CITY	1042	5015	5227
SIOUX FALLS	1385	6006	5836
TENNESSEE			
BRISTOL	868	3391	3216
CHATTANOOGA	743	2954	2626
KNOXVILLE	748	2937	2760
MEMPHIS	715	2734	2607
NASHVILLE	763	2914	2837
OAK RIDGE R	797	3185	2981
TEXAS			
ABILENE	508	1990	2163
AMARILLO	675	3016	3131
AUSTIN	380	1419	1437
BROWNSVILLE	151	626	526
CORPUS CHRISTI	222	866	805
DALLAS	470	1830	1948
DEL RIO	299	1269	1339
EL PASO	469	2317	2276
FORT WORTH	503	1905	1987
GALVESTON U	287	1020	1016
HOUSTON U	270	1057	1074
HOUSTON	298	1125	1168
LUBBOCK	652	2691	2862
MIDLAND	516	2241	2179
PORT ARTHUR	325	1286	1216
SAN ANGELO	459	1960	1901
SAN ANTONIO	366	1480	1312
VICTORIA	267	1044	1000
WACO	450	1696	1694
WICHITA FALLS	538	2222	2328
UTAH			
MILFORD	872	4691	4790
SALT LAKE CITY	763	4131	4513
WENDOVER	769	4257	4413
VERMONT			
BURLINGTON	1490	5643	5925
VIRGINIA			
LYNCHBURG	855	3287	3216
NORFOLK	699	2662	2635
RICHMOND	841	3218	3047
ROANOKE	838	3310	3210
WALLOPS ISLAND	843	3309	
WASHINGTON			
OLYMPIA	653	3596	3657
QUILLAYUTE	628	3677	3847
SEATTLE TACOMA	614	3221	3560
SPOKANE	799	4251	4867
STAMPEDE PASS R	961	5798	6206
WALLA WALLA U	551	2786	3652
YAKIMA	659	3445	4504
WEST VIRGINIA			
BECKLEY	1012	4208	
CHARLESTON	932	3524	3423
ELKINS	1039	4490	4194
HUNTINGTON	919	3565	3405
PARKERSBURG U	957	3766	3603
WISCONSIN			
GREEN BAY	1444	5992	5800
LA CROSSE	1472	5703	5665
MADISON	1407	5716	5720
MILWAUKEE	1325	5366	5432
WYOMING			
CASPER	1037	5082	5223
CHEYENNE	945	4554	5112
LANDER	1036	5262	5665
SHERIDAN	988	5284	5471

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS
Alabama *																													
Alaska *																													
Arizona *																													
Arkansas	1	1	0	0	0					0	0	4	0																
California *																													
Colorado										0	0	4																	
Connecticut										0	[illegible]	5	0					0	0	5	0	0	0	4	0				
Delaware										0	0	4	0																
Florida	1	1	0	2	0					0	0	5	0																
Georgia *																													
Hawaii *																													
Idaho												4								3						2	6		
Illinois *																													
Indiana	1	1	0	0	3	0	0	3	0	0	0	4	0					0	0	4	0								
Iowa *																													
Kansas										0	0	0	5																
Kentucky	2	1	0	0	4			?			?	5																	
Louisiana																										3	0	5	0
Maine										0	0	4	0					0	0	5	0								
Maryland										0	0	5	0																
Massachusetts										0	18	6	0					0	0	5	0								
Michigan										0	0	5	0																
Minnesota																		0	?	5	0								
Mississippi	1	1	0	0	4																								
Missouri *																													
Montana										0	2	3	0																
Nebraska *																													
Nevada *																													
New Hampshire										0	2	5	0					0	0	4	0								
New Jersey																				5									
New Mexico *																													
New York										5	16	6																	
North Carolina																		0	0	4	0	0	0	5	0	0	0	W4	0
North Dakota																		2	0	4	0								
Ohio										1	24	7																	
Oklahoma																		0	0	?	0								
Oregon *																													
Pacific Area *																													
Pennsylvania										1	21	7	0																
Puerto Rico *																													
Rhode Island										0	4	4	0					0	0	5	0								
South Carolina																										3	0	0	?
South Dakota																		1	0	0	0								
Tennessee																										?1	1	?	
Texas	2	2	0	0	6					0	2	6	0																
Utah *																													
Vermont										0	0	4	0					0	0	4	0	0	0	3	0				
U. S. Virgin Is. *																													
Virginia																						0	0	6	6				
Washington										0	0	5	0																
West Virginia										0	0	5	0																
Wisconsin *																													
Wyoming *																													

W Includes damage from waterspout

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

FEBRUARY 1967

Elmer R. Nelson, Office of Hydrology

Flooding reported in the Country during February was minor. No significant flood damages were reported.

ST. LAWRENCE DRAINAGE

Lake Erie.--Minor flooding occurred on the St. Marys River at Decatur, Ind., on the 2d and 3d. No damage resulted from the 2 feet of overflow on the 2d.

ATLANTIC SLOPE DRAINAGE

Precipitation ranging from 1-1/2 inches to generally less than 1/4 inch in the coastal area of North Carolina on the 17th and 18th caused minor flooding on the middle Neuse and lower Cape Fear Rivers during the last decade of the month. Additional precipitation, but of less magnitude, occurred late on the 20th. The Neuse crested from bankfull stage to 3 to 4 feet above flood stage. A sharp rise on the upper Cape Fear produced 3 feet of overflow in the lower portion. There was no reported damage from the flooding.

The Lumber River at Lumberton, N. C., rose above flood stage on the 7th and continued above flood stage well into March. The stream was at a high level and within 1 foot of bankfull stage when the heavy rain began on the 7th. Additional rain (3/4 inch) on the 10th was sufficient to raise the primary crest on the 13th to one-half foot above the crest in December. Additional rain (0.5 to 1 inch) on the 20-21st caused a secondary crest of 9.7 feet on the 25th. While the flooding was extensive and extended, no damage was reported. Several recreational areas and private lodges were unapproachable by inundated roads. No evacuation was necessary.

The Satilla River at Atkinson, Ga., continued in flood from January 8 to February 1, cresting nearly 4 feet above flood stage on January 15. Another rise around the middle of February caused the Satilla to overflow its banks at Atkinson, Ga., from the 18th to the 28th. It crested on the 22d and 23d, 1.2 feet above flood stage. No damage was reported.

EAST GULF OF MEXICO DRAINAGE

Heavy rains (1.5 to 3 inches) on the 6th and 7th caused flooding on the Apalachicola River at Blountstown, Fla., beginning on the 8th. Frequent recurring rains after the 7th kept the stream above flood stage to the 25th, except for 1 day. No damage was reported as the area flooded was wooded and unpopulated.

Minor flooding occurred on the Tibbee River at Tibbee, Miss., on the 24th, and in the headwaters of the Tombigbee River at Amory, Miss., on the 21st. No damage was reported.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--The total snowfall this season through February 28 at Minneapolis-St. Paul, Minn., is 75.3 inches. This is the greatest snowfall for any season of record through February. The previous record was 54.5 inches in 1916-17.

The snow cover in the Upper Mississippi Basin on February 28, as compared with that of other years is given in the following table:

COMPARATIVE SNOW DEPTHS (INCHES)

STATION	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956
(Minnesota)												
Bemidji	23	18	10	9	4	24	5	5	4	T	14	22
Alexandria	18	1	4	T	2	17	0	4	1	0	4	12
New Ulm	10	T	3	T	2	17	0	T	T	0	0	6
Minneapolis	23	T	4	0	3	24	0	2	0	0	T	7
Rochester	6	0	1	0	3	13	2	3	13	0	T	6
(Wisconsin)												
Park Falls	23	3	20	7	16	33	6	17	10	3	16	20
Wausau	16	0	5	11	7	30	1	5	9	0	1	7
Portage	5	T	T	0	6	24	0	4	10	T	0	T

Heavy precipitation in the form of rain and snow during the latter part of January and February 1 caused rapid rises on the Sangamon and Kaskaskia Rivers in Illinois to above flood stage. The Sangamon River at Riverton, Ill., was in flood from January 29 through February 10, cresting on February 5, 4.9 feet above flood stage. The Kaskaskia River exceeded flood stage from above Shelbyville to Vandalia, Ill., between the 2d to the 8th and at Carlyle Dam from January 31 to February 15. The extent of the actual flooding was limited mostly to winter grains and pastures in bottom-land areas.

Ohio Basin.--Minor flooding occurred in the upper reaches of the Scioto River at La Rue, Ohio, on the 3d due to moderate showers at the beginning of the month. Frozen ground produced a high rate of runoff. No damage resulted from the overflow.

Rainfall ranging from 3/4 inch over the upper Wabash to an inch or more over the White and lower Wabash Rivers in Indiana on February 1 caused minor flooding of lowlands during the next 4 to 5 days. No damage occurred. Slight overflow occurred again on the White at LaFayette and Covington, Ind., on the 17th and 18th.

Minor flooding occurred on South Chickamauga Creek at Chickamauga, Tenn., on the 20th to the 22d. No damage was reported.

White Basin.--Rains averaging 3/4 inch on the 2d caused a slow rise on the Cache River at Patterson, Ark., to above flood stage on the 5th. It crested on the 10th, 0.1 foot above flood stage and receded within its banks on the 11th. Flooding was minor and no damage occurred.

Arkansas Basin.--The Cimarron River at Perkins, Okla., reported an average monthly stage of 1.9 feet (normal is 3.8 feet). This was the second lowest February average in 40 years of record (1.8 feet was reported in 1957). The Arkansas River at Van Buren,

Ark., reported an average monthly stage of 4.1 feet (normal is 8.2 feet). This equalled the monthly average stage of 1953 and 1954. The only lower average stage on record was 3.0 feet in 1940.

PACIFIC SLOPE DRAINAGE

The overflow of the Sacramento River at all fixed-sill weirs during the latter part of January and the first half of February was due to a series of storms during the latter part of January. No major damage occurred, but some marinas, built below the maximum capacity elevation line inside the levees were flooded briefly with minor damage. The month of February was one of the driest of record over all of California and streams receded to near the low summertime levels by the end of the month.

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

FEBRUARY 1967

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ST. LAWRENCE DRAINAGE	Ft.			Ft.	
Lake Erie					
St. Marys: Decatur, Ind.	15	2	3	17.0	2
ATLANTIC SLOPE DRAINAGE					
Neuse: Smithfield, N. C.	13	20	24	15.7	22
Goldsboro, N. C.	14	23	28	R15.5	26
Cape Fear: Lock & Dam 3, Wm. O. Huske	42	21	23	44.7	22
Lock & Dam 2, Elizabethtown, N. C.	20	20 21	21 24	20.5 R22.9	20 23
Lumber: Lumberton, N. C.	8	7	1/	(10.3 (9.7	13 25
Satilla: Atkinson, Ga.	13	(Jan. 8 (18	Feb. 1 28	16.75 14.2	Jan. 15 22,23
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	(8 (22	20 25	17.4 16.3	12 24
Tibbee: Tibbee, Miss.	23	24	24	23.5	24
Tombigbee: Amory, Miss.	20	21	21	22.3	21
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Sangamon: Riverton, Ill.	13	Jan. 29	Feb. 10	17.9	5
Kaskaskia: Shelbyville, Ill.	13	2	5	13.6	4
Vandalia, Ill.	18	2	8	21.7	4
Carlyle Dam, Ill.	423	Jan. 31	15	426.7	8

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio Basin					
Scioto: La Rue, Ohio	11	3	3	11.25	3
White: Spencer, Ind.	14	4	4	14.3	4
Elliston, Ind.	18	4	5	19.2	4
Edwardsport, Ind.	15	5	7	16.3	7
Wabash: Wabash, Ind.	12	3	4	14.0	3
Lafayette, Ind.	11	(3 (17	5 18	14.1 13.3	4 17
Covington, Ind.	16	(4 (18	5 18	17.6 16.1	5 18
Montezuma, Ind.	14	3	7	16.1	6
Terre Haute, Ind.	14	4	7	14.5	6-7
South Chickamauga Creek: Chickamauga, Tenn.	10	20	22	11.4	21
White Basin					
Cache: Patterson, Ark.	7	5	11	7.1	10
PACIFIC SLOPE DRAINAGE					
Sacramento: Moulton Weir, Calif.	76.8	Jan. 29	5	81.0	Feb. 1
Colusa Weir, Calif.	61.8	Jan. 27	10	67.1	Feb. 1
Tisdale Weir, Calif.	45.5	Jan. 22	14	49.1	Feb. 1
Fremont Weir, Calif.	33.5	Jan. 22	12	37.2	Feb. 1

* Provisional
R Highest stage of record
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	86	-9.5	-14.1	33	.6
1000	28	126			36	1.9
950	28	521	-9.2	-13.5	26	4.7
900	28	941	-10.0	-14.3	27	9.3
850	28	1,381	-10.8	-16.1	28	12.3
800	28	1,847	-11.8	-17.2	28	14.2
750	28	2,341	-13.6	-19.4	28	16.3
700	28	2,863	-15.2	-21.0	27	18.9
650	28	3,420	-17.8	-23.8	27	20.5
600	28	4,018	-21.2	-27.3	26	22.7
550	28	4,655	-25.2	-31.1	26	25.3
500	28	5,345	-29.2	-35.4	26	29.4
450	28	6,089	-35.2	-41.0	26	32.1
400	28	6,909	-38.5	-44.1	26	37.2
350	28	7,816	-44.1		26	40.4
300	28	8,838	-49.0		26	42.0
250	28	10,025	-52.1		27	37.1
200	28	11,465	-52.7		27	36.6
175	28	12,329	-51.5		27	32.9
150	28	13,328	-51.8		27	31.8
125	28	14,506	-53.5		27	27.1
100	28	15,935	-55.5		27	24.6
80	28	17,355	-56.0		27	23.4
70	28	18,203	-55.8		27	21.4
60	28	19,185	-55.8		28	19.8
50	28	20,347	-55.6		27	16.5
40	28	21,770	-55.0		28	15.7
30	28	23,611	-54.6		28	15.4
25	27	24,783	-54.5		29	14.6
20	26	26,220	-52.5		29	13.7
15	25	28,082	-51.3		29	13.9
10	23	30,724	-49.9		28	21.6
7	10	33,079	-48.3			

ALBUQUERQUE, N. MEX. 839 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	1,619	-.3	-11.8	35	1.2
1000	28	192				
950	28	609				
900	28	1,055				
850	28	1,518				
800	28	2,006	1.6	-11.5	29	4.0
750	28	2,521	-1.2	-13.6	30	6.8
700	28	3,071	-4.2	-16.0	29	9.5
650	28	3,646	-7.6	-19.0	30	11.2
600	28	4,271	-11.3	-23.1	29	12.8
550	28	4,926	-15.7	-27.4	29	14.3
500	28	5,646	-20.5	-31.9	29	16.3
450	28	6,412	-26.0	-37.4	29	18.8
400	28	7,260	-31.8	-43.0	29	20.2
350	28	8,192	-38.2	-46.6	29	22.0
300	28	9,235	-45.7		28	25.8
250	28	10,430	-53.0		28	29.7
200	28	11,856	-55.1		27	32.4
175	27	12,712	-56.3		27	30.5
150	26	13,683	-58.1		28	26.9
125	26	14,824	-61.5		27	23.1
100	25	16,199	-63.5		28	19.4
80	24	17,566	-64.4		28	14.8
70	24	18,384	-62.8		28	9.8
60	24	19,335	-62.0		29	6.5
50	24	20,467	-59.8		32	3.7
40	24	21,867	-57.4		01	3.0
30	24	23,691	-55.4		03	4.1
25	24	24,855	-54.5		04	5.3
20	22	26,291	-52.5		05	4.9
15	17	28,151	-49.9		02	4.8
10	7	30,789	-47.8			

AMARILLO, TEXAS 892 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	1,095	-1.0	-9.5	27	2.2
1000	28	167				
950	28	585				
900	28	1,025				
850	28	1,480	3.5	-8.9	27	6.1
800	28	1,971	1.9	-10.7	28	7.1
750	28	2,491	-.2	-13.3	28	8.6
700	28	3,039	-3.2	-16.2	29	10.0
650	28	3,618	-6.6	-19.0	28	11.8
600	28	4,242	-10.7	-21.9	28	13.2
550	28	4,903	-15.1	-26.3	28	14.5
500	28	5,619	-20.2	-30.9	28	16.7
450	28	6,384	-25.8	-36.1	28	18.7
400	28	7,234	-32.0	-42.0	28	21.8
350	28	8,163	-38.9	-46.8	28	24.5
300	28	9,204	-46.2		27	29.2
250	28	10,398	-52.5		27	35.0
200	28	11,828	-55.3		27	35.1
175	27	12,679	-55.8		27	33.4
150	26	13,662	-58.2		27	29.1
125	26	14,804	-60.5		27	27.4
100	25	16,186	-63.2		28	22.1
80	25	17,553	-63.5		28	17.6
70	24	18,371	-62.4		28	13.3
60	21	19,327	-61.6		28	9.2
50	21	20,459	-60.3		30	4.5
40	20	21,857	-58.3		33	3.0
30	20	23,674	-56.1		36	3.1
25	20	24,836	-54.6		36	3.4
20	20	26,268	-53.2		01	3.0
15	18	28,125	-51.4		35	3.5
10	9	30,774	-49.0			

ANCHORAGE, ALASKA 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	45	-10.3	-15.8	02	1.0
1000	28	42			04	1.3
950	28	441	-7.3	-13.1	04	2.0
900	28	862	-7.4	-13.1	10	2.4
850	28	1,306	-9.0	-14.4	14	3.0
800	28	1,773	-12.0	-17.2	17	3.1
750	28	2,267	-14.7	-21.2	19	3.6
700	28	2,783	-17.7	-24.2	20	4.4
650	28	3,333	-21.3	-27.6	22	4.9
600	28	3,920	-25.2	-31.2	22	6.2
550	28	4,544	-29.3	-35.2	22	8.5
500	28	5,222	-33.5	-37.5	22	10.0
450	28	5,951	-38.1	-40.1	23	11.7
400	28	6,758	-43.1		23	14.3
350	28	7,646	-48.5		23	15.9
300	28	8,650	-52.4		23	16.6
250	28	9,826	-52.4		24	16.5
200	28	11,276	-50.1		25	16.1
175	28	12,150	-49.2		25	16.6
150	27	13,161	-48.4		26	16.1
125	27	14,361	-48.4		26	16.7
100	27	15,827	-49.4		26	17.3
80	26	17,289	-49.7		26	16.6
70	26	18,161	-50.1		27	16.5
60	26	19,171	-49.6		27	17.1
50	26	20,364	-49.5		27	17.7
40	26	21,827	-49.2		28	18.2
30	26	23,711	-49.6		28	18.3
25	26	24,905	-49.7		28	19.2
20	25	26,362	-50.4		28	20.4
15	19	28,247	-50.5		28	21.4
10	10	30,932	-47.0			

* ANNETTE, ALASKA 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	37	3.6	.5	16	3.8
1000	28	78			17	3.6
950	28	491	.5	-.9	18	8.7
900	28	925	-2.4	-2.9	19	10.3
850	28	1,377	-4.6	-6.6	20	9.8
800	28	1,852	-7.2	-9.6	21	10.8
750	28	2,354	-10.0	-15.4	22	11.9
700	28	2,884	-12.4	-18.6	24	11.1
650	28	3,446	-15.7	-22.5	24	12.9
600	28	4,046	-19.7	-26.9	24	13.7
550	28	4,688	-23.7	-30.4	25	15.7
500	28	5,379	-28.2	-35.6	25	17.9
450	28	6,124	-33.3	-40.7	26	21.3
400	28	6,947	-38.9	-44.5	25	22.5
350	28	7,852	-44.4		26	24.9
300	28	8,873	-49.5		26	24.8
250	28	10,056	-53.2		26	25.9
200	28	11,491	-53.0		27	20.7
175	27	12,357	-51.6		27	19.9
150	27	13,357	-51.5		28	19.9
125	27	14,539	-52.3		28	17.2
100	27	15,977	-53.5		29	15.9
80	26	17,407	-53.4		29	13.3
70	26	18,266	-53.4		28	13.4
60	25	19,263	-52.8		30	13.4
50	25	20,439	-52.9		30	10.6
40	24	21,888	-52.5		30	9.6
30	22	23,751	-52.1		31	9.3
25	20	24,931	-52.0		32	9.5
20	19	26,377	-51.8		32	10.2
15	16	28,264	-51.3		33	10.4
10	12	30,910	-48.6			
7	6	33,222	-49.6			

ATHENS, GEORGIA 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	246	2.1	-2.2	28	1.0
1000	28	165				
950	28	579	3.5	-3.4	28	5.4
900	28	1,019	2.4	-5.8	29	7.8
850	28	1,481	1.4	-9.9	28	9.5
800	28	1,968	.5	-11.7	28	13.3
750	28	2,482	-1.4	-13.1	27	16.2
700	28	3,032	-3.8	-15.6	27	18.9
650	28	3,609	-6.7	-18.4	27	21.0
600	28	4,234	-10.5	-22.6	27	24.3
550	28	4,894	-14.2	-25.6	27	27.6
500	28	5,616	-18.3	-28.9	26	31.8
450	28	6,385	-23.5	-33.0	26	34.7
400	28	7,246	-29.7	-38.6	26	39.3
350	28	8,184	-36.6	-43.6	26	43.3
300	28	9,234	-43.6		26	48.1
250	28	10,441	-50.7		26	49.6
200	28	11,875	-55.8		27	50.8
175	28	12,725	-56.1		27	48.8
150	28	13,701	-58.7		27	46.3
125	28	14,840	-61.6		27	40.4
100	27	16,210	-64.7		27	33.5
80	26	17,569	-65.5		27	23.6
70	24	18,376	-64.5		27	18.6
60	24	19,321	-63.2		27	15.7
50	23	20,449	-61.3		27	10.7
40	23	21,840	-58.9		28	7.7
30	23	23,658	-55.9		32	5.2
25	23	24,821	-54.5		31	4.6
20	19	26,265	-52.5		29	6.3
15	8	28,133	-49.2			
10						
7						

* BARROW, ALASKA 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	27	8	-27.8	-32.7	09	2.6
1000	27	132	-24.3	-28.4	09	4.1
950	27	515	-18.6	-23.7	10	5.2
900	27	915	-17.4	-23.6	09	4.5
850	27	1,343	-17.7	-25.3	10	3.5
800	27	1,796	-18.9	-26.4	10	2.5
750	27	2,276	-20.8	-28.8	09	1.3
700	27	2,783	-23.7	-31.2	06	.2
650	27	3,317	-27.1	-34.3	27	.7
600	27	3,894	-30.8	-37.5	28	2.3
550	27	4,501	-34.8	-40.9	28	4.0
500	27	5,166	-39.4	-43.4	28	5.0
450	27	5,879	-44.0		28	5.7
400	27	6,664	-48.9		28	6.3
350	27	7,531	-54.0		28	7.9
300	27	8,511	-58.1		28	9.6
250	27	9,654	-59.2		27	11.3
200	27	11,062	-56.1		27	14.7
175	26	11,911	-55.4		27	16.0
150	25	12,889	-55.3		26	19.5
125	25	14,054	-54.9		27	22.8
100	25	15,481	-54.5		27	27.4
80	25	16,910	-54.3		27	31.5
70	24	17,763	-54.0		27	35.1
60	23	18,755	-53.4		27	37.3
50	23	19,930	-53.2		27	40.0
40	23	21,367	-53.2		27	43.9
30	22	23,223	-53.0		27	47.1
25	22	24,397	-53.4		27	48.4
20	21	25,823	-52.5		27	51.2
15	17	27,703	-50.8		27	55.1
10	7	30,439	-45.9			

BARTER IS., ALASKA 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	15	-29.5	-32.1	12	1.1
1000	28	127	-26.1	-29.4	10	1.9
950	28	511	-18.4	-23.4	10	3.5
900	28	911	-16.6	-22.9	11	3.3
850	28	1,341	-16.8	-24.1	11	2.7
800	28	1,795	-18.4	-26.0	10	1.9
750	28	2,277	-20.5	-27.6	11	1.3
700	28	2,783	-23.2	-30.5	07	.3
650	28	3,322	-26.6	-33.4	30	.9
600	28	3,896	-30.3	-36.6	27	2.0
550	28	4,508	-34.4	-41.0	27	3.2
500	28	5,172	-38.6	-42.4	27	5.7
450	28	5,888	-43.3	-44.3	27	6.4
400	28	6,674	-48.4		27	9.1
350	28	7,543	-53.6		27	10.2
300	28	8,525	-58.0		27	11.9
250	28	9,670	-58.3		27	14.2
200	28	11,086	-55.4		27	18.2
175	28	11,938	-54.9		27	20.3
150	28	12,924	-54.4		27	22.6
125	28	14,093	-54.2		27	26.3
100	28	15,525	-53.9		28	30.5
80	27	16,962	-53.4		28	34.5
70	27	17,821	-53.3		28	37.6
60	27	18,812	-53.4		28	41.1
50	27	19,986	-53.2		28	44.8
40	27	21,424	-53.3		28	47.2
30	27	23,272	-54.2		28	55.7
25	24	24,440	-54.1		28	58.8
20	23	25,876	-53.9		28	59.1
15	17	27,745	-53.5		27	61.3
10	8	30,406	-50.5			

BETHEL, ALASKA 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	39	-13.7	-16.7	07	2.8
1000	28	30			02	5.1
950	28	424	-9.3	-13.7	11	4.6
900	28	843	-9.2	-14.8	13	4.9
850	28	1,284	-10.9	-17.6	15	4.3
800	28	1,748	-13.0	-20.6	17	3.6
750	28	2,236	-15.7	-24.9	20	2.7
700	28	2,756	-18.7	-28.8	23	3.1
650	28	3,301	-22.3	-31.8	24	3.0
600	28	3,889	-26.1	-34.7	23	6.3
550	28	4,508	-30.4	-38.6	23	7.3
500	28	5,184	-35.0	-42.2	23	7.1
450	28	5,909	-39.8	-40.7	21	6.4
400	28	6,709	-44.8	-44.7	22	6.9
350	28	7,593	-49.3		23	8.0
300	28	8,596	-52.3		23	8.8
250	28	9,776	-51.3		23	12.3
200	28	11,234	-48.9		24	13.6
175	28	12,113	-48.0		24	14.6
150	28	13,130	-47.6		23	15.3
125	28	14,335	-47.6		24	15.3
100	28	15,807	-48.2		24	16.4
80	28	17,275	-48.7		24	16.5
70	28	18,152	-48.6		25	16.0
60	28	19,169	-48.3		24	15.6
50	28	20,369	-48.4		25	16.6
40	27	21,833	-48.4		25	17.9
30	26	23,719	-48.5		25	18.9
25	26	24,918	-49.0		26	18.1
20	24	26,383	-49.2		26	21.0
15	23	28,279	-48.9		26	20.0
10	18	30,936	-47.3		26	25.3
7	7	33,497	-40.2			

BISMARCK, N. DAK. 956 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	505	-14.1	-18.5	36	1.8
1000	28	162				
950	28	553			32	3.9
900	28	966	-11.2	-15.1	31	6.5
850	28	1,406	-9.3	-14.3	32	10.1
800	28	1,875	-9.6	-15.2	31	12.1
750	28	2,365	-11.6	-17.9	32	14.3
700	28	2,898	-14.1	-20.7	31	16.0
650	28	3,453	-17.3	-23.4	31	17.5
600	28	4,053	-20.7	-27.6	32	18.8
550	28	4,683	-24.5	-31.0	31	21.4
500	28	5,379	-28.8	-35.3	31	22.9
450	28	6,117	-33.9	-38.4	31	23.7
400	28	6,941	-40.1	-41.5	31	24.3
350	28	7,840	-46.3		31	26.3
300	28	8,851	-51.9		30	27.0
250	28	10,025	-54.4		30	28.2
200	28	11,456	-53.0		30	27.7
175	28	12,322	-51.1		30	28.7
150	28	13,323	-51.3		30	26.0
125	28	14,506	-51.9		30	24.0
100	28	15,947	-53.5		30	21.6
80	28	17,380	-54.2		30	20.1
70	28	18,235	-54.0		31	17.5
60	28	19,224	-54.4		30	15.7
50	28	20,392	-54.4		31	13.3
40	28	21,821	-53.9		31	12.3
30	26	23,669	-53.5		33	9.7
25	24	24,854	-53.3		33	9.8
20	22	26,295	-52.7		33	11.9
15	11	28,172	-50.7		34	9.8

BOISE, IDAHO 921 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	868	.1	-2.8	14	1.4
1000	28	206				
950	28	622			31	.7
900	28	1,057	3.2	-4.5	31	.7
850	28	1,520	1.4	-7.8	29	4.4
800	28	2,005	-1.7	-10.5	30	7.0
750	28	2,513	-4.0	-15.8	30	8.9
700	28	3,059	-7.1	-18.2	30	10.3
650	28	3,626	-10.5	-21.5	30	12.4
600	28	4,246	-13.9	-25.0	30	15.7
550	28	4,897	-18.0	-28.0	31	16.9
500	28	5,609	-22.4	-32.0	31	18.3
450	28	6,371	-28.0	-37.2	31	20.3
400	28	7,212	-34.1	-42.8	31	21.9
350	28	8,133	-41.3	-45.4	31	24.4
300	28	9,163	-48.9		31	25.9
250	28	10,339	-56.4		31	28.1
200	27	11,755	-57.4		31	25.3
175	27	12,602	-55.6		31	23.1
150	27	13,583	-56.4		31	21.3
125	27	14,736	-58.2		31	20.4
100	27	16,137	-59.4		31	16.5
80	27	17,535	-59.3		31	11.9
70	27	18,370	-59.1		32	10.2
60	27	19,339	-57.6		33	7.6
50	27	20,493	-56.7		34	5.8
40	26	21,912	-55.4		35	4.9
30	25	23,748	-54.4		01	5.2
25	24	24,916	-53.3		03	5.3
20	23	26,356	-52.1		03	5.3
15	19	28,240	-49.9		05	6.6
10	6	30,926	-47.4			
7						
5						

* BOOTHVILLE, LA. 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	27	1	10.9	8.4	01	1.7
1000	27	162	11.1	7.2	03	1.5
950	27	593	8.9	3.8	25	1.4
900	27	1,038	8.2	.0	25	3.9
850	27	1,509	6.8	-2.6	26	6.2
800	27	2,006	5.0	-5.7	26	8.0
750	26	2,532	3.2	-7.4	26	11.2
700	26	3,089	.7	-11.7	26	13.2
650	26	3,678	-2.4	-15.9	26	17.1
600	26	4,312	-5.9	-19.2	26	20.0
550	26	4,982	-10.2	-22.4	26	22.4
500	26	5,717	-14.8	-26.8	26	25.0
450	26	6,503	-20.1	-30.9	26	29.0
400	26	7,371	-26.0	-37.3	26	30.1
350	26	8,324	-32.9	-42.1	26	34.2
300	26	9,391	-41.0	-46.3	27	35.9
250	26	10,607	-49.9		28	39.6
200	26	12,042	-56.9		27	37.6
175	26	12,884	-58.8		27	36.0
150	25	13,866	-62.4			
125	25	14,962	-66.0			
100	25	16,304	-69.3			
80	24	17,626	-70.7			
70	20	18,419	-69.8			
60	20	19,339	-67.9			
50	19	20,447	-64.3			
40	19	21,824	-60.7		29	6.1
30	19	23,633	-56.4		32	3.6
25	19	24,796	-54.3		30	1.9
20	19	26,233	-51.6		28	3.9
15	18	28,104	-47.7		27	8.3
10	17	30,812	-42.7		26	17.0
7	11	33,223	-39.8			

* BROWNSVILLE, TEXAS 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	7	13.0	11.1	16	1.0
1000	28	153	14.0	11.2	14	2.5
950	28	587	12.5	9.1	16	5.8
900	28	1,039	11.6	4.4	18	5.0
850	28	1,517	10.7	.5	22	3.5
800	28	2,021	9.3	-4.0	25	4.2
750	28	2,555	7.4	-8.1	27	5.5
700	28	3,120	5.0	-10.8	27	8.3
650	28	3,718	.9	-13.3	27	9.8
600	28	4,360	-3.4	-17.3	26	12.5
550	28	5,039	-7.9	-22.1	26	14.4
500	28	5,779	-12.5	-26.6	26	17.7
450	28	6,570	-17.9	-31.2	26	21.1
400	28	7,449	-24.0	-35.9	26	24.8
350	28	8,410	-31.3	-41.8	26	27.0
300	28	9,483	-39.6	-47.7	26	29.8
250	28	10,706	-48.7		26	33.8
200	28	12,146	-56.8		26	38.1
175	27	12,985	-59.5		26	36.9
150	26	13,947	-62.3		25	36.4
125	26	15,051	-66.7		26	31.9
100	26	16,383	-71.5		25	26.8
80	26	17,694	-72.8		26	18.2
70	25	18,478	-71.8		26	13.9
60	25	19,392	-69.5		27	8.5
50	25	20,487	-66.3		27	4.4
40	25	21,853	-61.6		26	2.1
30	25	23,656	-56.7		31	1.1
25	25	24,816	-54.5		33	1.1
20	25	26,256	-51.1		27	2.9
15	25	28,143	-47.3		27	9.2
10	24	30,852	-43.2		27	17.4
7	19	33,278	-39.4		26	22.5
5	9	35,598	-34.5			

BUFFALO, N. Y. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	218	-7.1	-10.7	24	4.0
1000	28	123				
950	28	524	-8.2	-12.2	25	6.7
900	28	941	-10.1	-14.4	26	9.3
850	28	1,381	-10.6	-16.4	27	11.1
800	28	1,845	-12.4	-18.8	27	12.7
750	28	2,340	-14.1	-20.9	27	13.8
700	28	2,858	-16.5	-23.1	27	15.8
650	28	3,415	-18.9	-25.0	27	17.3
600	28	4,006	-21.9	-28.8	28	18.7
550	28	4,641	-25.3	-32.1	27	20.4
500	28	5,328	-29.6	-36.2	27	22.8
450	28	6,071	-34.7	-42.0	27	25.1
400	28	6,886	-39.7	-45.8	27	28.5
350	28	7,790	-44.7		26	32.8
300	28	8,809	-49.7		26	35.5
250	28	9,994	-52.4		26	34.0
200	28	11,436	-52.2		26	32.6
175	28	12,302	-51.4		26	31.1
150	28	13,302	-51.8		26	28.7
125	28	14,481	-53.2		26	29.1
100	27	15,908	-54.9		27	24.8
80	27	17,332	-55.5		27	22.0
70	27	18,182	-55.6		27	20.6
60	27	19,163	-55.7		27	17.7
50	27	20,325	-55.3		28	13.1
40	26	21,748	-55.0		28	10.1
30	25	23,591	-53.8		29	9.3
25	25	24,764	-53.3		29	7.8
20	25	26,202	-52.7		29	9.1
15	24	28,066	-51.0			
10	24	30,716	-49.1			
7	11	33,072	-45.8			

* CANTON IS., PACIFIC AREA + 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	28	4	29.1	22.4	07	5.9
1000	26	81	27.2	20.4	07	6.9
950	28	523	21.9	15.8	07	10.0
900	28	1,000	19.3	12.1	08	11.2
850	28	1,492	18.1	6.2	08	10.0
800	28	2,010	16.7	.7	08	7.0
750	28	2,551	13.9	-2.0	08	4.2
700	28	3,135	10.5	-4.9	07	2.3
650	28	3,741	6.8	-6.6	10	2.2
600	28	4,402	3.3	-11.2	12	2.2
550	28	5,099	-.3	-16.0	30	.2
500	28	5,860	-4.6	-20.1	20	1.4
450	28	6,680	-9.4	-25.7	22	4.0
400	28	7,585	-14.9	-32.0	26	4.8
350	28	8,582	-21.6	-38.0	26	7.8
300	28	9,700	-30.1	-45.6	25	9.2
250	28	10,969	-40.9		25	10.9
200	28	12,448	-52.9		25	13.3
175	28	13,297	-59.8		26	14.3
150	28	14,244	-67.1		27	12.6
125	27	15,323	-74.7		29	12.0
100	27	16,599	-80.5		29	9.9
80	27	17,864	-76.3		27	5.5
70	27	18,645	-70.5		25	5.7
60	27	19,570	-65.9		26	6.9
50	27	20,688	-62.0		27	10.4
40	27	22,078	-59.0		27	11.9
30	27	23,902	-54.7		27	12.8
25	27	25,073	-53.4		27	11.3
20	26	26,516	-50.5		28	5.6
15	26	28,407	-47.4		08	11.4
10	22	31,131	-40.2		09	30.9
7	14	33,612	-33.9		09	36.4
5	5	35,991	-30.5			

NOTE: Beginning with the January 1967 publication the Dew Point temperature replaces Relative Humidity in the above table; wind direction is in tens of degrees and wind speed in meters per second.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Also, see reference notes at end of table.

RAWINSONDE DATA

Average monthly values

FEBRUARY 1967

* CAPE HATTERAS, N. C. — 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	4	5.5	1.8	30	3.3
1000	28	138	5.7	.2	30	4.7
950	28	556	4.8	-1.8	28	7.9
900	28	997	3.0	-3.7	27	9.6
850	28	1,459	1.3	-6.7	26	11.7
800	28	1,946	-.1	-10.2	26	15.6
750	28	2,460	-2.1	-13.2	26	18.4
700	28	3,007	-4.5	-15.8	26	20.0
650	28	3,585	-7.5	-19.2	26	23.0
600	28	4,207	-11.1	-22.6	26	25.[illegible]
550	28	4,869	-14.8	-25.4	26	28.9
500	28	5,587	-19.0	-28.4	26	32.8
450	28	6,361	-24.0	-32.9	26	36.5
400	28	7,213	-29.9	-38.6	26	38.0
350	28	8,152	-36.6	-44.1	26	42.2
300	28	9,203	-44.0		26	44.6
250	28	10,407	-51.2		27	47.5
200	28	11,840	-55.7		27	47.2
175	28	12,691	-55.4		27	43.4
150	27	13,668	-57.0		27	41.4
125	26	14,813	-59.9		27	35.9
100	26	16,196	-62.7		27	30.0
80	26	17,568	-63.2		27	23.2
70	26	18,391	-61.9		27	19.0
60	26	19,345	-61.6		27	14.2
50	26	20,480	-59.4		28	12.4
40	25	21,885	-57.4		27	8.3
30	25	23,712	-55.0		29	5.7
25	23	24,881	-53.7		30	5.5
20	23	26,321	-51.9		29	5.3
15	21	28,204	-49.0		28	4.[illegible]
10	18	30,900	-44.5		27	13.6
7	13	33,302	-41.0		26	25.7
5	9	35,607	-38.5			

* CARIBOU, MAINE — 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	191	-17.1	-21.9	28	2.1
1000	28	100				
950	28	485	-15.6	-19.3	28	[illegible].3
900	28	895	-15.8	-19.6	28	5.6
850	28	1,326	-15.4	-20.9	28	7.2
800	28	1,784	-16.0	-22.4	28	8.7
750	28	2,268	-17.3	-24.3	27	11.3
700	28	2,784	-19.2	-27.1	27	13.3
650	28	3,332	-21.6	-29.5	27	15.7
600	28	3,920	-24.5	-31.1	27	17.9
550	28	4,545	-27.9	-34.0	26	20.3
500	28	5,228	-32.1	-37.6	26	22.2
450	28	5,959	-36.6	-40.3	27	24.8
400	28	6,773	-41.4	-42.0	26	30.0
350	28	7,668	-46.7		26	32.8
300	28	8,680	-51.1		26	34.7
250	28	9,858	-53.3		26	38.9
200	28	11,297	-52.1		26	33.7
175	28	12,163	-51.1		26	33.3
150	28	13,165	-51.4		26	31.8
125	28	14,347	-52.2		26	31.7
100	28	15,785	-53.8		26	29.3
80	27	17,212	-54.6		26	27.7
70	26	18,071	-5[illegible].5		27	26.6
60	26	19,059	-54.4		27	25.2
50	26	20,227	-54.4		27	25.0
40	25	21,648	-55.6		27	23.0
30	23	23,458	-56.4		28	24.8
25	21	24,625	-54.8		28	24.8
20	20	26,048	-53.9		28	22.7
15	20	27,891	-54.3		28	26.4
10	20	30,499	-52.4		28	32.0
7	11	32,631	-52.0		28	49.0

CHARLESTON, S. C. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	13	5.4	1.3	29	1.5
1000	28	156	7.2	1.6	27	3.1
950	28	578	6.6	-1.1	28	6.1
900	28	1,021	4.9	-3.3	28	8.8
850	28	1,487	3.8	-7.4	27	12.0
800	28	1,979	2.6	-9.9	27	14.1
750	28	2,499	.6	-13.1	27	16.6
700	28	3,051	-2.0	-14.6	26	18.6
650	28	3,635	-5.1	-18.1	26	22.1
600	28	4,264	-8.3	-21.9	26	24.9
550	28	4,927	-12.3	-24.5	26	28.0
500	28	5,658	-16.9	-27.2	26	31.0
450	28	6,434	-22.3	-32.9	26	34.2
400	28	7,299	-28.7	-38.3	26	36.9
350	28	8,241	-35.8	-43.2	26	39.7
300	28	9,296	-43.3		26	44.0
250	28	10,502	-51.1		26	50.4
200	27	11,933	-56.0		27	51.2
175	27	12,780	-57.1		27	48.7
150	27	13,749	-59.9		27	45.3
125	27	14,879	-63.1		27	40.5
100	26	16,241	-66.2		26	34.1
80	26	17,586	-67.3		27	24.2
70	26	18,392	-66.0		26	19.3
60	26	19,331	-63.9		27	14.4
50	26	20,455	-61.2		28	10.2
40	26	21,848	-58.5		28	7.2
30	25	23,666	-56.0		29	5.9
25	25	24,829	-54.2		29	4.6
20	24	26,271	-51.6		30	3.6
15	21	28,147	-48.2		28	5.4
10	14	30,815	-45.6		28	12.3

CHIHUAHUA, MEXICO — 858 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,428	4.3	-5.9	27	1.2
1000	28	154				
950	28	579				
900	28	1,032				
850	28	1,503	5.8	-5.4	26	1.2
800	28	2,003	7.6	-6.1	25	2.7
750	28	2,530	5.2	-8.7	26	4.4
700	28	3,092	2.2	-12.0	27	6.6
650	27	3,682	-1.4	-14.8	27	9.2
600	27	4,320	-5.2	-18.9	27	10.9
550	27	4,990	-9.5	-22.6	27	13.7
500	27	5,727	-14.5	-26.4	26	16.2
450	27	6,505	-20.3	-31.2	27	18.2
400	27	7,378	-26.5	-35.2	26	22.1
350	27	8,329	-33.5	-42.1	26	24.4
300	27	9,392	-41.9	-47.3	26	28.5
250	27	10,604	-50.1		26	31.7
200	27	12,034	-57.1		26	31.5
175	25	12,884	-59.3		26	30.0
150	23	13,840	-61.1		27	25.8
125	22	14,965	-64.5		26	23.7
100	21	16,321	-67.4		27	18.1
80	17	17,656	-68.5		27	11.4
70	16	18,452	-67.6			
60	16	19,387	-65.8			
50	14	20,498	-64.1			
40	14	21,877	-60.3		36	.9
30	14	23,687	-56.8		35	.6
25	14	24,857	-54.3			
20	11	26,289	-51.9			
15	11	28,162	-50.1			
10	[illegible]	30,854	-45.3			

* COLD BAY, ALASKA — 996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	30	-2.6	-4.5	19	3.7
1000	28	-2			29	2.5
950	28	407	-3.0	-6.7	19	4.3
900	28	832	-5.8	-8.6	22	4.6
850	28	1,278	-7.7	-12.6	23	5.7
800	28	1,748	-10.2	-16.1	23	6.3
750	28	2,241	-13.3	-19.6	23	7.1
700	28	2,765	-16.3	-23.7	25	7.5
650	28	3,315	-19.6	-27.8	24	8.6
600	28	3,909	-23.5	-31.9	24	9.5
550	28	4,535	-27.4	-35.5	24	11.6
500	27	5,225	-31.2	-39.3	24	12.9
450	27	5,961	-36.1	-42.8	24	13.2
400	27	6,773	-41.7	-45.2	24	18.2
350	27	7,667	-47.1		23	19.6
300	27	8,677	-50.8		23	21.8
250	27	9,864	-50.7		24	19.9
200	27	11,328	-48.1		23	16.9
175	26	12,215	-47.5		23	17.4
150	26	13,236	-46.9		23	16.3
125	26	14,443	-47.1		24	14.7
100	24	15,920	-48.6		24	13.3
80	24	17,384	-49.2		24	11.9
70	24	18,260	-48.9		24	10.3
60	24	19,270	-49.0		24	[illegible].9
50	24	20,467	-48.8		24	[illegible].9
40	24	21,932	-48.9		24	7.7
30	24	23,823	-48.3		24	5.8
25	22	25,029	-48.4		24	4.8
20	20	26,509	-48.0		23	2.4
15	15	28,410	-48.2		24	2.2
10	13	31,115	-46.9		22	5.0
7	8	33,437	-45.2			
5	7	35,671	-42.4			

COLUMBIA, MO. — 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	238	-3.4	-8.4	24	1.1
1000	28	152				
950	28	556	-3.3	-9.1	25	4.6
900	28	985	-2.7	-11.4	27	8.6
850	28	1,438	-3.2	-13.5	28	10.0
800	28	1,917	-4.7	-15.2	29	11.9
750	28	2,423	-6.6	-16.4	29	14.2
700	28	2,961	-9.3	-19.5	29	15.3
650	28	3,526	-12.4	-23.2	29	17.3
600	28	4,139	-16.0	-26.5	29	19.1
550	28	4,781	-20.1	-30.5	28	21.1
500	28	5,490	-24.7	-34.0	28	23.3
450	28	6,242	-29.9	-38.9	28	26.3
400	28	7,079	-36.1	-42.9	28	26.7
350	28	7,994	-42.5	-43.8	28	29.7
300	28	9,021	-48.6		28	31.7
250	28	10,207	-53.0		27	34.8
200	27	11,632	-54.0		27	35.8
175	27	12,491	-53.4		27	33.4
150	27	13,481	-54.6		27	30.6
125	27	14,645	-56.1		28	26.3
100	26	16,058	-58.3		28	23.1
80	26	17,459	-59.1		28	17.7
70	26	18,294	-59.3		28	15.2
60	26	19,259	-59.1		29	13.2
50	26	20,405	-58.0		29	9.[illegible]
40	22	21,818	-56.6		30	8.2
30	20	23,650	-55.4		32	7.4
25	18	24,819	-54.3		32	7.2
20	17	26,254	-53.3		33	5.9
15	14	28,142	-51.2		34	5.5
10	11	30,811	-47.2			
7						

DAYTON, OHIO — 982 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	297	-6.4	-10.0	27	2.0
1000	28	153				
950	28	554	-6.9	-10.4	26	5.4
900	28	977	-7.3	-12.5	28	10.1
850	28	1,422	-7.4	-15.1	28	12.5
800	28	1,894	-8.9	-17.6	28	12.6
750	28	2,390	-10.4	-19.1	28	14.0
700	28	2,922	-12.7	-21.4	28	16.8
650	28	3,480	-15.4	-24.2	27	18.2
600	28	4,085	-18.8	-27.3	27	21.3
550	28	4,726	-22.4	-30.2	27	26.1
500	28	5,424	-26.7	-34.5	27	28.7
450	28	6,171	-32.0	-38.8	27	29.9
400	28	7,000	-37.1	-42.3	27	33.8
350	28	7,912	-42.6	-42.9	27	37.5
300	28	8,940	-47.9		26	42.2
250	28	10,130	-52.3		27	43.2
200	28	11,567	-53.2		27	44.3
175	28	12,429	-52.6		27	41.8
150	28	13,423	-53.3		27	38.4
125	28	14,590	-55.8		27	34.4
100	28	16,003	-57.8		27	28.3
80	28	17,405	-59.1		27	21.4
70	27	18,243	-57.7		28	18.5
60	27	19,214	-58.1		28	15.8
50	27	20,363	-57.7		28	12.4
40	26	21,775	-55.9		29	9.8
30	26	23,611	-55.0		30	8.5
25	26	24,778	-54.0		31	7.3
20	26	26,213	-52.7		31	7.5
15	23	28,084	-51.0		30	8.2
10	18	30,730	-48.1		29	12.9
7	7	33,017	-47.4			

DEL RIO, TEXAS — 983 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	314	7.8	.4	10	2.1
1000	28	167				
950	28	594	9.1	.0	14	4.8
900	28	1,040	8.8	-2.2	18	4.4
850	28	1,513	8.3	-5.2	23	4.1
800	[illegible]	2,013	6.6	-9.3	25	6.1
750	28	2,540	4.4	-11.3	27	7.8
700	28	3,100	1.8	-13.6	28	10.4
650	28	3,692	-1.8	-16.5	27	12.3
600	28	4,327	-5.9	-19.0	27	14.5
550	28	5,000	-10.2	-21.5	27	17.1
500	28	5,732	-15.1	-26.2	27	20.5
450	28	6,515	-20.7	-31.0	26	22.8
400	28	7,383	-26.9	-37.0	26	25.8
350	28	8,333	-33.8	-43.3	26	28.9
300	28	9,396	-41.7	-49.2	27	33.9
250	28	10,608	-50.7		27	38.5
200	27	12,042	-57.2		26	41.9
175	27	12,884	-58.2		26	40.3
150	27	13,849	-60.9		26	36.5
125	27	14,972	-64.7		26	30.6
100	27	16,323	-68.0		26	26.2
80	27	17,654	-69.7		27	17.0
70	25	18,447	-69.4		27	13.5
60	24	19,369	-67.0		28	8.8
50	24	20,479	-63.5		29	4.6
40	23	21,860	-59.7		36	1.8
30	21	23,676	-56.3		02	2.1
25	20	24,838	-54.4		04	2.4
20	20	26,275	-51.9		03	2.8
15	18	28,146	-49.5		30	4.1
10	13	30,819	-45.7			

DENVER, COLO. — 836 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,611	-2.9	-9.4	22	1.4
1000	28	171				
950	28	584				
900	28	1,021				
850	28	1,477				
800	28	1,962	.0	-12.8	30	3.4
750	28	2,474	-2.8	-15.7	31	6.3
700	28	3,020	-6.5	-17.8	31	9.2
650	28	3,593	-10.5	-21.2	31	12.7
600	28	4,206	-14.2	-25.5	31	15.7
550	28	4,860	-18.4	-30.1	31	17.7
500	28	5,566	-23.2	-34.2	31	18.3
450	28	6,325	-28.8	-39.2	31	19.7
400	28	7,161	-34.9	-44.6	30	22.1
350	28	8,080	-41.6	-47.2	30	24.5
300	28	9,110	-48.4		30	26.9
250	28	10,293	-54.3		29	27.5
200	28	11,715	-55.9		29	28.[illegible]
175	28	12,568	-54.3		29	27.3
150	28	13,555	-55.3		29	25.5
125	28	14,714	-57.2		29	22.5
100	28	16,121	-58.7		29	17.5
80	28	17,517	-60.2		29	13.1
70	27	18,349	-59.4		29	9.5
60	27	19,319	-58.2		31	7.4
50	27	20,469	-57.7		32	4.9
40	27	21,882	-56.1		35	4.6
30	26	23,711	-54.9		01	5.6
25	25	24,879	-54.4		01	6.6
20	23	26,317	-53.1		01	7.4
15	17	28,190	-50.8		36	6.7
10	5	30,831	-48.3			

DODGE CITY, KANS. — 925 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	791	-3.4	-9.1	29	2.0
1000	28	168				
950	28	580			29	4.8
900	28	1,010	.7	-8.5	29	4.8
850	28	1,470	1.4	-10.8	31	7.3
800	28	1,957	-.2	-13.6	31	8.3
750	28	2,470	-2.8	-15.[illegible]	31	10.0
700	28	3,015	-6.2	-19.1	30	11.1
650	28	3,590	-9.7	-21.3	29	12.6
600	28	4,205	-13.2	-24.1	29	14.3
550	28	4,861	-17.8	-28.[illegible]	28	16.8
500	28	5,569	-22.9	-33.1	28	18.5
450	28	6,328	-28.2	-38.3	28	21.2
400	28	7,169	-34.5	-43.7	29	23.3
350	28	8,090	-41.1	-44.8	28	25.2
300	28	9,121	-48.2		28	29.1
250	28	10,305	-54.2		28	33.5
200	28	11,729	-55.5		28	36.1
175	28	12,583	-54.3		28	34.5
150	28	13,568	-55.8		28	31.5
125	27	14,719	-57.8		28	26.1
100	27	16,119	-60.4		28	20.1
80	27	17,503	-61.4		28	15.6
70	27	18,332	-60.6		28	12.8
60	27	19,292	-59.8		29	[illegible].8
50	26	20,432	-58.8		31	5.2
40	25	21,834	-57.4		32	4.5
30	25	23,657	-55.8		36	4.4
25	25	24,820	-54.7		36	5.0
20	23	26,249	-53.3		01	5.7
15	23	28,107	-51.8		36	5.5
10	9	30,792	-48.1			

EL PASO, TEXAS — 884 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,193	4.0	-10.5	28	1.2
1000	28	173				
950	28	597				
900	28	1,046				
850	28	1,513	7.5	-8.8	28	2.2
800	28	2,010	5.2	-10.5	28	4.3
750	28	2,532	2.7	-12.2	28	6.5
700	28	3,091	-.5	-13.9	28	8.7
650	28	3,673	-4.3	-16.5	27	10.3
600	28	4,307	-8.3	-20.8	28	12.8
550	28	4,972	-12.1	-26.2	28	15.0
500	28	5,701	-17.0	-30.2	28	17.6
450	28	6,476	-22.7	-34.9	27	20.7
400	28	7,339	-29.0	-39.5	27	23.4
350	28	8,281	-36.2	-45.4	27	25.6
300	28	9,335	-43.8		27	30.2
250	28	10,540	-51.6		26	35.3
200	27	11,967	-56.6		27	35.4
175	27	12,811	-58.0		27	33.8
150	27	13,779	-59.6		27	29.2
125	27	14,913	-62.7		27	26.3
100	26	16,278	-65.4		27	19.0
80	26	17,631	-66.3		27	14.8
70	25	18,440	-65.4		28	11.8
60	25	19,380	-64.2		29	7.7
50	25	20,500	-62.1		30	4.7
40	23	21,887	-59.1		01	1.1
30	21	23,700	-56.7		02	3.0
25	21	24,860	-55.0		05	3.7
20	18	26,294	-52.8		04	3.9
15	13	28,148	-50.9		33	1.6
10						
7						

ELY, NEV. — 812 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,908	-7.3	-11.6	18	3.4
1000	28	249				
950	28	662				
900	28	1,096				
850	28	1,545				
800	28	2,022	-2.7	-9.2	21	2.1
750	28	2,538	-2.6	-12.8	34	2.2
700	28	3,080	-5.2	-15.4	33	6.8
650	28	3,660	-7.9	-19.2	32	8.7
600	28	4,278	-11.6	-23.2	31	11.3
550	28	4,941	-15.3	-27.3	32	14.0
500	28	5,655	-20.3	-31.6	32	14.8
450	28	6,425	-26.0	-35.6	32	16.7
400	28	7,270	-32.2	-41.0	32	18.4
350	28	8,198	-39.7	-45.5	32	20.5
300	28	9,233	-48.2		32	21.3
250	28	10,413	-56.0		31	22.5
200	28	11,818	-58.3		30	25.5
175	28	12,661	-56.7		30	21.4
150	27	13,633	-57.6		29	21.9
125	26	14,780	-60.0		30	18.8
100	25	16,161	-62.0		29	14.1
80	25	17,539	-62.4		30	9.0
70	25	18,363	-61.5		30	6.4
60	25	19,321	-60.1		33	5.4
50	24	20,463	-58.7		35	4.7
40	24	21,869	-57.3		02	4.3
30	24	23,694	-55.6		03	5.7
25	23	24,858	-54.5		04	6.2
20	21	26,283	-52.9		04	8.2
15	19	28,138	-51.2		04	7.8
10	13	30,764	-49.9		02	6.1
7	8	33,066	-49.9			

EMPALME, MEXICO — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	12	11.4	1.9	35	1.6
1000	28	139	16.5	2.0	35	2.6
950	28	577	17.9	-1.1	36	3.6
900	28	1,038	15.7	-3.0	34	2.2
850	28	1,520	12.7	-5.1	27	2.3
800	28	2,026	9.8	-7.9	26	3.6
750	28	2,556	6.9	-11.1	26	4.4
700	28	3,121	3.3	-13.5	27	5.2
650	28	3,714	-.2	-16.7	26	7.6
600	28	4,354	-4.6	-20.2	26	9.9
550	28	5,026	-9.3	-23.8	26	12.8
500	28	5,763	-14.3	-27.5	26	15.5
450	28	6,546	-20.1	-31.7	26	17.1
400	28	7,416	-26.3	-37.3	26	20.4
350	28	8,366	-33.7	-43.0	26	24.3
300	28	9,429	-41.5	-47.0	26	29.0
250	28	10,641	-50.4		26	33.4
200	28	12,071	-57.3		26	33.3
175	28	12,912	-58.7		25	29.6
150	28	13,875	-61.3		26	27.4
125	28	14,994	-65.2		26	25.7
100	28	16,343	-68.1		26	18.9
80	28	17,678	-69.1		26	13.8
70	28	18,477	-67.8		26	10.6
60	28	19,408	-66.4		29	6.6
50	28	20,519	-63.6		32	3.2
40	28	21,898	-60.2		35	2.8
30	27	23,708	-56.5		03	2.0
25	27	24,870	-54.3		01	1.9
20	26	26,307	-51.5		28	2.1
15	24	28,189	-49.1		28	7.8
10	14	30,864	-46.2			

* FAIRBANKS, ALASKA — 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	135	-23.8	-30.9	03	.6
1000	28	85				
950	28	474	-15.2	-18.4	08	2.9
900	28	878	-13.8	-17.6	11	3.7
850	28	1,312	-13.4	-17.4	12	2.6
800	28	1,773	-14.6	-19.3	14	2.2
750	28	2,258	-16.8	-21.7	20	1.5
700	28	2,775	-19.8	-24.3	22	2.8
650	28	3,320	-22.9	-28.4	22	2.9
600	28	3,905	-26.8	-32.6	22	3.[illegible]
550	28	4,524	-30.8	-36.3	22	5.7
500	28	5,199	-35.2	-39.7	22	[illegible].4
450	28	5,923	-39.8	-42.9	23	10.0
400	28	6,724	-45.0		23	11.3
350	28	7,606	-50.0		24	13.3
300	28	8,604	-54.2		24	15.6
250	28	9,770	-54.5		25	16.[illegible]
200	28	11,207	-51.7		26	17.1
175	28	12,076	-50.5		26	17.1
150	27	13,086	-50.2		26	19.0
125	27	14,279	-49.8		26	20.[illegible]
100	27	15,738	-49.8		27	23.1
80	27	17,194	-50.3		27	24.9
70	27	18,065	-50.2		27	25.[illegible]
60	27	19,072	-50.2		27	26.4
50	26	20,256	-50.0		28	28.4
40	26	21,715	-49.8		28	29.5
30	24	23,579	-50.6		28	32.9
25	22	24,769	-50.8		28	30.8
20	22	26,223	-50.8		28	29.8
15	17	28,114	-49.9		28	34.3
10	8	30,834	-48.3			

FLINT, MICH. — 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	234	-9.8	-14.2	26	2.5
1000	28	135				
950	28	531	-9.9	-12.7	28	4.4
900	28	948	-11.0	-14.5	29	8.0
850	28	1,387	-11.6	-16.9	29	9.5
800	28	1,852	-12.3	-19.1	29	10.0
750	28	2,344	-13.9	-21.1	28	11.7
700	28	2,866	-15.9	-24.5	28	14.0
650	28	3,419	-18.9	-26.8	28	15.6
600	28	4,015	-22.2	-29.2	28	17.9
550	28	4,644	-26.2	-32.1	28	18.9
500	28	5,333	-30.5	-36.2	28	21.3
450	28	6,072	-35.1	-39.5	28	23.4
400	28	6,888	-40.4	-43.3	27	25.7
350	28	7,788	-45.7		27	27.[illegible]
300	28	8,803	-50.2		27	32.8
250	28	9,986	-52.6		27	35.7
200	28	11,429	-51.4		27	33.3
175	28	12,297	-50.8		27	32.3
150	28	13,299	-51.5		27	30.1
125	28	14,480	-52.6		27	27.2
100	28	15,914	-54.5		27	23.7
80	28	17,339	-55.5		28	21.3
70	28	18,188	-55.9		28	18.9
60	28	19,171	-55.2		28	17.1
50	28	20,335	-54.9		28	15.4
40	28	21,762	-54.7		29	12.9
30	28	23,604	-53.8		30	11.8
25	28	24,776	-53.4		30	11.2
20	28	26,216	-52.3		30	12.5
15	28	28,082	-51.0		30	11.1
10	25	30,756	-47.8		30	15.2
7	7	33,010	-48.5			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FORT WORTH, TEXAS — 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	180	3.7	-1.7	21	.5
1000	28	172			35	.6
950	28	592	5.2	-3.3	22	3.6
900	28	1,033	5.9	-6.2	25	4.2
850	28	1,501	5.6	-7.9	26	5.2
800	28	1,995	3.7	-10.9	26	7.1
750	28	2,521	1.6	-13.6	27	9.5
700	28	3,071	-1.6	-15.5	28	11.5
650	28	3,657	-5.2	-17.3	28	13.4
600	28	4,282	-9.3	-20.1	28	15.3
550	28	4,949	-13.5	-24.2	27	17.8
500	28	5,670	-18.3	-28.8	27	21.3
450	28	6,444	-24.0	-34.3	27	23.6
400	28	7,299	-30.0	-40.0	27	29.0
350	28	8,237	-36.8	-44.8	27	34.3
300	28	9,287	-43.9		27	38.3
250	28	10,490	-51.7		27	38.8
200	25	11,924	-56.2		26	38.0
175	24	12,776	-57.3		26	38.2
150	24	13,747	-59.6		26	33.2
125	21	14,881	-62.0		26	29.2
100	19	16,250	-65.1		27	25.3
80	19	17,602	-66.3		27	16.5
70	18	18,415	-66.4		27	12.8
60	18	19,353	-64.5		28	8.4
50	17	20,472	-62.3		29	5.5
40	17	21,855	-60.0		34	3.3
30	17	23,664	-56.6		01	2.8
25	16	24,826	-55.1		01	3.0
20	16	26,255	-53.3		33	3.5
15	13	28,135	-50.6		30	5.6
10	[illegible]	30,807	-46.0			
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GLASGLOW, MONT. — 934 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	696	-11.4	-15.6	01	1.0
1000	28	163				
950	28	562			30	5.4
900	28	978	-7.1	-11.5	30	5.4
850	28	1,425	-6.1	-13.0	31	10.7
800	28	1,899	-7.4	-14.5	31	13.5
750	28	2,399	-9.7	-16.1	31	15.1
700	28	2,929	-13.1	-19.7	31	17.0
650	28	3,490	-16.4	-23.0	31	18.1
600	28	4,088	-20.1	-27.2	31	19.9
550	28	4,726	-24.3	-31.7	31	20.8
500	28	5,416	-29.2	-36.7	31	22.6
450	28	6,157	-34.4	-39.3	31	23.7
400	28	6,975	-39.9	-42.1	32	26.5
350	28	7,875	-45.9		32	28.6
300	28	8,887	-51.7		32	31.2
250	28	10,057	-55.3		32	31.3
200	28	11,482	-54.3		32	27.7
175	28	12,339	-53.5		31	28.4
150	28	13,334	-52.2		31	24.4
125	28	14,510	-53.3		31	22.1
100	28	15,939	-55.3		31	19.9
80	27	17,360	-55.0		31	17.5
70	26	18,216	-55.1		31	15.4
60	25	19,205	-54.4		31	14.4
50	25	20,372	-54.5		32	13.4
40	24	21,802	-53.8		32	12.6
30	23	23,651	-53.9		33	10.7
25	20	24,823	-53.0		33	10.5
20	20	26,259	-53.2		34	9.8
15	17	28,130	-51.5		34	12.1
10	11	30,818	-47.8			
7	5	33,262	-42.9			
5	5	35,532	-42.2			

* GRAND JUNCTION, COLO. — 855 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,474	-1.2	-9.2	11	1.7
1000	28	205				
950	28	619				
900	28	1,059				
850	28	1,519			11	1.9
800	28	2,006	-.8	-12.2	15	1.3
750	28	2,515	-4.0	-14.2	28	1.7
700	28	3,061	-7.3	-17.3	29	5.6
650	27	3,632	-10.7	-19.5	31	9.1
600	27	4,247	-14.0	-23.4	31	11.4
550	27	4,897	-18.1	-27.4	31	12.7
500	27	5,610	-22.6	-32.3	30	15.1
450	27	6,371	-28.0	-37.0	31	17.0
400	27	7,212	-33.9	-42.8	31	19.7
350	27	8,135	-40.4	-47.5	31	23.0
300	27	9,170	-47.5		31	25.5
250	27	10,354	-54.5		30	28.2
200	27	11,774	-56.3		30	27.3
175	27	12,624	-54.7		29	24.7
150	27	13,610	-55.4		29	23.1
125	27	14,767	-57.5		29	18.4
100	27	16,166	-60.5		29	14.6
80	25	17,547	-60.8		30	12.2
70	25	18,379	-59.3		30	8.9
60	25	19,345	-59.1		30	7.0
50	25	20,488	-58.2		32	4.9
40	25	21,899	-56.5		35	3.4
30	24	23,730	-55.0		02	5.0
25	23	24,897	-54.1		03	6.3
20	20	26,326	-52.8		03	7.2
15	18	28,197	-50.8		04	5.5
10	13	30,843	-48.2		36	7.3
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* GREAT FALLS, MONT. — 886 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,123	-2.4	-9.3	23	4.8
1000	28	150				
950	28	565				
900	28	1,001				
850	28	1,452	-1.0	-10.8	26	10.7
800	28	1,933	-3.6	-12.3	27	11.2
750	28	2,445	-6.7	-14.1	28	13.1
700	28	2,976	-10.3	-17.3	29	14.4
650	28	3,543	-14.1	-20.9	30	15.3
600	28	4,146	-17.6	-25.1	30	16.5
550	28	4,793	-21.7	-29.4	31	18.7
500	28	5,489	-26.6	-33.3	31	21.6
450	28	6,242	-31.9	-37.0	31	22.5
400	28	7,066	-37.7	-41.3	31	25.3
350	28	7,975	-43.6		31	28.4
300	28	8,998	-49.6		31	32.1
250	28	10,175	-55.8		31	31.5
200	28	11,590	-56.1		31	27.1
175	28	12,445	-53.2		31	25.1
150	28	13,439	-53.7		30	25.5
125	27	14,609	-54.4		30	21.4
100	26	16,029	-55.7		31	18.5
80	24	17,453	-54.9		31	16.0
70	24	18,306	-55.1		31	13.1
60	24	19,288	-55.2		31	11.9
50	22	20,451	-54.3		32	10.9
40	21	21,878	-54.3		32	8.3
30	19	23,737	-52.8		35	8.3
25	18	24,916	-52.2		35	8.0
20	17	26,362	-52.6		35	9.2
15	16	28,230	-50.6		36	11.0
10	14	30,881	-48.6		36	10.4
7	8	33,285	-46.2			
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GREEN BAY, WIS. — 991 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	210	-12.5	-15.5	30	1.8
1000	28	135				
950	28	531	-11.5	-14.4	32	4.0
900	28	941	-12.4	-16.5	31	5.3
850	28	1,378	-12.7	-18.2	29	6.6
800	28	1,839	-13.6	-19.9	29	9.3
750	28	2,327	-15.1	-21.6	29	12.0
700	28	2,849	-17.5	-25.3	29	13.1
650	28	3,398	-20.2	-27.6	29	15.1
600	28	3,991	-23.1	-29.6	29	17.2
550	28	4,618	-26.8	-33.4	29	19.7
500	28	5,305	-31.3	-36.9	29	20.5
450	28	6,041	-36.3	-39.5	29	22.0
400	28	6,851	-41.5	-43.4	29	25.9
350	28	7,747	-46.7		28	29.1
300	28	8,758	-51.4		28	32.8
250	28	9,935	-53.2		28	32.3
200	28	11,376	-51.7		28	31.6
175	28	12,244	-50.7		28	29.6
150	28	13,247	-51.4		28	28.8
125	28	14,429	-52.4		28	27.4
100	28	15,867	-53.7		28	25.3
80	28	17,297	-55.0		29	22.5
70	28	18,150	-54.8		29	20.6
60	28	19,138	-54.4		29	18.0
50	28	20,305	-54.9		30	15.3
40	28	21,731	-55.2		30	13.7
30	28	23,571	-54.7		31	12.6
25	28	24,739	-53.8		31	12.8
20	27	26,172	-53.4		31	11.3
15	26	28,034	-52.2		32	12.6
10	22	30,702	-48.7	-	32	9.6
7	11	33,065	-47.1			
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GREENSBORO, N. C. — 986 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	273	-.5	-3.9	28	1.6
1000	28	155				
950	28	567	.1	-6.4	28	5.1
900	28	999	-.9	-8.5	29	7.6
850	28	1,456	-.9	-10.1	28	10.4
800	28	1,939	-2.6	-13.5	28	13.0
750	28	2,449	-3.8	-16.5	28	14.8
700	28	2,993	-6.0	-18.6	27	17.5
650	28	3,567	-9.0	-22.1	27	19.8
600	28	4,186	-12.2	-25.1	27	24.0
550	28	4,844	-16.7	-28.3	27	26.9
500	28	5,556	-21.3	-31.0	27	30.6
450	28	6,323	-26.5	-35.5	26	34.5
400	28	7,168	-31.9	-39.6	26	38.0
350	28	8,099	-38.0	-44.3	26	41.4
300	28	9,146	-44.9		26	45.5
250	28	10,346	-51.7		27	46.6
200	28	11,778	-55.2		27	46.4
175	28	12,631	-55.1		27	43.0
150	28	13,611	-57.3		27	40.3
125	27	14,752	-60.2		27	35.4
100	27	16,136	-62.3		27	29.5
80	27	17,513	-62.2		27	23.2
70	27	18,338	-61.7		27	18.3
60	27	19,294	-60.9		27	14.1
50	27	20,431	-59.4		28	11.0
40	27	21,833	-57.3		28	10.7
30	27	23,658	-55.5		29	8.3
25	26	24,820	-54.2		30	8.5
20	24	26,252	-52.9		30	8.6
15	24	28,116	-50.7		29	9.7
10	20	30,788	-47.4		28	16.8
7	13	33,152	-44.6			
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GUAM, MARIANA IS. — 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	111	24.3	22.3	08	4.4
1000	28	106				
950	28	555	21.9	19.6	08	11.3
900	28	1,024	19.4	16.0	09	11.2
850	28	1,515	16.8	11.7	09	10.3
800	28	2,031	14.7	6.3	09	8.8
750	28	2,574	12.6	-1.6	08	8.5
700	28	3,152	10.1	-8.1	08	8.7
650	28	3,763	7.0	-12.3	08	6.8
600	28	4,418	3.2	-16.5	08	6.3
550	28	5,114	-1.0	-19.6	09	5.0
500	28	5,872	-5.5	-23.9	09	5.0
450	28	6,689	-9.9	-29.3	11	5.4
400	28	7,592	-15.7	-33.9	10	5.0
350	28	8,586	-22.4	-39.7	08	4.1
300	28	9,699	-30.7	-46.7	11	3.0
250	28	10,966	-41.0		14	2.1
200	28	12,442	-53.2		17	3.6
175	28	13,288	-60.2		17	4.1
150	28	14,232	-67.8		16	4.3
125	28	15,304	-76.3		14	5.8
100	26	16,571	-81.7		11	8.6
80	24	17,820	-80.5		09	6.9
70	23	18,581	-75.8		08	3.8
60	23	19,485	-70.6		32	1.1
50	23	20,581	-65.1		26	3.5
40	23	21,955	-60.6		27	5.1
30	23	23,764	-56.3		29	2.9
25	23	24,927	-54.0		03	1.1
20	23	26,370	-50.5		08	4.0
15	22	28,267	-46.6		07	10.1
10	21	30,983	-41.6		08	18.4
7	13	33,398	-40.0			
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HILO, HAWAII — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	11	19.6	17.1	24	2.7
1000	28	154	20.8	17.3	23	1.7
950	28	596	17.4	15.3	11	2.3
900	28	1,057	14.1	12.3	10	2.8
850	28	1,538	11.4	9.2	10	3.8
800	28	2,044	9.3	2.7	10	3.9
750	28	2,583	8.2	-4.2	10	4.7
700	28	3,146	6.1	-11.0	09	3.6
650	28	3,749	3.3	-14.5	07	3.6
600	28	4,395	-.2	-17.6	06	2.4
550	28	5,083	-4.7	-22.3	02	1.9
500	28	5,829	-9.5	-26.2	34	3.9
450	28	6,631	-15.4	-30.5	33	5.4
400	28	7,515	-21.7	-35.1	31	7.1
350	28	8,484	-29.0	-40.9	32	8.6
300	28	9,567	-37.5	-48.5	32	13.0
250	28	10,801	-46.6		32	18.2
200	28	12,252	-55.6		31	22.8
175	28	13,093	-60.3		30	22.2
150	28	14,043	-64.9		31	19.5
125	28	15,141	-70.2		32	14.5
100	28	16,452	-74.2		33	11.6
80	26	17,750	-75.3		35	5.8
70	26	18,526	-73.1		01	3.8
60	26	19,439	-68.5		03	2.7
50	25	20,546	-64.2		10	1.4
40	25	21,926	-59.2		02	.6
30	25	23,745	-55.3		36	1.6
25	24	24,914	-53.7		35	1.7
20	24	26,358	-50.8		34	1.5
15	23	28,248	-47.0		01	.3
10	20	30,968	-42.7		16	1.5
7	14	33,376	-40.3		16	1.1
5	6	35,673	-38.5			

HUNTINGTON W. VA. — 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	246	-3.0	-8.2	25	1.9
1000	28	160				
950	28	567	-3.5	-8.3	25	6.0
900	28	993	-5.5	-10.2	26	[illegible]
850	28	1,442	-5.8	-11.4	27	11.3
800	28	1,916	-6.9	-14.1	28	13.5
750	28	2,420	-8.7	-16.8	28	14.9
700	28	2,952	-10.5	-19.8	27	17.8
650	28	3,518	-13.3	-22.6	27	20.4
600	28	4,125	-17.0	-25.7	27	22.5
550	28	4,773	-20.5	-30.6	27	25.0
500	28	5,474	-24.9	-34.0	27	29.2
450	28	6,231	-29.9	-37.3	27	32.5
400	28	7,063	-35.4	-41.6	27	36.4
350	28	7,982	-40.9	-43.6	27	41.5
300	28	9,017	-46.5		26	44.1
250	28	10,214	-51.5		27	46.8
200	28	11,651	-53.3		27	45.9
175	28	12,512	-53.3		27	43.9
150	28	13,502	-54.7		27	39.9
125	28	14,661	-57.3		27	35.8
100	28	16,063	-59.4		27	29.7
80	28	17,457	-60.0		27	24.2
70	28	18,292	-58.6		27	19.7
60	28	19,262	-58.8		27	16.0
50	28	20,408	-57.9		28	12.7
40	28	21,819	-56.4		29	9.9
30	28	23,654	-54.6		30	7.6
25	28	24,822	-54.1		30	7.7
20	25	26,246	-52.5		29	7.6
15	21	28,119	-50.2		29	9.0
10	13	30,789	-48.0		29	13.1
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* INTERNATIONAL FALLS, MINN. — 974 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	360	-22.7	-28.4	33	1.0
1000	28	161				
950	28	543	-20.0	-24.7	30	1.1
900	28	943	-17.4	-21.2	30	3.5
850	28	1,372	-16.9	-22.7	30	5.7
800	28	1,827	-16.9	-23.4	30	7.8
750	28	2,309	-17.7	-25.4	30	9.9
700	28	2,825	-19.8	-27.8	30	11.6
650	28	3,369	-22.6	-31.0	30	14.0
600	28	3,956	-25.7	-32.7	31	15.6
550	28	4,575	-29.3	-36.0	30	18.0
500	28	5,258	-33.4	-38.4	30	20.4
450	28	5,988	-38.0	-41.0	30	22.6
400	28	6,794	-43.3	-44.6	30	24.4
350	28	7,682	-48.8		30	26.6
300	28	8,684	-53.4		30	28.5
250	28	9,853	-54.5		30	26.9
200	27	11,287	-52.2		30	27.0
175	27	12,154	-51.0		30	26.4
150	27	13,157	-50.9		30	26.6
125	27	14,343	-51.3		30	24.8
100	27	15,789	-52.2		30	24.4
80	27	17,230	-52.9		30	22.3
70	26	18,094	-52.9		30	19.8
60	26	19,088	-53.4		30	18.8
50	26	20,261	-53.5		30	18.2
40	26	21,696	-53.6		31	15.9
30	26	23,542	-54.0		31	16.7
25	26	24,711	-54.4		31	15.3
20	26	26,149	-53.9		32	13.5
15	16	28,062	-51.4		32	11.4
10	10	30,791	-46.7		33	8.3
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JACKSON, MISS. — 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	94	4.0	.6	34	1.0
1000	28	170	4.4	-1.1	35	.9
950	28	590	4.4	-3.1	29	2.3
900	28	1,029	4.2	-4.6	28	5.6
850	28	1,493	3.8	-7.7	27	8.2
800	28	1,985	2.2	-10.0	27	9.6
750	28	2,502	.6	-11.9	27	11.6
700	28	3,056	-2.0	-14.7	27	14.1
650	28	3,639	-5.5	-18.1	27	16.3
600	28	4,266	-9.2	-20.7	27	18.8
550	28	4,930	-13.3	-24.2	27	21.7
500	28	5,653	-17.9	-29.0	27	24.3
450	28	6,427	-23.0	-33.4	27	28.3
400	28	7,287	-28.9	-38.9	26	32.5
350	28	8,230	-35.5	-45.3	26	37.8
300	28	9,285	-43.2		26	43.8
250	28	10,491	-50.7		26	48.5
200	28	11,924	-56.5		26	49.9
175	28	12,770	-57.1		27	46.5
150	27	13,738	-59.4		26	44.2
125	27	14,871	-62.7		27	37.6
100	26	16,235	-66.1		27	30.3
80	25	17,579	-67.0		27	21.5
70	24	18,385	-66.4		27	16.5
60	24	19,322	-64.2		28	12.2
50	24	20,442	-61.5		29	6.6
40	24	21,833	-59.0		30	4.8
30	23	23,639	-56.7		34	3.0
25	23	24,798	-55.0		34	3.1
20	23	26,232	-52.3		32	3.4
15	21	28,105	-49.5		30	6.3
10	19	30,780	-45.4		28	10.7
7	6	33,131	-42.4			
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* JACKSONVILLE, FLA. — 1021 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	8.4	6.0	32	2.1
1000	28	176	10.5	5.5	30	2.3
950	28	605	9.4	3.0	27	3.7
900	28	1,051	7.9	-1.0	26	6.4
850	28	1,522	6.8	-4.0	27	9.3
800	27	2,019	5.4	-7.0	27	11.2
750	27	2,544	3.2	-11.3	26	13.2
700	27	3,102	.6	-14.3	26	16.5
650	27	3,691	-2.6	-16.4	26	19.2
600	27	4,325	-5.8	-20.0	26	21.2
550	27	4,994	-9.9	-23.5	26	23.9
500	27	5,730	-14.6	-27.4	26	27.2
450	27	6,513	-20.1	-31.8	26	30.4
400	27	7,382	-26.4	-36.4	26	33.4
350	27	8,334	-33.4	-42.5	26	36.9
300	27	9,399	-41.2		26	41.8
250	26	10,624	-48.8		27	44.1
200	23	12,063	-56.2		27	47.9
175	23	12,908	-58.1		27	48.1
150	23	13,873	-60.7		27	46.9
125	23	14,999	-64.8		27	40.5
100	23	16,348	-68.4		27	33.3
80	22	17,682	-69.2		27	23.3
70	21	18,477	-68.4		27	19.7
60	20	19,405	-65.8		27	14.6
50	20	20,523	-61.8		28	8.2
40	20	21,914	-58.2		28	6.5
30	19	23,743	-54.8		31	2.9
25	19	24,913	-53.1		29	2.5
20	19	26,357	-50.8		27	4.8
15	18	28,246	-46.8		27	7.5
10	15	30,963	-42.2		26	16.1
7	8	33,398	-39.7			
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JOHN F. KENNEDY INT. AP., NY — 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	-2.8	-8.5	32	2.5
1000	28	130	-3.7	-9.3	31	3.8
950	28	537	-4.9	-9.9	29	6.3
900	28	959	-6.0	-11.6	29	7.7
850	28	1,406	-6.9	-13.0	29	10.3
800	28	1,878	-8.3	-15.0	28	12.7
750	28	2,381	-9.5	-16.8	27	15.0
700	28	2,909	-11.9	-18.8	27	17.9
650	28	3,475	-14.6	-20.9	27	21.7
600	28	4,077	-17.9	-24.1	27	25.2
550	28	4,725	-21.7	-27.9	27	28.4
500	28	5,419	-26.1	-32.3	26	32.8
450	28	6,175	-31.0	-37.6	26	36.3
400	28	7,001	-36.2	-42.7	26	42.6
350	28	7,916	-42.0	-47.2	26	46.8
300	28	8,946	-48.0		26	46.6
250	28	10,134	-52.7		27	44.6
200	28	11,566	-54.1		27	41.8
175	28	12,424	-53.4		27	40.3
150	28	13,416	-53.6		27	34.4
125	28	14,582	-55.5		27	30.9
100	28	15,996	-57.5		27	27.1
80	26	17,403	-58.1		27	22.3
70	26	18,243	-57.8		27	19.8
60	26	19,218	-57.0		27	18.8
50	26	20,373	-56.4		27	14.0
40	25	21,790	-55.5		28	12.3
30	22	23,632	-54.6		27	10.1
25	21	24,806	-54.0		28	8.0
20	19	26,237	-53.1		28	7.2
15	19	28,098	-50.9		27	9.4
10	15	30,723	-48.4			
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JOHNSTON IS., PACIFIC AREA — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	3	23.8	19.8	09	5.3
1000	28	127	23.0	19.2	09	6.5
950	28	574	19.3	17.1	09	7.6
900	28	1,037	16.0	13.1	09	7.6
850	28	1,522	13.7	7.7	09	6.9
800	28	2,032	11.9	.4	10	5.6
750	28	2,575	9.8	-4.1	11	4.8
700	28	3,142	7.2	-10.3	13	2.9
650	28	3,744	4.5	-14.2	12	2.5
600	28	4,396	1.1	-17.8	12	2.9
550	28	5,087	-2.9	-21.3	07	1.0
500	28	5,840	-7.5	-25.8	34	2.0
450	28	6,645	-13.2	-29.5	32	3.3
400	28	7,539	-19.5	-34.6	32	3.9
350	28	8,518	-26.4	-40.1	33	7.4
300	28	9,614	-34.3	-47.3	33	9.9
250	28	10,866	-43.2		33	15.8
200	28	12,334	-53.7		33	17.8
175	28	13,182	-59.3		32	15.4
150	28	14,132	-65.9		32	14.7
125	28	15,220	-72.7		32	12.7
100	28	16,510	-78.4		33	7.7
80	28	17,777	-79.0		02	5.2
70	28	18,540	-76.3		04	4.2
60	25	19,440	-70.7		09	1.2
50	25	20,575	-65.6		24	1.1
40	25	21,909	-59.9		25	2.6
30	25	23,636	-55.3		30	3.0
25	25	24,894	-53.3		34	2.7
20	24	26,337	-50.3		04	2.4
15	23	28,233	-46.5		08	3.9
10	21	30,950	-42.3		10	8.5
7	15	33,349	-40.6			
5	5	35,635	-39.0			

KEY WEST, FLA. — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	3	19.6	16.0	07	1.8
1000	27	164	18.7	14.8	09	2.5
950	27	600	15.9	11.5	13	2.1
900	27	1,061	13.5	8.3	19	2.6
850	27	1,540	10.9	5.3	22	3.9
800	27	2,046	10.3	1.7	23	5.1
750	27	2,581	8.3	-1.0	24	5.8
700	27	3,149	5.6	-4.5	25	7.1
650	27	3,746	2.5	-7.8	25	8.1
600	27	4,395	-.9	-11.5	26	10.2
550	27	5,076	-5.1	-15.1	26	12.1
500	27	5,827	-9.9	-19.9	26	14.5
450	27	6,622	-15.6	-25.7	26	15.8
400	27	7,510	-22.1	-31.8	26	18.6
350	27	8,478	-29.7	-38.5	26	21.3
300	27	9,558	-38.5	-45.9	26	23.4
250	27	10,786	-47.4		26	27.7
200	27	12,235	-55.1		26	33.0
175	27	13,080	-59.1		26	33.8
150	27	14,038	-63.1		26	34.5
125	27	15,146	-68.4		27	30.4
100	26	16,464	-73.8		26	23.0
80	26	17,764	-74.4		26	13.8
70	25	18,540	-73.7		26	9.4
60	24	19,447	-70.5		26	5.6
50	22	20,540	-66.2		28	3.0
40	22	21,916	-59.8		27	1.3
30	21	23,744	-54.5		01	1.5
25	21	24,917	-52.7		29	1.1
20	18	26,364	-50.0		28	3.8
15	15	28,276	-45.1		26	6.3
10	[illegible]	31,019	-41.3			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1967

KING SALMON, ALASKA — 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	15	-9.7	-13.7	09	1.6
1000	28	29			06	1.0
950	28	427	-7.3	-11.2	09	1.9
900	28	848	-8.1	-12.5	16	1.6
850	28	1,291	-9.7	-15.7	21	3.5
800	28	1,758	-11.8	-18.7	22	4.3
750	28	2,249	-14.5	-21.4	22	5.9
700	28	2,769	-17.8	-24.8	23	6.0
650	28	3,315	-21.2	-27.4	23	6.5
600	28	3,907	-25.1	-31.3	23	7.4
550	28	4,529	-29.0	-36.4	23	8.1
500	28	5,210	-33.4	-40.7	23	9.5
450	28	5,936	-38.3	-43.1	24	11.2
400	28	6,744	-43.4	-44.8	25	11.2
350	28	7,634	-48.0		25	11.6
300	28	8,641	-51.4		25	13.7
250	28	9,827	-50.5		25	13.8
200	26	11,289	-48.2		25	12.8
175	26	12,170	-47.8		25	13.8
150	26	13,188	-47.3		25	14.2
125	25	14,397	-47.2		25	13.9
100	25	15,871	-48.2		25	14.5
80	25	17,338	-48.5		25	14.6
70	25	18,216	-48.4		25	12.7
60	25	19,231	-48.8		25	12.4
50	25	20,431	-48.3		25	12.4
40	25	21,902	-48.4		26	12.0
30	25	23,795	-48.5		26	11.4
25	24	24,993	-48.5		27	11.5
20	24	26,460	-48.7		28	12.2
15	22	28,367	-48.6		28	13.3
10	18	31,021	-47.5		27	16.7
7	6	33,449	-42.4			
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• KOROR, CAROLINE IS. — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	30	27.3	24.1	09	2.8
1000	28	84	26.8	23.6	08	3.6
950	28	531	23.4	19.7	08	7.1
900	28	1,008	20.5	15.6	08	7.5
850	28	1,502	18.0	11.6	09	7.4
800	28	2,020	15.8	6.7	08	7.3
750	28	2,565	13.6	1.4	09	6.6
700	28	3,145	10.5	-2.6	09	6.5
650	28	3,756	6.8	-5.9	09	8.1
600	28	4,413	3.0	-9.5	09	8.4
550	28	5,110	-.9	-13.1	09	8.3
500	28	5,869	-5.3	-18.3	10	8.0
450	28	6,688	-10.1	-23.2	10	8.9
400	28	7,590	-15.7	-29.2	10	9.5
350	28	8,584	-22.6	-35.5	10	9.3
300	28	9,697	-31.0	-43.1	11	10.4
250	28	10,963	-41.2		12	10.9
200	28	12,439	-53.5		12	15.0
175	28	13,284	-60.6		11	15.2
150	27	14,226	-68.4		11	15.4
125	27	15,297	-76.3		10	17.6
100	26	16,560	-81.5		10	13.7
80	26	17,828	-77.1		07	3.9
70	26	18,602	-72.1		31	1.8
60	26	19,521	-67.0		27	5.3
50	26	20,634	-62.2		27	8.5
40	26	22,026	-58.5		27	8.1
30	25	23,847	-55.5		27	6.8
25	23	25,011	-53.8		27	4.5
20	21	26,453	-50.6		07	.5
15	18	28,347	-47.3		09	11.3
10	15	31,027	-43.7			
7	5	33,492	-39.7			
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KOTZEBUE, ALASKA — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	-19.7	-22.9	10	5.2
1000	28	74			09	4.0
950	28	464	-14.3	-17.7	10	7.5
900	28	872	-13.6	-18.1	11	5.8
850	28	1,307	-14.4	-18.9	11	4.0
800	28	1,765	-15.7	-21.1	13	3.0
750	28	2,251	-18.0	-24.1	12	2.7
700	28	2,763	-21.0	-27.0	13	2.0
650	28	3,305	-24.5	-30.8	11	1.8
600	28	3,885	-28.5	-34.8	12	1.1
550	28	4,499	-32.8	-39.3	12	.7
500	28	5,167	-37.4	-42.9	24	.4
450	28	5,884	-42.5	-45.7	28	2.0
400	28	6,675	-47.7		25	3.9
350	28	7,547	-52.1		25	5.0
300	28	8,537	-55.9		26	5.4
250	28	9,694	-55.9		25	8.0
200	28	11,124	-53.2		24	12.2
175	28	11,987	-51.9		24	14.5
150	28	12,987	-51.3		25	16.0
125	28	14,172	-51.1		25	18.2
100	28	15,624	-50.6		25	21.9
80	27	17,083	-50.5		25	24.2
70	26	17,950	-50.4		25	26.1
60	26	18,955	-50.5		26	26.8
50	26	20,146	-50.2		26	29.5
40	26	21,603	-50.2		26	30.0
30	25	23,480	-51.0		26	34.2
25	24	24,668	-51.4		27	35.6
20	23	26,124	-50.9		27	36.8
15	20	28,026	-50.3		27	41.5
10	9	30,650	-50.5			
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KWAJALEIN, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	4	26.7	22.8	06	8.3
1000	28	94	26.0	22.4	07	8.6
950	28	545	22.5	20.8	07	9.5
900	28	1,015	19.7	16.0	07	8.8
850	28	1,507	16.9	12.7	08	7.9
800	28	2,021	15.1	6.6	09	6.8
750	28	2,566	12.9	.5	09	5.3
700	28	3,145	10.2	-5.5	08	3.9
650	28	3,755	7.4	-10.1	07	4.3
600	28	4,410	3.7	-12.5	09	5.1
550	28	5,110	-.4	-18.5	09	7.0
500	28	5,871	-4.4	-22.2	08	10.0
450	28	6,687	-9.3	-26.7	08	10.0
400	28	7,594	-14.9	-32.7	07	9.3
350	28	8,584	-22.1	-39.3	07	7.3
300	28	9,704	-30.7	-46.1	05	4.2
250	28	10,972	-40.9		05	3.1
200	28	12,448	-53.4		07	2.1
175	28	13,288	-60.2		06	2.6
150	28	14,238	-68.0		05	3.9
125	28	15,305	-76.0		06	5.9
100	28	16,574	-82.6		08	9.0
80	28	17,818	-79.7		09	6.5
70	28	18,582	-74.9		33	1.5
60	28	19,489	-69.8		26	7.6
50	28	20,593	-65.3		27	10.3
40	28	21,959	-61.1		27	10.0
30	28	23,771	-56.8		27	8.6
25	28	24,933	-54.2		28	5.2
20	28	26,376	-50.3		07	2.9
15	28	28,267	-47.4		09	13.1
10	26	30,977	-42.7		09	23.9
7	24	33,400	-39.5		09	25.9
5	10	35,731	-35.2			

LAKE CHARLES, LA. — 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	8.2	5.9	04	1.4
1000	28	169	9.2	4.2	07	1.9
950	28	598	8.4	.3	24	1.0
900	28	1,040	7.2	-3.5	25	3.8
850	28	1,510	6.3	-5.5	27	6.0
800	28	2,006	4.7	-7.8	27	7.8
750	28	2,534	2.7	-11.4	27	10.0
700	28	3,086	.0	-14.4	27	12.3
650	28	3,678	-3.1	-18.3	27	15.3
600	28	4,306	-6.8	-21.5	27	17.8
550	28	4,975	-10.8	-25.6	27	21.3
500	28	5,708	-15.3	-28.4	27	24.7
450	28	6,492	-20.7	-32.6	27	28.2
400	28	7,358	-26.8	-38.3	26	31.4
350	28	8,308	-33.5	-43.6	26	33.3
300	28	9,372	-41.6	-46.6	26	36.6
250	28	10,586	-49.9		26	40.5
200	28	12,021	-56.7		26	44.0
175	28	12,867	-57.7		26	42.4
150	28	13,834	-60.7		26	38.3
125	28	14,958	-64.3		26	34.1
100	27	16,306	-67.6		26	28.2
80	27	17,644	-68.8		27	19.5
70	26	18,444	-68.5		27	14.9
60	25	19,372	-66.1		27	11.1
50	25	20,486	-62.5		29	5.7
40	25	21,871	-59.6		31	2.5
30	24	23,686	-55.8		33	2.7
25	24	24,851	-53.9		31	3.2
20	24	26,291	-51.4		30	4.3
15	23	28,173	-48.5		28	8.0
10	20	30,858	-44.9		27	16.3
7	10	33,260	-41.5			
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LANDER, WYO. — 828 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,696	-5.2	-11.0	22	1.4
1000	28	189				
950	28	596				
900	28	1,030				
850	28	1,488				
800	28	1,967	-2.7	-12.3	20	.3
750	28	2,475	-5.0	-15.2	31	2.2
700	28	3,016	-8.1	-17.7	30	7.1
650	28	3,584	-12.0	-21.2	31	12.7
600	28	4,197	-15.8	-25.2	31	16.1
550	28	4,840	-20.1	-30.2	31	17.8
500	28	5,548	-25.4	-34.5	31	19.4
450	28	6,300	-30.7	-38.5	31	22.2
400	28	7,132	-36.7	-43.5	31	26.4
350	28	8,043	-43.3	-45.0	31	27.8
300	28	9,065	-49.6		31	30.0
250	28	10,243	-55.3		31	29.0
200	28	11,659	-56.3		30	23.1
175	28	12,509	-55.2		29	24.1
150	28	13,494	-55.2		29	22.1
125	28	14,655	-56.3		29	18.9
100	27	16,068	-58.2		29	15.0
80	27	17,473	-59.2		30	10.7
70	27	18,307	-58.1		30	7.9
60	27	19,280	-57.7		30	4.8
50	27	20,435	-56.6		35	4.1
40	27	21,857	-55.6		02	2.7
30	26	23,687	-55.0		03	4.7
25	26	24,855	-54.2		04	6.4
20	23	26,293	-52.8		05	7.5
15	17	28,160	-50.9		04	6.9
10	6	30,796	-48.8			
7						
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4						

* LIHUE KAUAI, HAWAII — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	36	20.6	17.8	07	2.8
1000	28	157	21.1	18.0	07	4.1
950	28	592	17.7	15.9	08	5.9
900	28	1,060	14.5	12.3	08	5.6
850	28	1,542	11.9	7.0	09	5.6
800	28	2,048	10.0	1.4	09	5.4
750	28	2,584	8.7	-7.3	10	3.7
700	28	3,152	6.6	-13.1	12	2.1
650	28	3,751	3.0	-16.5	14	1.2
600	28	4,401	-.5	-19.4	15	.3
550	28	5,083	-4.9	-21.5	31	1.1
500	28	5,834	-10.0	-23.4	28	2.6
450	28	6,634	-15.2	-28.7	29	5.4
400	28	7,520	-21.9	-34.9	30	6.7
350	28	8,487	-29.4	-42.1	30	8.7
300	28	9,569	-37.8	-48.9	31	12.5
250	28	10,800	-46.7		31	20.4
200	28	12,252	-55.1		32	23.2
175	28	13,094	-60.3		31	20.8
150	28	14,044	-64.9		31	19.6
125	27	15,145	-70.2		32	14.8
100	24	16,453	-75.2		32	11.6
80	22	17,744	-75.9		34	6.7
70	22	18,519	-73.5		36	4.9
60	22	19,427	-69.8		04	3.1
50	22	20,528	-64.5		08	2.3
40	22	21,905	-60.2		08	2.5
30	22	23,722	-55.3		06	.9
25	21	24,887	-53.9		02	2.2
20	21	26,326	-51.4		04	2.7
15	21	28,211	-47.1		20	.7
10	19	30,917	-43.6		24	6.0
7	16	33,354	-39.4		24	9.7
5	13	35,690	-33.7			
4	8	37,299	-31.7			

LITTLE ROCK, ARK. — 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	79	.9	-2.9	27	1.0
1000	28	171	1.5	-3.9	27	1.2
950	28	585	1.5	-6.1	28	3.7
900	28	1,021	1.2	-8.1	28	6.4
850	28	1,481	1.2	-10.6	28	8.9
800	28	1,969	.2	-13.4	29	11.4
750	28	2,483	-1.9	-15.5	29	13.1
700	28	3,031	-4.7	-17.5	28	14.8
650	28	3,609	-7.8	-20.4	28	16.2
600	28	4,229	-11.5	-23.1	28	19.2
550	28	4,886	-15.7	-27.2	27	21.4
500	28	5,604	-20.2	-31.7	27	23.2
450	28	6,368	-25.5	-35.9	27	25.5
400	28	7,220	-31.5	-41.3	27	30.3
350	28	8,154	-37.9	-46.4	27	34.2
300	28	9,200	-45.1		27	40.0
250	28	10,399	-51.8		27	45.4
200	27	11,838	-55.5		27	47.0
175	27	12,688	-56.2		27	43.8
150	27	13,666	-57.4		27	40.3
125	27	14,810	-60.4		27	34.6
100	27	16,191	-63.0		27	27.5
80	25	17,555	-64.5		27	20.3
70	24	18,373	-63.0		27	16.1
60	24	19,325	-61.8		28	11.4
50	24	20,456	-60.3		29	8.1
40	24	21,853	-58.0		31	4.4
30	23	23,676	-56.3		32	4.2
25	23	24,837	-54.9		33	4.8
20	22	26,268	-53.2		32	4.2
15	20	28,135	-50.9		30	4.5
10	7	30,768	-47.9			
7						
5						
4						

MCGRATH, ALASKA — 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	103	-19.5	-23.9	06	.2
1000	28	71				
950	28	460	-15.0	-17.5	09	2.3
900	28	867	-12.7	-15.7	10	3.7
850	28	1,304	-12.1	-16.2	11	2.0
800	28	1,767	-13.5	-18.4	13	1.4
750	28	2,253	-16.3	-21.2	17	2.0
700	28	2,772	-19.2	-25.1	19	3.1
650	28	3,313	-23.1	-29.4	20	3.1
600	28	3,901	-27.0	-34.1	21	3.1
550	28	4,518	-30.9	-38.4	21	5.3
500	28	5,194	-35.1	-41.7	21	5.8
450	28	5,919	-39.8	-42.7	22	5.9
400	28	6,719	-44.3		23	8.7
350	28	7,604	-49.2		23	12.0
300	28	8,605	-52.7		24	11.6
250	28	9,783	-52.0		24	14.3
200	28	11,234	-50.0		24	15.5
175	28	12,109	-49.1		25	16.2
150	28	13,122	-48.3		25	17.2
125	28	14,321	-48.6		25	17.7
100	28	15,788	-48.9		26	19.6
80	28	17,254	-49.0		26	20.4
70	27	18,130	-48.6		26	21.0
60	27	19,144	-48.8		26	20.3
50	26	20,344	-48.8		26	21.5
40	26	21,809	-48.7		27	22.5
30	26	23,699	-49.1		27	22.8
25	26	24,893	-49.6		27	24.2
20	24	26,364	-49.6		27	27.0
15	22	28,264	-48.7		28	29.5
10	8	30,915	-48.2			
7						
5						
4						

• MAJURO, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	3	28.2	23.8	07	5.7
1000	28	93	26.9	21.4	07	6.8
950	28	539	22.8	17.3	07	9.4
900	28	1,015	19.8	13.6	08	9.4
850	28	1,507	17.1	10.3	08	8.4
800	28	2,024	15.2	5.4	09	7.3
750	28	2,572	13.1	.3	09	5.9
700	28	3,147	10.1	-4.2	09	4.5
650	28	3,760	6.8	-7.7	08	4.0
600	28	4,414	3.4	-11.6	10	4.8
550	28	5,111	-.6	-16.1	09	7.1
500	28	5,872	-4.4	-21.5	08	9.8
450	28	6,696	-8.8	-26.3	08	10.2
400	28	7,601	-14.4	-31.9	07	9.6
350	28	8,601	-21.1	-37.9	06	8.1
300	28	9,721	-29.5	-44.7	05	4.5
250	28	10,996	-39.7	-52.7	04	3.2
200	28	12,481	-52.2		05	3.2
175	28	13,332	-59.2		05	3.0
150	28	14,281	-66.8		04	5.2
125	28	15,361	-74.5		05	7.0
100	28	16,636	-80.7		07	8.7
80	28	17,896	-78.3		08	5.1
70	28	18,671	-71.3		27	4.0
60	28	19,592	-66.3		27	10.0
50	28	20,711	-61.4		27	13.1
40	28	22,106	-57.9		27	13.3
30	28	23,935	-54.7		27	10.8
25	28	25,104	-53.4		27	6.5
20	28	26,549	-50.6		24	1.9
15	26	28,440	-47.5		09	8.8
10	25	31,149	-41.6		09	22.3
7	14	33,580	-37.1			
5						
4						

• MARCUS IS., N. PACIFIC — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	9	21.4	15.3	05	2.8
1000	27	152	19.4	12.4	06	3.1
950	27	591	15.4	9.0	06	2.2
900	27	1,047	12.0	6.5	15	.4
850	27	1,524	9.3	2.9	24	2.2
800	27	2,026	7.7	-.8	25	4.8
750	27	2,557	6.8	-7.4	26	7.9
700	27	3,123	5.5	-10.6	27	11.9
650	27	3,725	2.6	-13.0	27	14.1
600	27	4,370	-1.1	-17.0	27	17.1
550	27	5,056	-4.9	-22.0	27	20.6
500	27	5,804	-8.4	-25.5	27	22.9
450	27	6,614	-12.9	-30.0	27	25.1
400	27	7,505	-18.5	-34.8	27	28.7
350	27	8,489	-24.8	-40.2	27	31.1
300	27	9,594	-31.6	-46.1	27	35.2
250	27	10,859	-41.1	-53.0	27	35.3
200	26	12,337	-52.4		28	34.0
175	26	13,188	-58.6		27	33.0
150	26	14,140	-65.8		27	30.5
125	26	15,228	-72.3		27	27.0
100	25	16,528	-75.9		26	20.1
80	25	17,809	-77.1		27	13.5
70	25	18,578	-75.2		27	9.2
60	25	19,479	-70.6		28	3.2
50	25	20,581	-63.6		22	.3
40	25	21,970	-58.1		06	2.1
30	25	23,803	-53.1		08	3.6
25	25	24,982	-51.8		11	3.7
20	25	26,435	-49.5		12	2.1
15	25	28,332	-46.0		23	3.8
10	23	31,067	-40.5		26	13.8
7	11	33,514	-38.6			
5						
4						

* MEDFORD, OREG. — 977 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	401	1.1	-.2	25	.2
1000	28	215				
950	28	634	3.0	.0	29	.6
900	28	1,069	4.1	-3.9	20	1.2
850	28	1,534	3.4	-8.6	22	1.9
800	28	2,025	1.6	-12.3	29	3.7
750	28	2,544	-.6	-14.1	30	6.4
700	28	3,092	-3.3	-16.4	30	8.6
650	28	3,673	-6.8	-19.0	30	10.4
600	28	4,296	-10.9	-21.4	30	11.7
550	28	4,956	-15.2	-25.1	30	13.2
500	28	5,674	-20.3	-29.5	30	14.7
450	28	6,438	-25.9	-35.8	30	15.8
400	28	7,290	-32.2	-41.5	30	17.0
350	28	8,218	-39.3	-45.7	30	18.5
300	28	9,256	-47.2		30	20.7
250	28	10,439	-55.7		30	22.8
200	28	11,843	-59.2		30	24.3
175	28	12,684	-57.2		30	23.2
150	28	13,660	-56.9		30	21.7
125	28	14,810	-58.7		30	16.5
100	28	16,201	-61.5		30	14.6
80	28	17,583	-61.1		31	10.4
70	28	18,413	-60.2		32	8.1
60	28	19,378	-58.7		34	5.5
50	28	20,525	-57.6		35	5.0
40	27	21,942	-56.2		01	5.7
30	27	23,778	-54.8		04	6.5
25	26	24,947	-53.8		05	7.9
20	26	26,386	-52.4		06	7.6
15	25	28,258	-50.7		06	8.8
10	24	30,913	-48.3		07	9.9
7	21	33,270	-46.0		07	9.4
5	17	35,543	-43.1		04	10.1
4	6	36,974	-43.6			

MERIDA, MEXICO — 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	11	17.5	16.6	08	2.1
1000	28	162	19.8	16.4	09	5.0
950	28	601	17.9	12.4	11	6.0
900	28	1,065	15.3	9.8	10	4.1
850	28	1,549	12.8	6.2	11	1.2
800	28	2,057	10.9	.9	21	1.6
750	28	2,593	9.5	-6.8	22	2.6
700	28	3,164	6.5	-10.6	27	2.6
650	28	3,766	3.6	-14.5	27	3.4
600	28	4,416	.2	-19.0	26	4.4
550	28	5,100	-3.8	-23.2	26	4.8
500	28	5,855	-8.7	-27.4	26	6.8
450	28	6,659	-14.1	-31.8	26	10.2
400	28	7,549	-20.2	-37.5	26	12.2
350	28	8,523	-28.0	-43.5	25	14.2
300	28	9,610	-37.1	-50.0	27	14.5
250	28	10,844	-46.5		26	17.5
200	28	12,299	-54.8		26	23.0
175	27	13,141	-59.6		26	25.0
150	27	14,097	-63.7		26	23.8
125	27	15,200	-69.7		27	19.9
100	27	16,509	-75.4		28	12.2
80	27	17,796	-76.2		27	7.3
70	27	18,569	-74.3		29	5.3
60	27	19,475	-70.9		29	4.1
50	27	20,565	-66.8		29	3.1
40	26	21,934	-59.1		36	1.8
30	26	23,767	-52.7		04	2.9
25	26	24,949	-50.5		08	2.1
20	26	26,411	-48.1		29	2.7
15	24	28,330	-43.5		26	3.1
10	21	31,078	-41.1		21	2.1
7						
5						
4						

* MIAMI, FLA. — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	4	17.2	13.8	30	.7
1000	27	161	17.8	13.3	06	.5
950	27	601	15.4	9.6	17	1.6
900	27	1,056	12.8	6.9	21	2.4
850	27	1,535	10.1	3.6	22	3.9
800	27	2,038	9.6	-4.8	24	5.5
750	27	2,576	7.8	-7.2	25	6.6
700	27	3,140	4.8	-10.6	27	8.2
650	27	3,735	1.5	-15.1	26	9.3
600	27	4,381	-2.1	-18.5	26	12.9
550	27	5,061	-6.0	-21.8	26	14.8
500	27	5,809	-10.8	-26.2	27	16.5
450	27	6,612	-16.2	-31.6	27	19.2
400	27	7,489	-22.6	-36.3	27	21.8
350	27	8,455	-30.1	-43.4	27	24.0
300	27	9,533	-38.9	-49.8	27	26.1
250	27	10,759	-48.3		27	28.8
200	27	12,203	-55.7		27	34.2
175	27	13,047	-58.8		27	35.5
150	27	14,005	-63.0		27	34.2
125	27	15,113	-68.6		27	30.4
100	25	16,435	-73.3		27	23.6
80	25	17,733	-74.5		27	16.7
70	25	18,510	-73.9		27	12.8
60	25	19,415	-71.2		27	9.7
50	25	20,508	-65.8		28	6.5
40	23	21,881	-59.7		31	2.7
30	21	23,707	-54.7		34	3.0
25	19	24,874	-52.9		30	3.1
20	15	26,324	-49.7		27	6.2
15	14	28,235	-44.7		27	10.9
10	12	30,988	-40.4		25	15.2
7	6	33,476	-36.8			
5						
4						

* MIDLAND, TEXAS — 918 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	874	2.4	-6.7	33	.9
1000	28	172				
950	28	590			30	1.1
900	28	1,032	6.0	-6.1	30	1.1
850	28	1,501	6.4	-8.3	29	4.4
800	28	1,998	5.3	-8.8	29	6.4
750	28	2,523	2.8	-11.3	29	8.0
700	28	3,079	-.3	-13.9	28	9.6
650	28	3,664	-3.8	-17.0	28	11.8
600	28	4,295	-7.8	-20.3	27	14.2
550	28	4,959	-12.2	-24.7	27	17.4
500	28	5,689	-16.9	-29.5	27	19.4
450	28	6,463	-22.9	-34.2	27	22.3
400	28	7,324	-28.9	-39.9	27	27.4
350	28	8,266	-35.6	-45.1	27	31.3
300	28	9,322	-43.3		27	35.6
250	28	10,526	-51.7		27	39.3
200	28	11,955	-56.1		26	39.6
175	28	12,802	-57.3		27	37.3
150	28	13,772	-59.1		27	32.9
125	28	14,905	-62.6		27	28.8
100	26	16,271	-65.5		26	22.5
80	25	17,625	-66.6		27	14.5
70	25	18,433	-65.9		28	10.6
60	24	19,368	-64.6		28	6.3
50	24	20,489	-62.2		29	3.8
40	24	21,875	-59.5		36	1.7
30	24	23,688	-56.7		04	2.7
25	24	24,848	-54.9		02	2.6
20	24	26,281	-52.8		03	2.5
15	21	28,152	-50.0		34	2.6
10	18	30,818	-47.5		28	7.9
7	8	33,203	-44.5			
5						
4						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1967

Standard pressure surface (mb.)	MONTERREY, MEXICO 970 MB						MONTGOMERY, ALA. 1014 MB						* NANTUCKET, MASS. 1013 MB						* NASHVILLE, TENN. 999 MB						NOME, ALASKA 1005 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	26	423	9.4	3.7	32	1.8	28	61	5.2	1.0	35	1.1	28	14	-2.3	-6.0	30	2.1	28	180	-1.0	-4.8	29	.7	26	5	-13.4	-17.1	08	2.9
1000	26	167					28	174	5.8	.7	33	.7	28	117	-3.3	-8.0	30	2.7	28	172			34	1.6	26	40			05	2.1
950	26	602	11.1	4.4	03	1.0	28	595	5.0	-2.3	27	2.7	28	520	-5.1	-8.5	28	4.9	28	583	-1.9	-6.7	26	4.1	26	437	-10.7	-15.3	10	5.2
900	26	1,047	10.8	2.6	11	.4	28	1,035	5.0	-4.8	28	5.7	28	946	-6.8	-11.7	28	7.0	28	1,011	-2.3	-9.4	27	7.5	26	850	-11.1	-16.3	11	4.9
850	26	1,524	10.7	-.1	18	1.0	28	1,501	4.1	-7.5	28	8.4	28	1,392	-7.2	-13.6	27	9.4	28	1,465	-2.4	-11.4	28	9.2	26	1,288	-12.2	-18.2	10	4.7
800	26	2,027	9.5	-3.9	24	2.1	28	1,993	2.6	-9.1	27	12.4	28	1,863	-8.4	-16.3	27	13.0	28	1,947	-3.0	-14.5	28	12.3	26	1,749	-14.4	-20.1	10	3.9
750	26	2,562	7.2	-6.7	26	4.0	28	2,513	.8	-11.6	27	15.0	28	2,363	-10.0	-17.5	26	15.4	28	2,455	-4.9	-16.4	28	14.6	26	2,237	-16.8	-23.2	09	3.4
700	26	3,125	4.2	-9.7	27	6.7	28	3,066	-1.9	-14.0	27	16.5	28	2,893	-12.2	-19.0	26	18.7	28	2,997	-7.4	-18.8	28	16.5	26	2,752	-19.9	-26.5	09	2.8
650	26	3,725	.7	-13.1	27	7.5	28	3,648	-4.9	-17.5	27	19.0	28	3,455	-14.8	-21.4	26	22.9	28	3,571	-10.4	-22.6	28	19.4	26	3,299	-23.4	-30.3	09	2.9
600	26	4,363	-3.6	-16.5	26	10.1	28	4,278	-8.4	-20.4	26	20.7	28	4,060	-18.0	-24.8	26	25.4	28	4,184	-13.6	-25.2	27	22.1	25	3,880	-27.2	-34.4	08	2.8
550	26	5,041	-8.0	-21.1	26	12.4	28	4,943	-12.2	-23.0	26	24.7	28	4,700	-22.1	-29.0	26	27.9	28	4,841	-17.7	-29.0	27	24.3	25	4,499	-31.4	-38.5	09	2.0
500	26	5,779	-13.1	-25.9	25	14.6	28	5,671	-17.0	-26.2	26	28.2	28	5,401	-25.7	-33.4	26	32.5	28	5,549	-22.1	-32.6	27	28.2	25	5,171	-36.0	-42.7	08	1.7
450	25	6,571	-18.5	-31.3	25	19.1	28	6,450	-22.1	-30.9	26	32.4	28	6,152	-30.0	-37.0	26	37.2	28	6,314	-27.2	-35.8	27	31.0	25	5,894	-40.9	-44.1	13	.5
400	25	7,443	-24.7	-35.4	25	22.9	28	7,310	-28.2	-37.1	26	34.5	28	6,987	-35.5	-41.8	26	40.1	28	7,156	-32.9	-41.5	27	34.7	25	6,687	-46.1		24	1.6
350	25	8,402	-31.9	-41.0	25	26.6	28	8,254	-35.3	-43.9	26	37.3	28	7,906	-41.4	-45.2	26	44.9	28	8,083	-39.2	-44.8	26	37.9	25	7,566	-50.9		27	2.3
300	25	9,473	-40.6	-49.8	25	25.9	28	9,311	-42.8		26	42.9	28	8,939	-47.3		26	47.6	28	9,124	-45.7		26	43.5	25	8,561	-54.1		26	4.4
250	25	10,690	-50.0		25	31.5	28	10,520	-50.2		26	46.0	28	10,131	-52.3		26	50.4	28	10,323	-51.6		26	47.5	25	[illegible],730	-53.8		25	7.1
200	25	12,123	-56.9		25	33.9	28	11,956	-55.8		26	47.0	28	11,566	-53.7		26	48.4	28	11,759	-54.1		27	48.0	25	11,174	-50.8		24	9.3
175	25	12,965	-59.4		25	32.0	27	12,800	-56.7		26	44.2	28	12,426	-52.9		26	45.8	28	12,615	-54.4		26	45.9	25	12,045	-49.9		24	11.6
150	25	13,923	-62.5		25	32.3	27	13,771	-59.6		26	41.1	28	13,420	-53.5		26	41.[illegible]	28	13,601	-55.8		26	41.2	25	13,054	-49.3		25	12.8
125	25	15,035	-67.4		25	28.8	27	14,902	-63.0		26	36.4	28	14,589	-54.9		26	36.8	28	14,752	-58.7		26	34.9	25	14,251	-48.7		25	15.2
100	25	16,364	-71.6		25	24.6	27	16,264	-66.0		26	28.8	28	16,010	-56.7		26	30.6	28	16,143	-61.6		27	29.8	25	15,718	-49.0		25	16.9
80	24	17,675	-73.3		25	16.1	26	17,612	-66.9		26	24.3	28	17,419	-57.2		26	26.0	28	17,524	-61.6		27	23.1	25	17,182	-49.1		25	19.2
70	23	18,456	-71.8		26	10.2	26	18,419	-65.9		26	17.7	27	18,264	-57.9		26	24.6	28	18,351	-61.2		27	17.7	25	18,057	-49.1		25	19.8
60	21	19,372	-69.5		25	8.0	25	19,358	-63.4		27	13.5	27	19,235	-57.2		27	20.7	28	19,309	-60.5		28	12.5	25	19,071	-48.7		25	20.5
50	21	20,470	-65.6		26	3.8	25	20,483	-61.2		27	8.0	27	20,389	-56.4		27	18.3	27	20,449	-58.9		28	9.4	25	20,269	-48.6		25	21.9
40	20	21,843	-60.2		27	1.1	25	21,878	-58.1		27	6.4	27	21,808	-55.5		27	15.2	27	21,853	-57.5		29	6.5	25	21,737	-48.9		26	22.3
30	20	23,659	-56.0		24	2.4	25	23,700	-55.3		30	3.4	27	23,643	-54.9		27	12.3	27	23,680	-54.8		30	5.7	25	23,628	-48.8		26	25.1
25	20	24,823	-54.1		27	2.0	25	24,868	-53.4		29	4.1	27	24,808	-54.5		28	11.6	26	24,843	-53.7		31	4.8	25	24,826	-48.9		26	25.7
20	20	26,264	-51.3		25	5.[illegible]	25	26,310	-51.3		29	4.7	26	26,247	-53.3		28	11.9	25	26,280	-52.1		31	4.3	25	26,290	-49.3		26	26.5
15	20	28,151	-47.8		26	11.3	25	28,192	-48.3		28	6.6	24	28,105	-51.7		29	12.0	25	28,152	-49.5		31	4.6	24	28,185	-49.2		26	30.5
10	14	30,850	-43.9				24	30,891	-43.7		27	13.1	21	30,757	-48.2		28	15.3	24	30,819	-46.4		29	8.2	13	30,818	-49.0			
7							21	33,284	-41.3		26	19.6	17	33,087	-45.6		27	21.5	19	33,207	-43.2		27	16.4						
5							17	35,550	-39.0										5	35,507	-38.1									

Standard pressure surface (mb.)	* NORTH PLATTE, NEBR. 917 MB						* OAKLAND, CALIF. 1021 MB						OKLAHOMA CITY, OKLA. 972 MB						OMAHA, NEBR. 969 MB						+ PAGO PAGO, AMERICAN SAMOA 1010 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	848	-6.3	-12.6	32	1.6	28	6	8.1	4.3	04	.7	28	392	1.5	-5.0	18	.5	28	403	-7.7	-12.0	30	2.2	28	5	29.0	24.2	08	3.5
1000	28	164					28	181	9.3	3.4	04	1.3	28	160					28	154					28	94	27.6	22.2	08	4.0
950	28	566			31	4.6	28	605	10.1	-1.9	02	3.4	28	577	2.3	-6.7	20	3.3	28	555	-7.7	-11.7	29	3.7	28	547	23.5	18.4	07	4.3
900	28	995	-3.9	-11.3	31	4.6	28	1,056	9.6	-6.7	01	3.6	28	1,012	3.2	-8.6	25	6.5	28	977	-5.1	-12.1	30	8.3	28	1,018	20.4	15.0	06	5.0
850	28	1,449	-1.7	-11.7	30	11.6	28	1,529	8.1	-10.2	35	2.7	28	1,475	2.6	-11.7	28	7.3	28	1,427	-4.2	-13.2	30	10.3	28	1,511	17.5	11.9	06	4.7
800	28	1,930	-4.0	-13.9	31	13.0	28	2,028	6.0	-13.1	33	3.1	28	1,964	.9	-12.7	27	8.4	28	1,904	-6.3	-15.5	30	12.0	28	2,028	14.9	7.7	06	4.0
750	28	2,438	-6.7	-16.7	31	14.5	28	2,553	3.4	-15.3	33	4.5	28	2,479	-1.2	-14.9	27	11.1	28	2,406	-8.2	-18.9	30	13.4	28	2,576	12.2	4.5	07	3.9
700	28	2,973	-9.5	-19.6	31	16.6	28	3,110	.3	-17.3	32	5.7	28	3,028	-4.2	-17.2	28	12.7	28	2,940	-10.8	-21.4	30	15.5	28	3,149	9.3	.5	07	3.5
650	28	3,540	-13.0	-23.3	30	17.6	28	3,694	-3.6	-19.8	32	5.8	28	3,603	-7.5	-20.7	28	14.3	28	3,501	-14.2	-24.2	30	16.9	28	3,760	6.1	-3.3	08	3.4
600	28	4,148	-17.0	-27.0	30	18.9	28	4,327	-8.0	-23.1	31	6.9	28	4,228	-11.7	-23.9	28	16.1	28	4,109	-17.9	-27.8	29	18.8	28	4,413	2.3	-6.7	08	2.8
550	28	4,793	-21.3	-30.6	30	19.8	28	4,991	-12.9	-25.1	30	8.0	28	4,883	-16.3	-27.5	27	18.4	28	4,751	-22.2	-31.2	29	20.7	28	5,109	-1.6	-12.6	07	2.5
500	28	5,493	-25.6	-34.6	30	22.[illegible]	28	5,718	-17.9	-29.2	29	9.4	28	5,599	-21.1	-31.8	27	21.4	28	5,449	-26.4	-36.3	29	22.6	28	5,867	-5.5	-16.8	10	2.8
450	28	6,242	-30.8	-39.7	30	24.0	28	6,488	-23.5	-35.1	29	11.3	28	6,363	-26.4	-37.5	27	24.2	28	6,198	-31.7	-40.9	29	24.8	28	6,686	-10.2	-22.0	12	2.5
400	28	7,076	-36.7	-44.4	30	25.2	28	7,348	-30.1	-40.4	29	12.9	28	7,209	-32.9	-43.2	27	26.[illegible]	28	7,025	-37.7	-44.4	29	26.7	28	7,586	-16.0	-27.9	15	2.5
350	28	7,987	-43.3	-47.5	30	26.4	28	8,284	-37.5	-46.9	29	14.6	28	8,135	-39.5	-47.7	27	30.7	28	7,934	-43.8	-48.2	28	29.3	28	8,579	-22.7	-34.9	16	3.1
300	28	9,010	-49.7		30	29.1	28	9,330	-45.8		30	16.5	28	9,174	-46.4		27	37.9	28	8,956	-49.5		29	30.0	28	9,691	-31.0	-43.5	20	4.0
250	28	10,189	-54.7		29	29.6	28	10,519	-54.7		30	18.7	28	10,366	-52.7		27	39.2	28	10,137	-53.4		29	31.5	28	10,957	-41.3		20	5.0
200	28	11,614	-54.5		29	30.0	28	11,924	-59.2		30	20.2	28	11,794	-55.5		27	39.6	28	11,572	-53.3		28	32.3	28	12,431	-53.7		21	7.5
175	28	12,473	-53.2		29	28.6	28	12,764	-58.2		29	18.3	28	12,645	-55.6		27	36.2	28	12,434	-52.3		28	30.4	27	13,273	-60.7		21	9.6
150	28	13,466	-53.7		29	27.1	28	13,733	-59.0		30	16.1	28	13,623	-57.3		27	33.1	28	13,431	-52.7		28	29.4	27	14,216	-67.5		20	10.7
125	28	14,633	-55.2		29	24.2	28	14,869	-61.6		30	13.6	28	14,769	-59.7		27	27.5	28	14,603	-54.5		28	25.6	27	15,297	-73.4		20	7.8
100	28	16,049	-57.4		29	19.2	27	16,241	-63.8		30	11.6	27	16,157	-62.5		27	24.1	28	16,024	-56.6		28	22.4	27	16,588	-76.8		18	6.1
80	28	17,453	-58.6		29	15.8	27	17,607	-64.2		31	8.0	26	17,528	-63.6		28	16.8	28	17,436	-57.2		29	18.2	27	17,878	-73.3		12	7.4
70	28	18,291	-58.2		30	13.2	27	18,424	-63.2		32	7.1	26	18,348	-62.5		28	13.1	28	18,280	-57.4		29	14.9	27	18,665	-70.2		10	8.9
60	28	19,264	-57.7		30	10.9	27	19,374	-61.9		34	5.7	26	19,300	-61.2		29	8.7	28	19,253	-57.1		29	11.5	27	19,590	-66.5		09	10.3
50	27	20,419	-57.2		30	9.6	27	20,507	-60.0		01	4.2	25	20,433	-59.7		30	5.4	27	20,406	-56.8		30	10.4	26	20,705	-62.2		09	10.3
40	27	21,834	-56.2		33	6.8	27	21,906	-57.7		05	5.2	25	21,834	-57.9		32	4.0	26	21,824	-55.9		32	9.5	26	22,097	-58.2		08	10.2
30	26	23,668	-55.1		35	5.8	27	23,729	-55.9		06	6.3	25	23,657	-55.7		35	3.8	22	23,670	-54.6		32	7.0	26	23,923	-54.6		08	11.6
25	26	24,833	-54.5		35	6.2	27	24,891	-54.6		06	8.0	25	24,821	-54.3		01	3.8	22	24,837	-54.4		33	6.9	25	25,095	-51.8		09	14.2
20	25	26,269	-53.4		36	5.5	27	26,324	-53.2		07	8.6	24	26,254	-53.1		01	4.4	21	26,266	-54.0		32	9.9	23	26,546	-48.9		09	17.7
15	23	28,135	-51.8		36	6.9	27	28,184	-51.5		08	9.0	23	28,116	-50.8		34	2.7	19	28,122	-51.7		32	11.5	23	28,452	-44.9		09	25.2
10	19	30,789	-48.2		01	6.8	22	30,836	-48.4		07	9.8	18	30,778	-47.7		30	9.4	14	30,762	-50.1		31	9.9	19	31,191	-39.4		09	28.2
7	11	33,134	-46.0		35	7.2	17	33,219	-44.1		07	8.7	6	33,107	-46.6				5	33,192	-46.7				7	33,615	-38.1			
5							7	35,543	-39.8																					

Standard pressure surface (mb.)	* PEORIA, ILL. 994 MB						* PITTSBURGH, PA. 973 MB						+ PONAPE, CAROLINE IS. 1005 MB						PORTLAND, MAINE 1013 MB						* QUILLAYUTE, WASH. 1015 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	200	-7.9	-12.2	24	1.2	28	359	-5.7	-9.6	25	2.8	26	39	28.0	23.6	07	4.1	28	20	-10.8	-16.5	29	1.7	28	58	4.3	3.7	16	1.3
1000	28	151					28	143					26	80	27.5	22.9	07	5.0	28	115			32	1.8	28	174	4.7	3.1	17	2.2
950	28	553	-7.1	-12.5	25	4.5	28	548	-5.9	-9.9	25	5.0	26	525	23.2	18.3	07	8.4	28	515	-9.0	-15.5	26	4.5	28	591	2.7	.2	22	5.5
900	28	973	-6.0	-13.8	28	7.9	28	968	-7.4	-11.7	27	10.2	26	1,004	19.9	14.8	08	9.6	28	930	-10.1	-16.2	27	6.4	28	1,027	.4	-3.6	23	6.9
850	28	1,420	-7.1	-15.7	29	10.3	28	1,412	-8.5	-14.0	27	11.8	26	1,496	17.5	9.7	08	9.2	28	1,370	-11.4	-17.3	27	8.8	28	1,484	-1.4	-6.8	24	7.4
800	28	1,892	-8.3	-18.5	29	12.3	28	1,881	-10.0	-16.2	27	12.5	26	2,013	15.7	4.4	09	8.2	28	1,834	-12.3	-19.0	27	12.0	28	1,967	-2.7	-10.5	25	9.5
750	28	2,394	-10.3	-19.6	28	13.2	28	2,376	-11.7	-18.1	28	14.8	26	2,555	13.3	.1	09	6.3	28	2,325	-13.8	-20.8	27	14.7	28	2,475	-4.6	-12.6	26	11.8
700	28	2,920	-12.9	-22.0	29	15.9	28	2,904	-13.7	-20.3	28	17.8	26	3,137	10.2	-2.6	09	7.0	28	2,849	-15.5	-22.4	27	16.3	28	3,018	-7.2	-14.1	27	14.3
650	28	3,481	-15.5	-25.2	29	18.6	28	3,463	-16.3	-24.0	27	20.1	26	3,746	6.9	-7.5	08	8.2	28	3,405	-18.0	-24.8	27	19.1	28	3,588	-10.5	-18.3	27	16.4
600	28	4,082	-18.8	-28.4	29	20.9	28	4,063	-19.3	-27.2	27	22.4	26	4,405	3.4	-11.3	08	8.1	28	4,001	-21.1	-27.0	26	22.1	28	4,205	-14.2	-21.6	26	17.3
550	28	4,728	-22.5	-31.7	29	23.3	28	4,703	-23.3	-30.1	27	25.1	26	5,099	-1.0	-14.9	09	8.7	28	4,633	-25.2	-31.3	26	24.3	28	4,855	-18.4	-25.7	27	18.7
500	28	5,419	-27.1	-36.1	28	26.6	28	5,397	-27.6	-34.9	27	27.7	26	5,860	-5.3	-20.2	09	9.1	28	5,325	-29.5	-35.6	26	27.5	28	5,565	-23.1	-30.3	27	20.3
450	28	6,165	-32.2	-39.7	28	30.1	28	6,146	-32.4	-39.7	27	31.5	26	6,681	-9.5	-26.4	09	9.9	28	6,066	-34.4	-38.7	26	30.8	28	6,321	-28.6	-35.8	27	20.2
400	28	6,992	-38.0	-44.4	28	31.8	28	6,970	-37.1	-43.2	27	35.4	26	7,584	-14.6	-32.0	09	9.2	28	6,886	-39.0	-42.3	26	35.2	28	7,163	-34.4	-41.7	28	20.0
350	28	7,901	-44.0	-46.1	28	35.6	28	7,882	-42.7	-47.4	27	39.4	26	8,583	-21.3	-37.9	08	7.6	28	7,792	-44.1		26	40.3	28	8,084	-41.1	-44.3	28	22.2
300	28	8,922	-49.8		27	37.3	28	8,910	-47.7		27	42.8	25	9,702	-29.7	-45.5	09	6.0	28	8,815	-49.2		26	41.5	28	9,114	-48.8		28	22.8
250	28	10,103	-53.5		27	38.9	28	10,102	-51.8		27	44.8	25	10,975	-40.2	-53.2	09	5.5	28	10,001	-53.1		26	39.1	28	10,292	-55.8		28	24.1
200	28	11,538	-53.4		27	37.7	28	11,544	-52.2		27	41.5	25	12,457	-52.6		10	4.6	28	11,437	-53.1		26	35.3	28	11,701	-57.6		28	20.0
175	28	12,399	-52.7		27	37.0	28	12,408	-52.1		27	40.3	25	13,306	-59.7		09	4.8	28	12,301	-51.7		26	35.7	28	12,548	-55.4		28	19.1
150	28	13,393	-53.7		27	33.4	28	13,404	-53.2		27	38.0	25	14,252	-67.4		09	6.3	28	13,300	-51.9		26	34.2	27	13,534	-55.1		29	17.0
125	28	14,561	-55.0		28	29.9	28	14,572	-55.5		27	35.1	25	15,329	-75.2		08	8.5	28	14,478	-53.3		26	31.0	27	14,693	-57.0		29	15.9
100	28	15,979	-57.4		28	24.7	28	15,988	-57.4		27	29.6	25	16,598	-82.3		09	12.1	28	15,910	-55.3		26	27.5	27	16,102	-56.2		29	13.2
80	28	17,383	-58.7		28	20.7	28	17,397	-57.0		27	22.3	25	17,851	-78.5		09	6.0	28	17,327	-56.1		26	24.8	27	17,508	-57.6		30	12.1
70	28	18,221	-58.6		28	17.1	28	18,242	-56.9		27	19.5	25	18,623	-72.2		28	2.2	28	18,176	-56.0		26	21.2	27	18,350	-57.5		30	8.7
60	28	19,191	-58.3		29	13.[illegible]	27	19,213	-57.5		27	16.9	25	19,542	-67.0		27	9.6	27	19,157	-56.0		27	20.0	27	19,325	-56.6		31	5.9
50	28	20,341	-57.3		29	11.5	27	20,366	-57.0		27	15.3	25	20,654	-62.5		27	11.7	27	20,315	-56.0		27	18.8	27	20,484	-55.7		31	5.9
40	28	21,753	-56.6		30	9.3	27	21,782	-55.6		28	13.6	25	22,042	-59.0		27	12.4	27	21,737	-54.9		27	15.9	27	21,[illegible]09	-54.3		34	5.4
30	28	23,582	-55.7		31	7.[illegible]	26	23,625	-54.8		29	9.5	25	23,858	-55.9		27	9.1	25	23,568	-54.9		28	14.0	25	23,757	-54.4		36	6.5
25	28	24,746	-54.5		32	8.2	26	24,793	-54.0		30	9.3	25	25,023	-54.0		27	5.5	24	24,728	-55.1		28	15.7	24	24,931	-53.3		01	6.7
20	28	26,180	-53.0		32	7.9	26	26,230	-52.6		30	7.3	23	26,463	-51.0		24	2.5	24	26,154	-54.2		28	15.0	20	26,378	-52.8		01	6.8
15	28	28,042	-51.4		32	8.3	25	28,100	-50.5		30	8.6	23	28,346	-48.0		10	8.7	22	28,023	-52.7		28	17.2	19	28,241	-51.9		02	7.6
10	26	30,702	-47.7		32	8.9	24	30,759	-47.7		29	13.8	20	31,029	-44.7		09	22.3	20	30,648	-50.3		28	19.9	13	30,924	-48.3		04	8.1
7	25	33,070	-44.8		30	12.7	22	33,107	-45.2		28	19.6	16	33,447	-39.0		09	28.8	19	32,978	-47.5		28	23.6	9	33,215	-49.0			
5	11	35,436	-41.5		30	13.9	14	35,311	-42.9		28	34.8	11	35,758	-35.9				13	35,211	-44.6									

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1967

RAPID CITY, S. DAK. 903 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	966	-5.8	-10.7	32	3.4
1000	28	156				
950	28	564			32	4.7
900	28	990			32	4.7
850	28	1,441	-3.0	-11.5	31	10.6
800	28	1,919	-5.3	-14.4	31	14.5
750	28	2,418	-8.1	-17.4	32	15.9
700	28	2,956	-11.5	-19.9	32	16.5
650	28	3,515	-14.9	-22.8	31	17.6
600	28	4,121	-18.6	-27.6	31	18.9
550	28	4,760	-22.9	-31.4	31	20.1
500	28	5,457	-27.5	-34.8	31	21.7
450	28	6,198	-32.8	-38.8	30	22.3
400	28	7,026	-38.9	-43.9	30	22.8
350	28	7,929	-45.3		31	26.7
300	28	8,944	-51.4		31	29.0
250	28	10,119	-54.5		31	29.3
200	28	11,544	-54.9		30	27.9
175	28	12,403	-52.9		30	26.1
150	28	13,398	-53.2		30	24.3
125	28	14,569	-54.5		30	22.4
100	27	15,997	-56.3		30	18.1
80	26	17,413	-56.9		30	16.1
70	25	18,261	-57.6		30	13.6
60	25	19,236	-57.1		31	10.7
50	25	20,391	-56.6		32	10.3
40	25	21,809	-55.7		32	7.5
30	25	23,648	-54.5		33	7.8
25	23	24,816	-54.3		34	8.5
20	22	26,249	-53.8		34	9.0
15	18	28,131	-52.5		35	9.8
10	9	30,794	-48.6			
7						
5						

ST CLOUD, MINN. 979 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	316	-17.1	-21.0	01	1.0
1000	28	150				
950	28	540	-15.0	-18.0	36	1.3
900	28	948	-12.4	-16.2	32	4.0
850	28	1,386	-11.4	-16.9	31	6.4
800	28	1,850	-12.3	-18.3	30	7.8
750	28	2,343	-13.5	-19.0	30	9.7
700	28	2,866	-15.9	-22.1	30	12.2
650	28	3,421	-18.7	-25.4	30	13.7
600	28	4,014	-22.2	-28.2	30	16.9
550	28	4,646	-26.3	-31.6	30	18.4
500	28	5,332	-30.8	-35.8	30	20.0
450	28	6,065	-35.7	-39.6	30	21.4
400	28	6,882	-41.0	-44.4	30	23.2
350	28	7,779	-46.5		30	25.2
300	28	8,791	-51.5		30	27.0
250	28	9,967	-53.8		30	28.8
200	28	11,402	-52.5		29	28.9
175	28	12,268	-51.3		29	27.3
150	28	13,270	-51.3		29	26.2
125	28	14,453	-52.1		29	26.0
100	28	15,893	-53.7		29	23.9
80	28	17,322	-54.4		30	20.7
70	28	18,176	-54.5		30	18.2
60	28	19,163	-54.7		30	16.6
50	27	20,328	-54.9		31	15.1
40	27	21,754	-54.6		31	13.0
30	27	23,593	-54.6		32	13.2
25	26	24,765	-54.1		32	12.2
20	24	26,207	-52.9		33	9.7
15	19	28,077	-52.2		32	11.0
10	8	30,741	-48.2			
7						
5						

ST PAUL IS., ALASKA 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	10	-2.3	-4.7	06	1.4
1000	28	-28				
950	28	377	-4.4	-6.7	26	2.1
900	28	802	-7.2	-9.1	24	1.5
850	28	1,246	-9.1	-12.6	22	1.6
800	28	1,713	-11.5	-16.9	25	2.3
750	28	2,204	-14.3	-21.1	26	2.3
700	28	2,725	-17.7	-24.6	25	2.2
650	28	3,275	-21.0	-27.9	26	2.5
600	28	3,863	-24.9	-31.4	25	4.3
550	28	4,488	-29.1	-36.5	25	4.9
500	28	5,166	-33.7	-40.5	27	6.4
450	28	5,899	-38.7	-43.8	26	7.7
400	28	6,699	-43.4	-47.4	27	8.0
350	27	7,596	-48.4		27	9.4
300	27	8,602	-51.4		27	10.3
250	27	9,786	-51.2		26	10.4
200	27	11,244	-48.8		25	12.8
175	27	12,123	-47.6		25	12.4
150	27	13,144	-46.9		25	14.3
125	27	14,352	-47.0		25	13.6
100	26	15,835	-47.3		24	13.6
80	26	17,310	-47.8		25	12.6
70	26	18,190	-48.0		25	12.3
60	26	19,205	-48.2		24	13.5
50	26	20,407	-47.9		24	12.9
40	26	21,880	-47.6		25	12.4
30	24	23,788	-47.8			
25	23	24,998	-47.7			
20	23	26,470	-48.0			
15	22	28,372	-48.3		24	13.4
10	18	31,036	-48.8			
7	14	33,368	-47.7			
5	5	35,628	-41.8			

SALEM, OREG. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	61	2.8	1.3	19	2.3
1000	28	195	4.9	2.0	20	2.8
950	28	612	4.8	-.1	22	4.8
900	28	1,054	3.4	-3.7	23	6.1
850	28	1,517	1.8	-7.6	26	7.4
800	28	2,004	.0	-9.8	27	8.3
750	28	2,515	-2.4	-12.6	28	9.4
700	28	3,064	-5.4	-14.8	29	11.3
650	28	3,636	-8.6	-16.9	29	13.7
600	28	4,259	-12.2	-20.7	29	15.5
550	28	4,910	-16.8	-25.8	29	16.3
500	28	5,628	-21.8	-30.6	29	16.9
450	28	6,384	-27.5	-34.7	29	18.5
400	28	7,233	-33.2	-40.0	30	20.7
350	28	8,158	-40.1	-45.8	30	21.8
300	28	9,192	-47.8		30	22.4
250	27	10,366	-56.1		30	23.6
200	27	11,771	-58.5		30	23.7
175	27	12,616	-55.9		30	23.8
150	26	13,603	-56.7		30	23.1
125	26	14,754	-58.0		30	20.1
100	26	16,158	-59.2		30	14.3
80	25	17,546	-59.2		31	11.1
70	25	18,383	-58.1		31	9.1
60	25	19,354	-57.5		32	6.7
50	25	20,507	-56.9		34	6.2
40	24	21,926	-55.6		36	5.0
30	24	23,767	-54.0		03	5.2
25	24	24,939	-53.5		04	5.9
20	23	26,377	-52.6		04	7.0
15	19	28,266	-50.2		05	7.4
10	9	30,904	-47.9			
7						
5						

SALT LAKE CITY, UTAH 876 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,288	-.1	-5.6	14	3.0
1000	28	213				
950	28	628				
900	28	1,067				
850	28	1,528	1.3	-8.0	17	3.3
800	28	2,014	-1.2	-10.8	25	3.2
750	28	2,529	-4.7	-13.3	28	5.1
700	28	3,066	-7.7	-17.0	30	8.1
650	28	3,640	-10.7	-21.2	30	10.2
600	28	4,251	-14.5	-25.4	31	12.9
550	28	4,902	-18.5	-29.4	31	16.1
500	28	5,610	-23.1	-33.3	31	18.8
450	28	6,371	-28.2	-37.9	31	22.1
400	28	7,210	-34.1	-43.2	32	23.7
350	28	8,131	-41.1	-46.7	32	24.7
300	28	9,162	-48.6		32	26.3
250	28	10,340	-55.9		31	26.5
200	28	11,753	-56.7		30	25.2
175	28	12,601	-56.1		30	22.5
150	28	13,580	-56.8		30	22.0
125	28	14,731	-58.5		30	19.9
100	28	16,127	-60.2		30	15.9
80	28	17,518	-60.6		30	10.2
70	28	18,348	-60.5		30	8.1
60	28	19,312	-59.0		32	6.3
50	28	20,459	-57.9		33	5.2
40	28	21,869	-56.8		35	5.2
30	28	23,701	-54.8		03	5.7
25	26	24,874	-54.3		04	6.7
20	23	26,302	-53.3		04	7.2
15	22	28,168	-51.2		05	9.4
10	17	30,820	-49.4			
7						
5						

SAN DIEGO, CALIF. 1003 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	124	8.2	5.4	06	1.2
1000	28	150	9.9	5.6	06	1.3
950	28	584	14.1	.1	04	1.2
900	28	1,037	12.2	-3.7	01	1.7
850	28	1,514	10.3	-7.2	01	1.7
800	28	2,017	8.1	-10.3	35	1.9
750	28	2,545	5.4	-12.5	33	3.0
700	28	3,108	2.4	-14.9	34	4.3
650	28	3,695	-1.7	-18.4	33	5.3
600	28	4,335	-6.2	-21.8	33	6.9
550	28	5,000	-11.1	-25.7	33	7.9
500	28	5,736	-16.0	-30.0	32	9.3
450	28	6,511	-21.8	-34.6	31	10.4
400	28	7,378	-28.4	-39.6	31	11.2
350	28	8,322	-35.7	-45.7	30	13.5
300	28	9,375	-44.0		30	15.5
250	28	10,576	-52.6		29	18.0
200	28	11,996	-57.9		27	20.8
175	28	12,837	-58.5		28	18.9
150	28	13,808	-59.4		27	16.0
125	28	14,939	-62.3		28	15.3
100	28	16,307	-64.8		28	12.1
80	28	17,663	-65.5		29	8.3
70	27	18,477	-64.8		30	6.8
60	27	19,420	-63.2		31	5.2
50	26	20,547	-61.7		36	3.5
40	26	21,936	-58.7		05	3.5
30	26	23,755	-56.0		06	4.5
25	25	24,917	-54.5		07	6.0
20	25	26,352	-52.3		06	5.0
15	24	28,220	-50.1		06	4.1
10	24	30,887	-47.0		01	.8
7	18	33,279	-42.8		32	2.7
5	12	35,569	-39.7			

* **SAN JUAN, P. R.** 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	6	21.8	19.1	11	2.3
1000	28	151	22.2	18.8	10	5.7
950	28	593	19.1	16.0	09	7.4
900	28	1,060	16.0	11.7	09	7.0
850	28	1,544	13.3	7.3	08	6.7
800	28	2,053	11.4	.6	09	6.4
750	28	2,588	9.5	-4.5	08	5.7
700	28	3,162	7.7	-9.3	09	4.3
650	28	3,759	4.4	-12.9	09	4.2
600	28	4,416	.8	-18.3	09	3.3
550	28	5,102	-2.9	-22.4	08	2.3
500	28	5,859	-7.7	-27.1	06	2.3
450	28	6,662	-13.2	-31.6	36	1.6
400	28	7,558	-19.8	-36.9	31	3.7
350	28	8,534	-27.2	-42.8	30	5.7
300	28	9,627	-34.5	-49.0	29	12.5
250	28	10,878	-43.3		29	17.8
200	28	12,345	-53.9		29	19.0
175	27	13,191	-59.4		29	17.4
150	27	14,142	-65.3		29	14.4
125	27	15,236	-71.1		29	8.8
100	26	16,538	-76.7		30	3.5
80	26	17,813	-77.8		34	2.0
70	26	18,580	-75.7		01	1.0
60	26	19,481	-70.2		31	1.6
50	26	20,580	-64.7		30	2.3
40	24	21,955	-59.3		34	1.9
30	23	23,779	-53.5		05	2.6
25	23	24,959	-50.5		07	3.2
20	22	26,423	-47.3		10	3.9
15	21	28,336	-43.9		11	5.3
10	17	31,091	-40.8		10	8.8
7	13	33,525	-37.7		10	10.7
5						

SAN NICOLAS, CALIF. 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	174	11.1	4.5	32	3.1
1000	28	156				
950	28	590	14.7	-4.9	02	2.5
900	28	1,045	12.8	-7.4	03	1.8
850	28	1,522	10.7	-10.9	02	2.0
800	28	2,025	8.3	-12.9	01	2.3
750	28	2,555	6.0	-16.4	35	3.0
700	28	3,116	2.5	-19.5	33	3.8
650	28	3,710	-1.7	-22.6	33	4.6
600	28	4,341	-6.4	-25.0	32	6.1
550	28	5,015	-11.5	-29.3	32	7.8
500	28	5,738	-16.6	-32.1	31	8.4
450	28	6,523	-21.4	-36.1	31	10.0
400	28	7,380	-28.2	-41.3	31	10.7
350	28	8,322	-36.2	-47.0	30	12.4
300	28	9,373	-44.8	-54.3	30	13.7
250	28	10,568	-53.9	-62.8	29	17.2
200	28	11,979	-58.6	-67.1	28	19.0
175	28	12,817	-59.1	-68.2	28	16.4
150	28	13,782	-59.8	-69.3	28	15.6
125	27	14,910	-63.1		28	14.1
100	27	16,274	-65.2		28	11.0
80	27	17,630	-65.7		29	7.8
70	27	18,444	-64.5		30	5.5
60	27	19,387	-63.6		30	4.2
50	27	20,511	-61.5		36	2.3
40	26	21,906	-58.3		06	4.0
30	26	23,729	-55.8		06	4.6
25	25	24,893	-54.3		07	6.0
20	25	26,330	-52.2		07	5.9
15	24	28,201	-49.7		05	5.4
10	19	30,881	-46.6		09	3.6
7	5	33,240	-43.7			
5						

* **SAULT STE MARIE, MICH.** 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	221	-15.7	-20.7	01	1.0
1000	28	128				
950	28	518	-14.5	-18.1	31	2.2
900	28	925	-14.8	-17.9	29	5.3
850	28	1,356	-15.6	-20.2	29	7.3
800	28	1,813	-16.7	-21.6	29	8.7
750	28	2,295	-17.5	-22.9	29	10.6
700	28	2,812	-19.7	-25.7	29	12.4
650	28	3,356	-22.2	-28.3	28	14.0
600	28	3,944	-25.2	-31.2	28	16.1
550	28	4,569	-28.7	-34.5	28	18.2
500	28	5,247	-33.2	-38.8	28	19.9
450	28	5,980	-38.1	-40.7	28	21.3
400	28	6,782	-43.2	-42.8	28	22.8
350	28	7,670	-48.5		28	25.6
300	28	8,673	-52.7		28	28.1
250	28	9,848	-52.9		28	29.2
200	28	11,291	-51.3		28	28.7
175	28	12,161	-50.3		28	28.7
150	28	13,166	-50.5		28	29.0
125	28	14,353	-51.1		28	27.6
100	28	15,798	-52.5		28	25.6
80	28	17,237	-53.3		28	23.4
70	28	18,095	-53.4		28	22.1
60	28	19,089	-53.5		29	21.1
50	28	20,259	-54.0		29	19.0
40	28	21,693	-53.5		29	16.6
30	28	23,544	-53.4		30	15.2
25	28	24,717	-53.6		30	14.3
20	27	26,160	-52.2		31	14.4
15	27	28,024	-51.5		30	14.8
10	26	30,662	-49.5		30	17.0
7	17	33,077	-44.9		31	16.7
5						

SHEMYA, ALASKA 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	38	-1.4	-3.4	02	1.7
1000	28	-43				
950	28	364	-3.8	-5.7	30	3.0
900	28	789	-6.9	-8.5	29	3.3
850	28	1,234	-9.5	-12.9	29	3.4
800	28	1,700	-12.5	-17.3	27	3.0
750	28	2,191	-15.6	-21.5	28	2.8
700	28	2,708	-19.0	-26.1	26	3.8
650	28	3,256	-22.5	-29.2	26	4.9
600	28	3,840	-26.2	-32.7	26	5.8
550	28	4,464	-29.7	-35.9	25	7.5
500	28	5,140	-33.9	-38.8	24	10.1
450	28	5,870	-39.2	-42.5	23	10.2
400	28	6,671	-44.2	-48.8	24	9.6
350	28	7,557	-49.1		24	10.8
300	28	8,559	-53.0		24	11.9
250	28	9,734	-53.3		24	15.0
200	28	11,182	-49.6		23	14.9
175	28	12,059	-48.3		24	15.2
150	28	13,077	-47.1		23	17.4
125	28	14,286	-46.7		23	17.7
100	28	15,763	-47.2		23	19.5
80	28	17,239	-47.7		23	19.3
70	28	18,120	-47.6		23	17.8
60	28	19,139	-47.5		23	16.5
50	28	20,344	-47.5		23	15.4
40	28	21,818	-47.5		23	13.8
30	28	23,715	-48.3		23	11.5
25	28	24,915	-48.6		22	11.5
20	27	26,383	-48.5		23	10.2
15	25	28,286	-48.6		22	8.0
10	19	30,992	-47.8			
7	12	33,359	-48.5			
5	6	35,537	-47.9			

* **SHREVEPORT, LA.** 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	79	3.8	[illegible]	04	.5
1000	28	169	4.9	-1.0	10	.4
950	28	593	4.6	-3.4	24	1.6
900	28	1,030	4.7	-6.2	27	4.0
850	28	1,496	4.6	-9.2	28	6.5
800	28	1,988	2.5	-11.4	29	8.7
750	28	2,508	.2	-13.6	28	10.8
700	28	3,059	-2.6	-16.7	28	11.9
650	28	3,643	-5.7	-19.0	28	14.1
600	28	4,267	-9.4	-22.3	27	16.8
550	28	4,934	-13.6	-26.3	27	19.1
500	28	5,654	-17.9	-30.6	27	22.2
450	28	6,433	-23.4	-35.2	27	26.3
400	28	7,286	-29.3	-40.7	27	29.8
350	28	8,226	-36.2	-46.1	27	34.1
300	28	9,279	-43.8		27	38.1
250	28	10,482	-51.4		27	43.1
200	28	11,914	-55.9		26	43.1
175	28	12,760	-56.8		27	40.4
150	28	13,731	-59.4		27	42.3
125	28	14,864	-62.3		27	32.5
100	28	16,230	-65.7		27	26.3
80	28	17,580	-66.1		27	18.2
70	27	18,391	-65.8		28	13.8
60	26	19,329	-64.4		27	13.2
50	25	20,450	-61.6		30	6.4
40	25	21,840	-58.7		31	3.8
30	24	23,658	-56.1		01	3.1
25	24	24,820	-54.5		01	3.1
20	23	26,259	-52.0		35	3.4
15	22	28,130	-49.0		32	3.4
10	21	30,809	-45.4		28	10.8
7	15	33,204	-41.3		26	17.5
5	6	35,491	-38.9			

SPOKANE, WASH. 935 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	717	-.1	-3.5	20	2.8
1000	28	175				
950	28	588			23	6.0
900	28	1,024	1.3	-5.3	23	6.0
850	28	1,483	-.7	-9.7	25	7.3
800	28	1,966	-3.3	-13.1	27	8.0
750	28	2,473	-5.9	-15.8	28	9.3
700	28	3,012	-9.0	-18.6	28	11.5
650	28	3,580	-12.2	-21.7	28	13.3
600	28	4,191	-15.9	-23.4	29	14.6
550	28	4,840	-20.0	-27.4	29	[illegible]
500	28	5,544	-24.7	-31.8	30	19.0
450	28	6,300	-29.7	-35.7	30	21.2
400	28	7,135	-35.3	-40.9	30	23.4
350	28	8,052	-42.1	-45.2	30	26.5
300	28	9,079	-49.2		30	29.5
250	28	10,255	-55.9		30	30.2
200	28	11,668	-56.8		30	29.1
175	28	12,518	-54.6		30	27.0
150	28	13,507	-54.1		30	24.2
125	28	14,673	-55.5		31	21.8
100	28	16,090	-57.0		30	16.3
80	28	17,502	-56.7		31	14.3
70	28	18,348	-56.6		31	11.2
60	28	19,326	-55.6		32	10.2
50	27	20,493	-55.2		32	9.2
40	25	21,921	-53.9		34	8.6
30	25	23,772	-53.9		35	7.0
25	25	24,945	-52.8		35	8.1
20	22	26,393	-52.1		36	7.3
15	19	28,266	-50.1		02	7.5
10	16	30,928	-48.2		03	9.2
7	9	33,318	-46.0			
5						

SWAN ISLAND, W. I. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	10	24.2	20.3	08	3.3
1000	28	131	23.3	19.6	07	4.4
950	28	583	19.9	17.3	08	6.2
900	28	1,043	16.8	13.3	09	5.5
850	28	1,529	14.0	9.0	10	4.3
800	28	2,039	11.5	3.5	11	3.2
750	28	2,583	[illegible]	-.9	11	[illegible]
700	28	3,146	7.1	-8.2	11	3.6
650	28	3,753	4.4	-13.2	09	2.9
600	28	4,401	1.0	-18.0	09	2.2
550	28	5,093	-2.7	-22.3	07	1.8
500	28	5,845	-7.1	-26.0	06	1.5
450	28	6,655	-12.4	-30.5	19	.9
400	28	7,549	-18.8	-35.5	24	2.8
350	28	8,530	-26.2	-41.3	25	8.2
300	28	9,625	-34.9	-48.1	25	14.9
250	27	10,872	-44.2		25	20.1
200	27	12,336	-54.6		24	23.2
175	27	13,180	-59.9		25	22.5
150	27	14,131	-65.0		26	17.2
125	27	15,227	-71.5		26	10.4
100	27	16,524	-77.2		26	3.6
80	27	17,799	-77.5		12	1.0
70	27	18,567	-75.5		18	.6
60	27	19,468	-71.8		30	3.0
50	26	20,556	-66.7		29	3.9
40	26	21,926	-60.5		29	3.8
30	26	23,749	-53.5		01	.9
25	25	24,927	-50.5		04	2.4
20	25	26,389	-47.8		06	3.2
15	20	28,304	-44.3		09	5.1
10						
7						
5						

TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	8	12.2	9.6	05	1.4
1000	28	166	13.5	9.1	07	2.2
950	28	598	12.4	7.1	22	1.7
900	28	1,051	10.5	4.3	25	4.2
850	28	1,527	9.3	.1	25	6.0
800	28	2,029	8.1	-3.5	26	8.6
750	28	2,562	6.3	-7.0	26	11.0
700	28	3,125	3.6	-10.6	26	13.1
650	28	3,720	.3	-14.1	26	14.6
600	28	4,361	-3.3	-17.6	26	16.6
550	27	5,043	-7.3	-21.5	26	19.2
500	27	5,784	-12.1	-25.0	26	22.8
450	27	6,576	-17.6	-30.5	26	25.4
400	27	7,454	-24.0	-35.7	26	29.1
350	27	8,415	-31.0	-41.6	26	31.5
300	27	9,490	-39.3	-48.6	26	36.9
250	27	10,715	-48.4		26	39.4
200	27	12,158	-55.6		26	41.7
175	27	13,003	-57.8		26	41.8
150	27	13,967	-61.4		26	39.2
125	27	15,084	-66.3		26	34.8
100	26	16,425	-70.5		27	27.4
80	25	17,743	-71.6		27	18.6
70	25	18,533	-70.5		27	14.2
60	24	19,450	-68.2		27	10.3
50	23	20,554	-64.0		27	6.2
40	23	21,936	-59.1		30	4.2
30	23	23,758	-54.7		32	3.3
25	22	24,923	-52.5		29	2.5
20	22	26,372	-49.8		28	4.4
15	21	28,272	-45.7		27	10.0
10	19	31,004	-40.8		26	20.2
7	8	33,370	-41.3			
5						

TOPEKA, KANS. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	269	-2.6	-8.4	29	1.3
1000	28	159				
950	28	566	-2.3	-9.3	28	4.1
900	28	996	-1.3	-10.1	28	[illegible]
850	28	1,451	-1.7	-11.9	29	9.3
800	28	1,933	-3.4	-15.0	30	11.6
750	28	2,438	-5.4	-18.0	30	13.7
700	28	2,981	-8.1	-20.4	30	[illegible]
650	28	3,547	[illegible]	-23.5	29	16.7
600	28	4,162	-15.6	-26.8	29	18.5
550	28	4,809	-19.7	-30.0	29	20.8
500	28	5,515	-24.1	-34.2	29	24.0
450	28	6,268	-29.6	-39.2	28	24.3
400	28	7,105	-36.0	[illegible]	28	26.2
350	28	8,020	-42.7	-45.7	28	29.2
300	28	9,046	-49.1		28	30.7
250	28	10,228	-53.6		27	35.2
200	28	11,661	-54.3		28	34.2
175	28	12,519	-53.4		27	33.5
150	28	13,509	-54.4		28	30.4
125	28	14,672	-56.3		28	[illegible]
100	28	16,081	-58.9		28	21.5
80	28	17,477	-59.9		28	16.0
70	28	18,311	-59.4		28	13.9
60	28	19,277	-59.1		29	12.7
50	28	20,422	-58.1		30	8.6
40	28	21,834	-56.5		31	5.3
30	27	23,663	-55.8		33	5.1
25	26	24,830	-54.6		32	6.0
20	23	26,264	-53.2		32	[illegible]
15	21	28,122	-51.2		33	5.7
10	18	30,785	-48.4		33	6.4
7	9	33,197	-44.2			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1967

• TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	2	28.1	23.5	06	5.6
1000	28	91	27.3	21.8	06	7.1
950	28	542	23.5	18.6	07	10.0
900	28	1,015	20.5	14.1	08	10.2
850	28	1,508	17.8	9.8	09	9.1
800	28	2,026	15.7	4.3	09	8.1
750	28	2,572	13.5	.1	09	7.9
700	28	3,151	10.5	-3.9	09	7.5
650	28	3,766	7.3	-7.8	09	8.2
600	28	4,420	3.5	-12.2	09	8.3
550	28	5,115	-.6	-16.1	09	9.3
500	28	5,879	-4.5	-22.5	09	10.3
450	28	6,697	-9.0	-27.2	09	10.3
400	28	7,606	-14.4	-32.5	09	10.6
350	28	8,605	-21.2	-39.1	09	9.4
300	28	9,725	-29.6	-45.4	10	8.8
250	28	10,999	-39.9	-53.6	11	6.9
200	28	12,483	-52.2		12	8.3
175	28	13,333	-59.4		11	8.6
150	28	14,281	-67.1		11	8.2
125	28	15,359	-75.4		09	9.6
100	28	16,627	-82.1		09	13.3
80	28	17,888	-76.7		08	7.3
70	28	18,666	-71.2		08	.3
60	28	19,588	-66.6		27	6.7
50	28	20,704	-62.0		27	9.9
40	28	22,096	-58.3		27	10.2
30	28	23,923	-54.7		27	8.2
25	27	25,095	-52.6		27	5.9
20	27	26,545	-49.6		16	.7
15	27	28,442	-47.0		10	8.9
10	22	31,149	-42.4		09	23.3
7	15	33,570	-38.0		09	27.1
5	6	35,881	-34.6			

* TUCSON, ARIZ. 927 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	789	7.0	-7.7	14	2.9
1000	28	156				
950	28	583			14	2.5
900	28	1,032	11.9	-5.5	14	2.5
850	28	1,508	10.0	-7.2	15	1.2
800	28	2,009	6.8	-9.8	26	1.2
750	28	2,533	3.7	-12.3	28	3.3
700	28	3,093	.5	-14.9	28	4.7
650	28	3,680	-3.2	-19.2	29	6.6
600	28	4,312	-7.4	-22.8	29	8.1
550	28	4,976	-11.8	-26.6	29	9.5
500	28	5,708	-16.9	-30.7	28	12.0
450	28	6,485	-22.2	-34.4	28	13.9
400	28	7,346	-28.6	-40.4	28	16.1
350	28	8,289	-35.6	-45.9	28	17.7
300	28	9,343	-43.5		27	22.6
250	28	10,546	-51.8		27	29.0
200	28	11,973	-56.1		27	28.8
175	28	12,820	-57.3		27	25.7
150	28	13,788	-59.5		27	24.0
125	27	14,924	-62.3		27	20.7
100	27	16,291	-65.4		27	17.5
80	27	17,643	-66.2		27	13.1
70	27	18,453	-65.2		28	10.5
60	26	19,394	-64.2		28	6.7
50	26	20,515	-62.0		30	3.7
40	25	21,905	-59.1		36	2.6
30	25	23,722	-56.1		05	4.2
25	24	24,889	-54.6		05	4.8
20	23	26,323	-52.5		05	4.2
15	22	28,190	-50.1		05	2.8
10	20	30,857	-47.2		32	2.9
7	9	33,249	-42.6			

* VANDENBERG AFB, CALIF. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	100	7.4	4.8	04	1.1
1000	28	165	10.0	4.4	03	1.8
950	28	597	13.6	-2.1	02	3.5
900	28	1,049	12.1	-4.8	01	2.0
850	28	1,526	10.1	-8.8	34	2.1
800	28	2,027	7.6	-11.7	33	2.5
750	28	2,554	5.0	-13.7	33	2.9
700	28	3,116	1.9	-16.5	33	4.2
650	28	3,706	-1.8	-20.1	32	5.4
600	28	4,342	-6.2	-23.3	31	6.2
550	28	5,008	-11.1	-26.7	31	7.4
500	28	5,742	-16.2	-30.2	31	8.6
450	28	6,516	-22.3	-34.3	31	10.2
400	28	7,380	-29.2	-39.8	30	11.7
350	28	8,319	-36.8	-46.1	31	13.1
300	28	9,368	-45.2		30	14.0
250	28	10,561	-54.2		30	16.1
200	28	11,968	-59.5		29	18.7
175	28	12,804	-59.0		29	17.0
150	27	13,765	-59.5		28	15.4
125	27	14,899	-62.0		29	12.7
100	27	16,269	-64.7		29	10.6
80	26	17,625	-64.8		30	8.1
70	26	18,441	-63.9		31	7.1
60	26	19,387	-62.7		33	5.2
50	24	20,516	-60.8		01	3.6
40	23	21,910	-58.3		05	4.1
30	23	23,730	-55.9		06	6.6
25	22	24,892	-54.4		06	6.7
20	22	26,326	-52.8		06	7.2
15	20	28,182	-50.7		06	6.4
10	13	30,827	-48.2			

VICTORIA, TEXAS 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	33	9.4	5.7	01	1.2
1000	28	159	10.7	4.9	08	1.4
950	28	585	9.6	2.9	17	2.9
900	28	1,035	8.6	-.1	20	3.7
850	28	1,507	7.1	-3.7	24	3.7
800	28	2,004	6.0	-7.3	27	5.1
750	28	2,526	4.6	-10.7	28	7.9
700	28	3,091	2.0	-12.3	27	11.0
650	28	3,679	-1.3	-15.2	27	13.6
600	28	4,319	-5.5	-18.7	27	15.5
550	28	4,987	-10.0	-22.5	27	18.4
500	28	5,724	-14.9	-26.2	27	20.8
450	28	6,504	-20.2	-30.9	27	23.6
400	28	7,377	-26.2	-37.2	27	27.0
350	28	8,329	-33.0	-43.2	26	30.3
300	28	9,395	-41.2	-49.6	27	35.0
250	28	10,609	-50.2		27	38.9
200	28	12,042	-56.7		26	42.0
175	28	12,885	-58.5		26	40.7
150	28	13,849	-61.3		26	39.2
125	28	14,970	-65.0		26	31.3
100	28	16,317	-68.5		26	27.1
80	28	17,646	-70.4		27	20.8
70	28	18,439	-69.8		27	15.1
60	27	19,359	-67.3		27	9.4
50	26	20,467	-64.9		28	4.6
40	26	21,842	-60.1		30	1.9
30	26	23,652	-56.6		32	1.9
25	25	24,816	-54.5		32	2.5
20	25	26,253	-51.8		29	4.8
15	23	28,130	-48.7		28	7.5
10	23	30,816	-45.1		27	16.2
7	17	33,224	-41.9		27	20.8

* WAKE IS., PACIFIC AREA 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	24.3	20.5	07	5.8
1000	28	134	23.2	19.8	07	6.6
950	28	578	19.4	17.2	07	6.7
900	28	1,045	16.1	14.1	07	6.3
850	28	1,530	13.3	9.9	08	4.8
800	28	2,039	11.2	5.1	[illegible]	3.5
750	28	2,576	9.8	-3.6	07	1.8
700	28	3,149	8.0	-10.9	35	1.6
650	28	3,754	5.7	-15.3	32	3.2
600	28	4,409	2.6	-19.9	30	5.2
550	28	5,102	-1.2	-22.5	29	6.7
500	28	5,862	-5.9	-26.7	28	8.6
450	28	6,674	-11.2	-29.6	28	10.1
400	28	7,573	-17.5	-34.8	29	11.2
350	28	8,560	-23.9	-41.1	29	13.4
300	28	9,669	-31.6	-47.5	29	14.9
250	28	10,934	-41.1		29	15.3
200	28	12,412	-52.8		29	15.5
175	28	13,260	-59.5		29	15.6
150	28	14,208	-66.7		29	14.4
125	27	15,290	-74.1		29	12.4
100	24	16,572	-79.4		29	7.4
80	21	17,831	-80.4		31	2.5
70	18	18,592	-78.3		35	.8
60	18	19,481	-73.2		21	.7
50	18	20,567	-66.0		23	2.1
40	17	21,938	-60.3		25	2.7
30	16	23,756	-55.0		33	1.0
25	16	24,927	-52.3		05	1.8
20	16	26,381	-49.0		36	.7
15	14	28,276	-46.4		35	1.6
10	12	30,993	-42.0		04	.9
7	10	33,433	-38.0			

* WALLOPS IS., VA. NASA 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	3	-.2	-3.9	32	2.7
1000	27	137	.8	-4.2	31	3.5
950	27	551	.5	-6.1	29	6.6
900	27	983	-.6	-8.6	28	7.3
850	27	1,439	-2.1	-10.7	27	9.2
800	27	1,920	-3.4	-12.7	26	12.4
750	27	2,429	-5.4	-14.9	26	15.4
700	27	2,969	-8.1	-18.2	26	19.3
650	27	3,539	-11.1	-20.8	26	22.4
600	27	4,153	-14.2	-24.7	26	25.6
550	27	4,806	-17.9	-28.6	26	29.0
500	27	5,516	-22.1	-31.6	26	32.4
450	27	6,278	-27.1	-35.5	26	35.2
400	27	7,123	-32.7	-40.2	26	39.4
350	27	8,051	-39.1	-45.2	26	39.1
300	27	9,092	-46.2		27	42.3
250	27	10,287	-52.2		27	43.1
200	27	11,717	-55.2		27	39.1
175	26	12,564	-54.5		27	38.8
150	26	13,550	-55.5		28	35.3
125	26	14,706	-57.9		27	30.2
100	24	16,104	-59.4		27	25.1
80	23	17,492	-60.7		27	22.5
70	22	18,323	-59.8		28	20.4
60	22	19,287	-59.2		28	16.8
50	22	20,430	-58.5		28	14.3
40	22	21,837	-56.9		28	12.6
30	19	23,660	-55.3		29	9.8
25	18	24,820	-54.4		29	9.0
20	18	26,255	-52.5		29	9.3
15	17	28,111	-51.0		28	11.7
10	14	30,779	-46.6		28	19.2
7	10	33,132	-43.6			
5	5	35,304	-41.5			

WASHINGTON DULLES INT. AP 1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	85	-4.8	-8.1	30	2.1
1000	28	140			31	2.9
950	28	548	-2.5	-8.9	29	6.7
900	28	974	-4.1	-10.7	29	8.9
850	28	1,423	-5.0	-12.3	28	11.2
800	28	1,899	-6.7	-14.4	28	13.7
750	28	2,406	-8.4	-16.9	27	15.8
700	27	2,937	-10.6	-19.9	27	19.0
650	27	3,504	-13.1	-22.9	27	20.9
600	27	4,110	-16.3	-26.1	27	23.7
550	27	4,757	-20.1	-29.6	27	26.8
500	27	5,458	-24.6	-34.1	26	31.3
450	27	6,216	-29.5	-38.3	26	35.7
400	27	7,050	-35.0	-42.1	26	40.2
350	27	7,970	-41.0	-44.9	26	44.8
300	27	9,003	-47.1		26	47.2
250	27	10,195	-52.7		26	49.7
200	27	11,627	-54.3		26	48.7
175	27	12,484	-53.8		27	45.2
150	27	13,474	-54.7		26	41.5
125	27	14,633	-57.0		27	37.6
100	27	16,040	-58.5		27	29.0
80	27	17,437	-60.0		26	24.8
70	27	18,270	-59.6		27	21.1
60	26	19,234	-58.7		27	17.2
50	26	20,381	-58.2		27	12.5
40	26	21,791	-56.5		28	10.8
30	25	23,619	-55.6		29	7.8
25	25	24,783	-54.5		29	8.3
20	24	26,217	-52.9		30	8.4
15	22	28,090	-50.9		29	10.5
10	21	30,738	-48.4		28	14.1
7	7	33,054	-46.7			

WINNEMUCCA, NEV. 874 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	1,310	-1.9	-6.6	17	.7
1000	27	222				
950	27	635				
900	27	1,074				
850	27	1,532	2.5	-6.7	19	1.8
800	27	2,021	.7	-10.3	24	3.4
750	27	2,534	-1.6	-13.5	27	4.8
700	27	3,084	-4.6	-16.8	29	6.6
650	27	3,659	-7.8	-21.0	29	8.5
600	27	4,282	-11.3	-23.0	30	9.9
550	27	4,941	-15.5	-26.4	30	12.5
500	27	5,658	-20.3	-30.6	30	14.7
450	27	6,420	-25.8	-35.0	30	16.2
400	27	7,272	-32.3	-40.7	30	18.1
350	27	8,199	-40.0	-43.7	30	19.2
300	27	9,233	-48.2		30	22.3
250	27	10,412	-56.2		30	23.7
200	27	11,816	-58.4		30	23.2
175	27	12,662	-55.6		30	21.9
150	27	13,642	-57.1		30	19.9
125	26	14,788	-59.6		30	18.3
100	25	16,180	-61.5		30	13.9
80	24	17,565	-61.7		31	9.6
70	24	18,393	-60.8		32	7.6
60	24	19,354	-59.7		33	6.0
50	21	20,499	-58.2		35	4.6
40	21	21,911	-56.1		02	4.1
30	21	23,746	-54.8		04	4.9
25	21	24,914	-54.1		04	5.5
20	21	26,351	-52.6		05	5.6
15	20	28,211	-51.8		05	7.0
10	13	30,847	-50.1			

WINSLOW, ARIZ. 854 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,492	-2.6	-14.1	24	.8
1000	28	213				
950	28	628				
900	28	1,067				
850	28	1,525			25	.8
800	28	2,013	2.8	-11.3	32	2.7
750	28	2,532	.1	-13.3	31	3.9
700	28	3,083	-2.9	-16.4	31	5.3
650	28	3,664	-6.4	-20.0	30	7.0
600	28	4,288	-9.8	-23.6	30	9.8
550	28	4,950	-13.8	-27.5	30	11.7
500	28	5,672	-18.7	-32.0	31	13.2
450	28	6,442	-24.6	-36.5	31	14.3
400	28	7,296	-30.8	-41.5	31	16.3
350	28	8,230	-37.9	-46.5	30	19.1
300	28	9,275	-45.7		30	22.3
250	28	10,469	-53.7		29	25.3
200	28	11,890	-56.2		28	26.6
175	28	12,736	-57.4		28	25.2
150	28	13,708	-58.6		29	24.1
125	28	14,848	-60.9		29	20.0
100	28	16,224	-64.2		28	15.9
80	28	17,586	-64.7		29	12.4
70	28	18,402	-63.7		30	9.3
60	28	19,348	-62.7		29	5.5
50	27	20,477	-61.0		32	4.1
40	27	21,873	-58.3		01	3.5
30	25	23,693	-56.1		05	3.8
25	25	24,856	-54.5		05	4.6
20	24	26,292	-52.9		06	4.5
15	19	28,159	-50.8		05	5.6

YAKUTAT, ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	12	-4.1	-5.3	10	2.6
1000	28	26			11	3.0
950	28	437	-1.0	-5.1	11	5.3
900	28	865	-3.8	-7.4	13	5.5
850	28	1,315	-6.5	-10.5	15	5.8
800	28	1,786	-9.5	-13.2	16	6.0
750	28	2,286	-12.5	-16.8	17	6.2
700	28	2,806	-15.6	-20.1	18	6.3
650	28	3,361	-19.1	-24.4	20	6.2
600	28	3,953	-22.8	-27.9	21	6.6
550	28	4,584	-26.9	-31.6	22	7.1
500	28	5,268	-30.8	-36.1	23	8.4
450	28	6,008	-35.6	-38.8	24	10.8
400	28	6,820	-41.1	-41.4	24	12.7
350	28	7,716	-47.1		25	14.1
300	28	8,725	-51.7		25	16.4
250	28	9,904	-52.4		25	18.1
200	28	11,350	-50.9		26	18.3
175	28	12,221	-49.9		26	18.1
150	28	13,230	-49.6		26	19.1
125	28	14,423	-49.9		27	19.3
100	28	15,880	-50.4		27	19.2
80	28	17,333	-50.9		27	18.5
70	27	18,195	-51.0		27	18.4
60	27	19,199	-50.6		28	17.3
50	27	20,387	-50.6		28	16.7
40	26	21,841	-50.4		28	17.9
30	26	23,716	-50.9		29	18.6
25	26	24,902	-51.0		29	19.8
20	25	26,357	-50.8		30	20.1
15	23	28,228	-50.2		30	21.1
10	18	30,886	-48.9		30	26.6
7	7	33,230	-49.5			

• YAP, CAROLINE IS. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	17	27.5	23.6	06	4.7
1000	28	89	26.8	22.9	07	6.2
950	28	534	22.8	18.9	08	10.0
900	28	1,012	19.9	14.5	09	10.3
850	28	1,505	17.6	9.8	09	10.0
800	28	2,022	15.5	4.1	09	8.8
750	28	2,562	13.0	-.8	09	9.4
700	28	3,145	10.4	-4.7	09	9.4
650	28	3,755	7.0	-8.7	09	9.6
600	28	4,412	3.2	-13.4	09	9.6
550	27	5,106	-.5	-17.7	10	9.6
500	27	5,870	-4.9	-20.8	10	7.9
450	27	6,687	-9.9	-25.6	10	8.4
400	27	7,592	-15.5	-31.4	10	8.9
350	27	8,588	-22.3	-37.7	10	9.7
300	27	9,702	-30.6	-44.8	11	9.2
250	27	10,970	-40.8	-51.3	11	9.5
200	27	12,449	-53.1		12	9.4
175	27	13,296	-60.4		12	10.8
150	27	14,238	-68.3		12	10.7
125	27	15,309	-76.8		11	12.7
100	27	16,572	-81.4		10	12.2
80	27	17,834	-77.2		09	6.2
70	27	18,606	-73.0		09	1.0
60	27	19,523	-66.9		27	2.4
50	27	20,636	-62.6		28	6.4
40	27	22,025	-58.5		28	6.9
30	27	23,847	-54.8		27	5.6
25	27	25,016	-52.5		26	2.2
20	27	26,468	-49.7		10	4.6
15	26	28,360	-47.0		09	10.8
10	24	31,082	-41.3		09	21.7
7	19	33,528	-35.9		09	27.1
5	7	35,838	-34.6			

YUCCA FLAT, NEV. 886 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	1,196	-1.1	-10.2	32	1.4
1000	28	211				
950	28	626				
900	28	1,066				
850	28	1,529	5.5	-9.5	36	3.8
800	28	2,022	3.3	-12.1	36	4.3
750	28	2,540	.9	-14.6	35	5.0
700	28	3,095	-1.6	-17.8	33	4.9
650	28	3,676	-5.1	-20.1	32	6.4
600	28	4,306	-9.2	-23.2	32	8.9
550	28	4,964	-14.0	-26.6	32	11.0
500	28	5,689	-19.0	-31.0	32	12.5
450	28	6,458	-24.6	-35.7	32	14.4
400	28	7,312	-30.8	-41.3	32	16.2
350	28	8,245	-38.2	-46.5	31	16.2
300	28	9,288	-46.1		31	18.7
250	28	10,477	-54.3		31	21.6
200	28	11,888	-58.1		30	25.4
175	28	12,733	-56.8		30	22.7
150	28	13,706	-58.4		29	21.6
125	28	14,848	-60.7		30	17.8
100	27	16,227	-63.0		29	16.4
80	24	17,599	-63.2		29	10.2
70	23	18,417	-62.7		30	9.2
60	23	19,369	-61.6		32	6.2
50	23	20,505	-59.4		34	4.3
40	23	21,907	-57.4		04	3.9
30	22	23,730	-55.4		06	5.9
25	21	24,894	-54.1		05	6.3
20	21	26,328	-53.0		05	7.5
15	19	28,190	-50.8		06	8.2
10	12	30,851	-48.9			

YUMA, ARIZ. 1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	19	131	9.1	-9.2	03	1.2
1000	19	153	11.0	-6.6	02	1.8
950	19	587	14.9	-2.5	36	6.0
900	19	1,041	12.4	-4.9	01	6.4
850	19	1,517	9.3	-7.4	01	5.3
800	19	2,017	6.7	-9.9	36	5.3
750	19	2,545	4.3	-12.5	34	5.7
700	19	3,103	1.4	-15.6	33	5.6
650	19	3,689	-2.5	-18.7	32	6.7
600	19	4,324	-6.9	-22.5	32	8.1
550	19	4,988	-11.6	-26.1	32	10.4
500	19	5,720	-17.2	-30.1	32	10.9
450	19	6,488	-22.9	-35.0	30	13.7
400	19	7,353	-29.2	-41.3	30	16.5
350	19	8,292	-36.2	-46.2	29	18.8
300	19	9,344	-44.2		29	19.3
250	19	10,541	-53.2		28	22.8
200	18	11,965	-58.0		27	28.0
175	18	12,805	-58.8		28	25.5
150	17	13,767	-60.2		27	23.8
125	16	14,898	-63.6		28	20.0
100	13	16,268	-66.5		29	15.2
80	11	17,616	-66.7		30	12.2
70	10	18,426	-65.9		31	7.9
60	9	19,362	-63.4			
50	9	20,489	-61.5			
40	9	21,880	-59.0			
30	8	23,700	-56.7			
25	8	24,862	-54.9			
20	8	26,294	-53.1			
15	8	28,161	-50.7			
10	7	30,828	-47.7			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes. Dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

See reference note at end of table

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. FEBRUARY 1967

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Feb. 1	----	----	----	----	----	----	1.22	1.09	0.99
3	1.01	1.12	1.23	1.40	----	----	----	----	.97
4	1.03	1.14	1.26	1.39	----	----	----	1.15	1.03
5	1.08	----	1.43	----	----	----	----	1.16	1.02
6	----	----	----	----	----	----	----	1.08	.94
8	----	----	----	----	----	----	----	1.07	.96
10	1.05	1.16	1.27	1.44	1.50	1.38	1.23	----	----
11	1.02	1.14	1.25	1.41	1.53	1.43	1.32	1.20	1.09
12	1.08	1.18	1.30	1.44	1.51	----	----	1.15	1.04
13	1.04	1.13	----	----	----	----	----	----	----
15	----	----	----	1.41	1.51	1.38	1.18	1.03	.88
16	.93	1.08	1.23	1.40	1.51	----	----	----	----
17	1.02	1.15	1.27	1.43	1.53	----	----	----	----
18	1.05	1.18	1.27	1.43	1.53	1.39	----	----	----
19	1.04	1.16	1.26	1.41	----	----	----	----	----
20	----	----	----	----	1.40	1.24	1.05	.94	.82
21	.88	.99	1.11	1.35	1.49	1.43	1.28	1.16	1.06
22	1.04	1.13	1.25	1.40	----	1.41	1.25	1.16	1.05
23	1.01	----	----	----	----	----	----	1.14	----
24	1.03	1.10	----	----	----	----	----	----	----
27	----	----	----	----	----	1.33	1.13	.96	.84
28	1.01	1.11	1.24	1.40	1.52	1.37	1.24	1.14	1.02
Averages	1.02	1.13	1.25	1.41	1.50	1.37	1.21	1.10	0.98

MADISON, WIS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Feb. 11	S 0.86	S 0.96	S 1.11	S 1.26	----	----	----	----	----
16	S .93	S 1.02	S 1.11	S 1.29	S 1.32	----	----	----	----
25#	S .92	----	----	----	----	----	----	----	----
28#	S .91	S 1.00	S 1.13	S 1.28	S 1.36	----	----	----	----
Averages	0.91	0.99	1.12	1.28	1.34	----	----	----	----

GUAM, M. I.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
			No observation due to cloudiness						

BLUE HILL OBS., MASS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Feb. 3	----	----	----	1.30	1.32	1.27	1.04	0.84	0.70
5	----	----	1.01	1.22	1.28	1.27	1.04	.84	.72
8	1.04	1.13	1.25	1.40	1.42	1.40	1.21	1.06	.94
9	.87	.95	1.10	1.25	1.28	1.21	.99	.79	.62
12	.96	1.07	1.18	1.37	1.44	1.41	1.24	1.13	1.03
13	1.01	1.11	1.20	1.34	1.39	1.32	1.06	.89	.79
22	.89	.99	1.12	1.26	1.34	1.25	----	----	----
25	----	----	----	----	----	1.22	1.06	.93	.82
26	.77	.90	1.06	1.28	1.37	1.25	1.10	.96	.89
27	.89	1.00	1.15	1.30	1.37	----	----	----	----
Averages	0.92	1.02	1.13	1.30	1.36	1.29	1.09	0.93	0.81

TUCSON, ARIZ.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Feb. 1	0.87	0.97	1.10	1.29	1.36	----	----	----	----
3	----	----	1.08	1.24	----	1.13	0.86	0.69	0.55
4	.84	.93	1.05	1.20	----	----	----	----	----
5-6				Pyrheliometer inoperative					
7	----	----	----	----	----	1.13	1.09	.95	.83
8	.92	1.02	1.15	1.29	1.21	1.03	.90	.78	.71
10	----	----	----	----	----	1.28	1.13	.99	.90
11	----	----	1.15	----	1.41	1.27	1.07	.95	.82
12	.96	1.05	----	----	----	----	----	----	----
17-18				Pyrheliometer inoperative					
20	----	----	----	----	----	1.13	.89	----	----
21	.79	.87	1.01	1.20	1.34	1.19	1.01	.89	.79
22	.91	.99	1.11	1.28	1.39	----	----	----	----
27	----	----	----	1.36	1.41	1.28	1.12	1.00	.90
28	----	1.05	1.31	1.40	1.45	1.33	1.19	1.07	.98
Averages	0.88	0.98	1.12	1.28	1.37	1.20	1.03	0.92	0.81

OMAHA, NEBR.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Feb. 2	0.85	0.95	1.10	----	----	----	----	----	----
6	----	HI .90	HI1.03	HI1.21	HM1.20	----	----	----	----
8	HS .87	HS1.02	----	----	----	----	----	----	----
12	----	----	----	----	HS1.33	HS0.81	HS0.58	HS0.37	‡
13	HS .86	HS1.15	HS1.28	HS1.32	HS1.37	HS1.32	----	----	----
14	HS .86	HM1.00	HM1.13	HM1.28	HM1.34	HM1.24	----	----	----
21	HS .84	HS .98	HS1.10	HS1.30	HS1.38	HS1.28	HS1.09	----	----
25	HS .81	HS .97	HS1.06	HS1.26	HS1.34	----	----	----	----
28	HS .64	HM .80	HM .90	----	----	----	----	----	----
Averages	0.82	0.97	1.08	1.27	1.33	1.18	0.84	0.37	----

S Slight haze - indeterminable
‡ Surface-based obstruction
# Doubtful data
* Values corresponding to true solar noon
HS Slight haze
HM Moderate haze
HI Intense haze

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

FEBRUARY 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ANNETTE ALASKA	---	51	12	61	14	134	15	106	48	---	59	75	39	23	108	167	96	83	29	---	72	129	25	16	97	37	144	121				70
APALACHICOLA FLORIDA	437	258	123	325	471	135	157	272	105	393	229	101	---	---	---	---	---	---	---	---	---	---	---	501	540	531	447	186				---
ARGONNE NAT. LAB.	54	277	152	175	73	209	232	252	315	136	351	296	244	315	123	336	258	164	252	346	382	203	200	405	425	346	67	418				250
ASTORIA OREGON	91	104	62	164	236	102	242	97	66	146	108	30	121	152	149	81	45	216	308	281	269	135	275	107	281	232	178	46				154
ATLANTA GEORGIA	268	90	213	291	387	33	313	313	41	271	46	118	427	414	300	206	128	332	192	45	487	210	478	491	510	486	91	470				273
BARROW ALASKA	10	16	23	19	19	15	10	17	25	37	35	46	54	48	55	50	44	26	45	19	52	59	56	39	77	43	53	93				39
BETHEL ALASKA	111	59	54	35	46	61	68	74	52	69	98	125	106	137	71	70	71	79	62	131	87	133	165	188	194	196	115	87				98
BISMARCK N.DAK.	---	216	206	123	251	202	228	272	161	183	300	295	276	196	336	291	235	228	343	372	223	283	328	378	372	290	332	330				268
BLUE HILL MASS.	183	25	284	142	276	78	20	333	308	97	282	358	349	149	270	304	266	171	216	104	83	370	28	400	301	410	389	150				227
BOISE IDAHO	138	195	245	182	296	281	300	233	163	285	227	293	53	307	115	154	178	293	360	366	367	311	364	295	141	375	380	218				254
BOSTON MASSACHUSETTS	137	18	---	---	---	---	---	---	---	---	---	---	---	137	239	268	271	192	207	71	82	357	14	356	335	416	346	151				---
BROWNSVILLE TEXAS	193	191	82	89	164	210	497	190	514	510	496	548	526	531	517	339	419	165	348	213	262	553	554	418	129	358	346	86				337
CANTON ISLAND P.I.	667	694	550	686	679	687	657	651	660	704	678	678	660	719	700	699	698	701	678	551	610	654	620	697	689	685	669	685				668
CAPE HATTERAS N.C.	320	278	136	175	346	203	68	164	33	158	371	227	282	399	396	133	242	35	410	125	282	411	368	476	478	500	367	270*				273*
CHARLESTON S.C.	333	315	152	358	432	75	---	88	34	242	259	123	422	470	460	381	425	51	259	124	303	286	---	520	534	537	236	346				299
CLEVELAND OHIO	---	33	116	51	83	271	227	308	282	192	142	338	271	293	81	209	224	249	198	52	255	204	278	298	361	396	127	234				214
COLUMBIA MISSOURI	69	328	155	356	166	317	362	291	359	348	383	368	387	353	173	167	325	206	300	361	438	361	392	383	453	74	122	456				302
DAVIS CALIFORNIA	275	330	160*	83	337	282	212	129	78	324	208	225	285	394	157	344	363	361	420	423	422	397	349	82	199	405	324	394				284*
DODGE CITY KANSAS	78	314	364	360	190	359	166	402	323	377	397	---	402	316	424	266	415	218	406	437	452	459	440	451	287	347	478	467				355
E. LANSING MICHIGAN	142	229	263	117	123	321	338	270	304	218	267	386	261	298	54	315	313	279	199	285	251	287	349	367	400	436	122	---				266
EL CENTRO CALIF. NPF	289	313	308	313	325	338	334	333	332	325	341	317	325	279	356	307	404	370	362	387	387	340	392	352	259	391	382	395				341
EL PASO TEXAS	455	334	422	465	461	454	446	478	422	487	503	496	489	458	410	489	535	510	412	447	519	558	546	462	309	349	570	583				467
ELY NEVADA	346	349	351	---	---	---	396	405	378	---	407	298	210	160	---	366	312	443	404	466	465	461	454	274	224	357	482	427				367
EPPLEY NEWPORT R.I.	206	84	250	97	282	72	52	324	288	147	299	354	327	211	295	311	144	155	249	97	88	372	49	361	299	405	378	148				227
FAIRBANKS ALASKA	12	29	45	45	33	24	39	51	79	79	142	36	134	---	114	34	66	90	42	49	48	73	123	117	140	172	145	101				76
FORT WORTH TEXAS	175	188	317*	394	371	228	438	407	445	434	62	468	472	443	166	124	239	419	92	412	336	513	507	523	455	95	308	531				341*
FRESNO CALIFORNIA	207	77	228	57	40	224	84	208	84	66	240	307	286	412	364	346	377	387	198	396	407	383	301	168	373	439	383	459				268
GLASGOW MONTANA	202	221	155	111	141	124	220	237	254	218	190	226	166	187	317	169	313	307	231	341	214	342	370	375	344	315	350	295				248
GRAND JUNCTION COLO.	347	350	282	360	280	361	384	382	216	233	388	394	298	150	326	351	407	381	151	455	446	455	442	---	157	239	458	475				340
GREAT FALLS MONTANA	120	128	63	101	257	75	236	158	111	127	142	174	172	150	229	171	269	187	305	311	102	287	302	296	226	291	308	239				198
GREENSBORO N.C.	277	204	291	313	342	143	314	356	50	125	249	393	384	380	---	---	---	150	194	69	---	---	---	---	---	---	---	---				---
INDIANAPOLIS INDIANA	30	137	138	87	165	366	391	340	360	292	359	369	332	345	91	250	296	322	375	191	414	200	243	349	477	438	82	483				283
ITHACA NEW YORK	51	3	206	73	175	269	86	281	205	261	160	220	215	208	210	59	239	273	191	97	83	247	163	262	115	224	113	103				171
LAKE CHARLES LA.	246	245	226	315	106	31	469	388	462	386	300	360	480	329	380	276	91	277	77	261	504	484	467	504	527	452	106	408				327
LAKELAND FLORIDA	255	411	386	320	478	462	333	97	122	471	406	254	233	507	488	430	274	486	433	379	78	283	537	520	590	562	531	343				381
LANDER WYOMING	309	304	248	195	295	321	340	351	335	199	366	363	367	71	402	380	365	356	255	419	378	446	383	375	359	160	430	400				328
LARAMIE WYOMING	296	307	280	264	202	302	321	339	299	158	364	353	361	330	345	350	213	364	289	415	367	405	194	431	288	250	449	433				320
LAS VEGAS NEVADA	330	372	385	386	396	401	403	400	399	377	428	417	346	379	416	434	---	---	394	472	475	459	453	249	425	484	488	458				409
LITTLE ROCK ARKANSAS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	293	---	---	483	110	91	---				---
LOS ANGELES CALIF.	235	363	372	371	353	359	348	365	349	269	350	331	323	308	409	---	435	434	229	454	498	438	465	224	382	481	499	524				377
LOS ANGELES CALIF. U	308	428	406	403	397	415	406	398	372	381	393	397	319	277	463	433	480	431	291	503	578	406	458	228	428	480	509	534				411
MADISON WISCONSIN	87	320	264	223	233	310	341	227	---	246	---	282	268	343	16	380	310	162	160	---	---	330	232	448	481	399	239	466				282
MANHATTAN KANSAS	28	312	287	311	82	231	246	314	238	243	349	349	352	325	282	132	200	224	359	338	379	401	402	417	299	321	401	385				293
MATANUSKA ALASKA	70	73	63	76	65	8	12	50	103	105	147	137	127	131	141	30	103	52	107	89	58	97	117	189	173	205	165	115				100
MEDFORD OREGON	140	132	78	88	97	132	208	267	169	285	183	305	34	215	142	77	110	305	384	391	370	377	380	229	221	312	315	268				222
MIAMI FLORIDA	---	---	---	---	---	---	---	---	273	473	242	247	293	350	338	264	341	280	344	379	226	180	351	402	413	335	229	377				317
MIDLAND TEXAS	375	367	336	378	367	423	369	420	380	420	129	438	433	384	248	360	402	357	140	331	267	472	468	483	411	248	426	---				364
NASHVILLE TENNESSEE	244	31	89	140	362	68	375	395	287	273	308	415	410	362	176	251	69	140	246	39	449	125	368	432	494	398	33	316				260
NEW YORK N.Y. U	115	142	284	78	280	71	28	321	272	194	274	358	220	270	260	338	82	151	226	51	145	335	133	322	211	431	219	262				217
NORTH OMAHA NEBRASKA	30	283	290	301	171	347	138	335	199	355	192	372	386	---	210	268	132	---	367	---	429	318	408	426	446	309	138	413				290
OAK RIDGE TENNESSEE	272	62	133	236	357	52	279	231	126	260	137	421	417	393	85	266	71	410	250	63	421	180	412	442	484	488	84	393				265
OKLAHOMA CITY OKLA.	137	113	260	328	318	306	235	233	325	334	213	355	363	230	294	208	198	384	271	333	336	408	398	403	250	83	366	404				289
PAGE ARIZONA	298	300	312	309	314	316	319	333	252	315	321	314	279	298	350	351	352	321	276	376	379	384	362	266	258	333	389	---				321

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

FEBRUARY 1967

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	380	380	385	402	407	425	428	430	397	428	438	433	359	304	434	378	453	468	441	455	479	480	487	419	243	473	512	508				422
PORTLAND MAINE	112	47	329	104	233	199	42	314	294	117	211	340	340	148	221	250	332	269	316	133	92	350	44	384	369	394	384	186				234
PROSSER WASHINGTON	131	72	146	217	276	252	270	210	150	270	154	195	208	291	241	282	116	221	340	316	335	172	---	249	324	---	313	196				229
RAPID CITY S.DAK.	309	283	227	147	221	246	303	253	324	344	237	336	265	103	388	330	313	305	372	410	199	418	429	436	370	232	414	386				307
RENO NEVADA	---	---	---	288	310	310	308	275	299	302	314	161	265	293	270	341	326	358	328	377	391	357	343	341	230	382	330	333				313
RICHLAND 25 NW WASH.	128	59	90	213	243	227	244	163	158	268	160	236	179	277	237	241	114	175	---	280	320	151	294	243	206	314	287	152				210
RIVERSIDE CALIFORNIA	272	357	371	381	380	397	319	399	364	343	408	276	254	116	319	400	399	372	319	442	444	404	443	224	219	414	444	440				354
RUSTON LOUISIANA	151	43	73	299	234	74	323	362	370	240	111	345	382	348	195	111	---	---	---	---	---	266	402	449	365	152	45	439				251
SAINT CLOUD MINN.	117	215	164	254	278	283	176	176	215	240	314	191	264	174	101	262	229	305	285	344	219	340	359	400	389	323	305	369				260
SALT LAKE CITY	281	---	272	321	271	---	---	709	234	208	347	364	191	59	392	196	168	293	414	455	---	343	401	370	128	176	446	425				311
SAN ANTONIO TEXAS	---	436	139	282	119	200	466	413	462	457	426	485	473	450	373	175	201	318	63	452	446	514	445	---	83	102	77	440				327
SANTA MARIA CALIF.	300	325	338	343	348	346	---	371	386	395	388	376	344	400	390	391	421	423	195	430	454	427	259	234	441	464	478	477				376
SAULT STE MARIE MICH	92	274	216	102	296	298	312	246	300	87	314	356	217	161	91	357	329	258	231	---	343	248	383	368	385	348	146	422				266
SEATTLE TACOMA WASH.	53	39	73	114	219	200	170	118	33	122	62	34*	97	127	107	64	55	145	303	199	282	---	272	199	171	179	218	59				138*
STATE COLLEGE PENN.	102	5	292	131	215	304	176	340	316	319	324	385	214	329	165	347	129	296	231	49	264	320	281	249	282	435	139	275				247
SPOKANE WASHINGTON	62	32	61	193	247	227	256	188	103	257	147	141	64	245	160	213	97	282	265	282	332	220	297	299	134	311	306	91				197
STERLING VIRGINA	207	180	323	316	294	58	192	393	200	---	309	418	374	397	185	400	98	211	192	104	351	368	436	399	279	464	150	289				281
STILLWATER OKLAHOMA	157	110	268	341	---	---	---	---	---	---	---	---	---	---	346	145	208	---	275	343	372	442	412	427	287	60	415	416				---
SWAN ISLAND W.I.	460	476	481	522	521	531	515	482	535	519	516	541	222	459	297	---	---	531	---	531	584	577	593	524	318	389	368	---				479
TAMPA FLORIDA	319	419	304	346	442	438	344	59	123	458	367	---	---	---	491	456	313	479	442	470	53	245	532	517	573	544	524	295				382
TUCSON ARIZONA	388	280	381	354	392	398	405	416	---	---	427	417	379	329	406	296	---	---	---	---	---	---	458	377	168	299	490	501				378
WAKE ISLAND,PACIFIC	309	394	399	399	294	419	268	184	361	385	349	382	415	294	342	---	381	450	446	361	410	314	276	369	366	248	466	449				360

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

FEBRUARY 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-75	-33	-47	-47	-46	-77	-14	42	-55	-84	-89	-93	-90	-93	-42	-18	-34	-43	-73	-29	-20	-25	-65	-126	-87	-28	-10	-47				-52

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

These data are of an experimental nature and are published as received from the Palmer Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

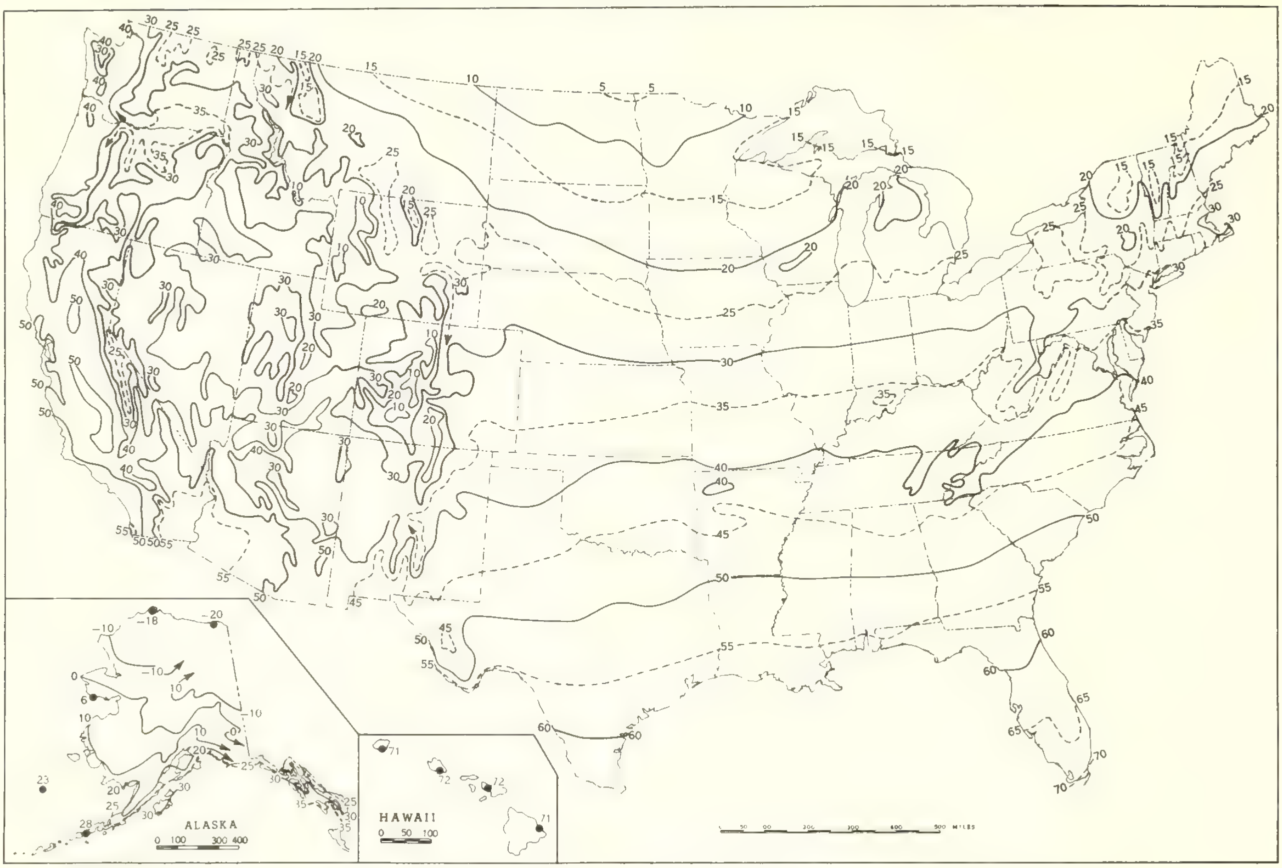
Units: Milli-atmo-cms.

Station	Day of month													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Albuquerque, N. Mex.	00311	05303	00327	00344	05301	00334	05356	00352	05313	00287	00300	05281	02311	00308
Bedford, Mass.	00342	-----	-----	-----	-----	-----	-----	00370	00396	05404	-----	-----	00359	00394
Bismarck, N. Dak.	00423	05451	35425	36404	20440	36445	20469	05451	35503	36458	-----	-----	00457	05471
Caribou, Maine	33394	35358	00413	34470	-----	00474	34423	35455	00455	35408	04433	-----	02429	00456
Fairbanks, Alaska	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Green Bay, Wis.	04377	00390	04377	00394	05446	00441	00450	04490	00421	00414	00462	00378	03437	00398
Huancayo, Peru	00265	00264	00264	-----	00266	00258	00262	05266	00263	00261	00260	00268	00272	-----
Nashville, Tenn.	00296	06347	05402	05379	00341	05356	00355	00364	00464	00374	00335	00336	00339	00336
Sterling, Va.	04297	04306	00385	00364	00343	-----	-----	00346	00352	00399	00330	32329	00351	-----
Tallahassee, Fla.	00303	05286	05300	05277	00327	05345	05325	02298	05357	00310	05311	-----	00305	00319
Mauna Loa, Hawaii	00266	00269	00273	00269	-----	00276	00268	00272	-----	00272	00278	-----	00274	05280

Station	Day of month																	Mean O_3
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Albuquerque, N. Mex.	00276	00351	00347	00323	00325	00309	00331	00308	00330	04301	06307	05350	00328	00309				319
Bedford, Mass.	00386	00394	00382	-----	-----	-----	00435	00377	05450	00507	-----	-----	00360	-----				397
Bismarck, N. Dak.	00488	33481	06553	04389	00396	00420	05465	00555	05490	00504	00389	04402	00352	03350				447
Caribou, Maine	35427	-----	35414	00451	00434	05447	-----	00386	-----	-----	-----	-----	03413	-----				428
Fairbanks, Alaska	-----	32389	-----	32411	-----	32463	-----	-----	33447	34460	34410	02412	36419	35489				433
Green Bay, Wis.	-----	00425	04462	02457	06401	00386	06398	04486	03566	00569	00426	00373	04446	00448				434
Huancayo, Peru	00255	03265	00270	00288	00269	00273	00269	-----	00271	00267	00272	00266	00268	00275				267
Nashville, Tenn.	04320	00337	04371	04393	04331	-----	00352	05393	00417	00467	-----	00378	-----	00360				366
Sterling, Va.	00349	00352	-----	05417	05343	05359	00425	-----	00474	00488	-----	00401	05384	00393				372
Tallahassee, Fla.	00300	06294	00275	05280	03279	05281	03295	00296	00296	00350	00369	00341	00323	02341				310
Mauna Loa, Hawaii	00288	05302	-----	00294	-----	00318	00291	00281	-----	00279	-----	-----	00285	00287				281

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g., 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), February



B. Temperature Departure from 30 - Year Mean (°F 1931-60), February 1967.

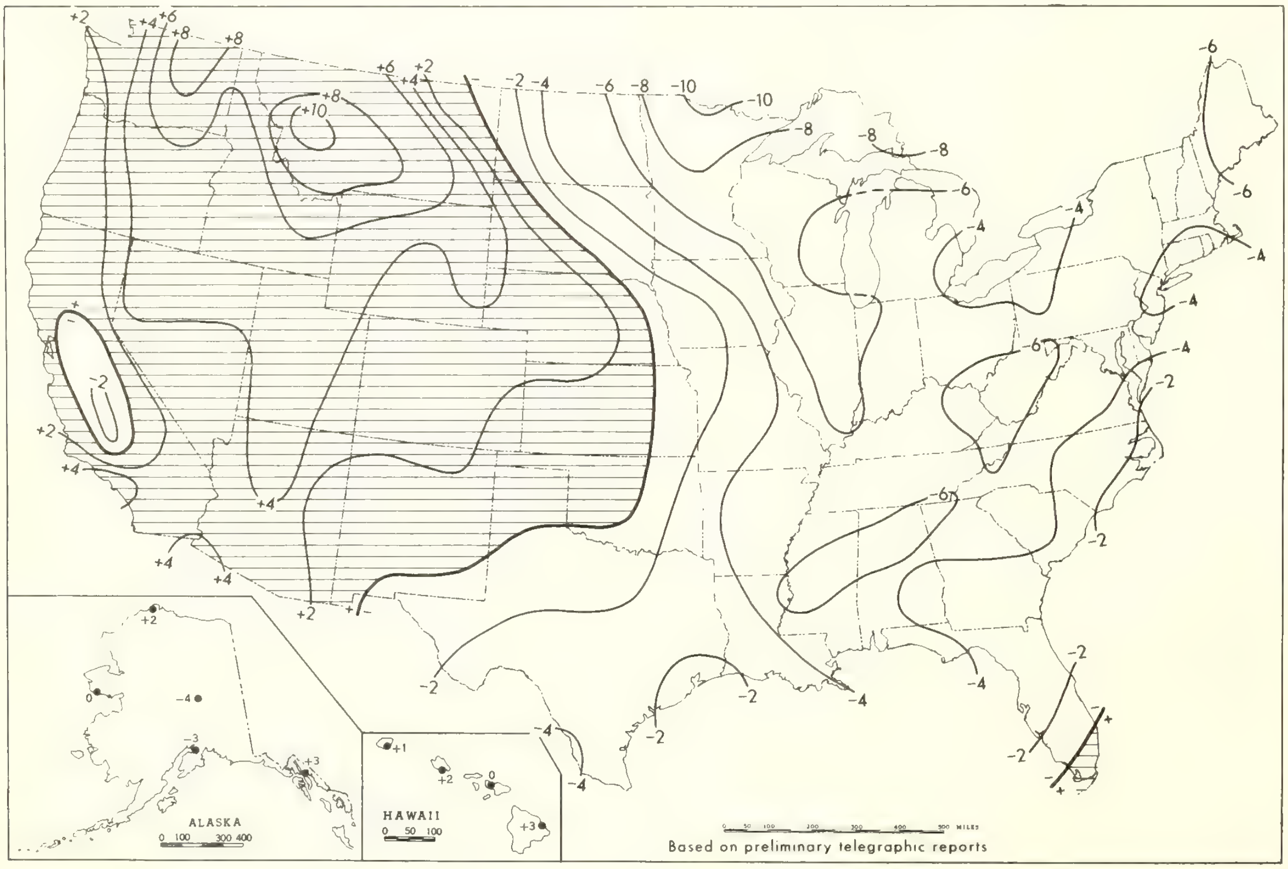


Chart II. Total Precipitation (Inches), February 1967.

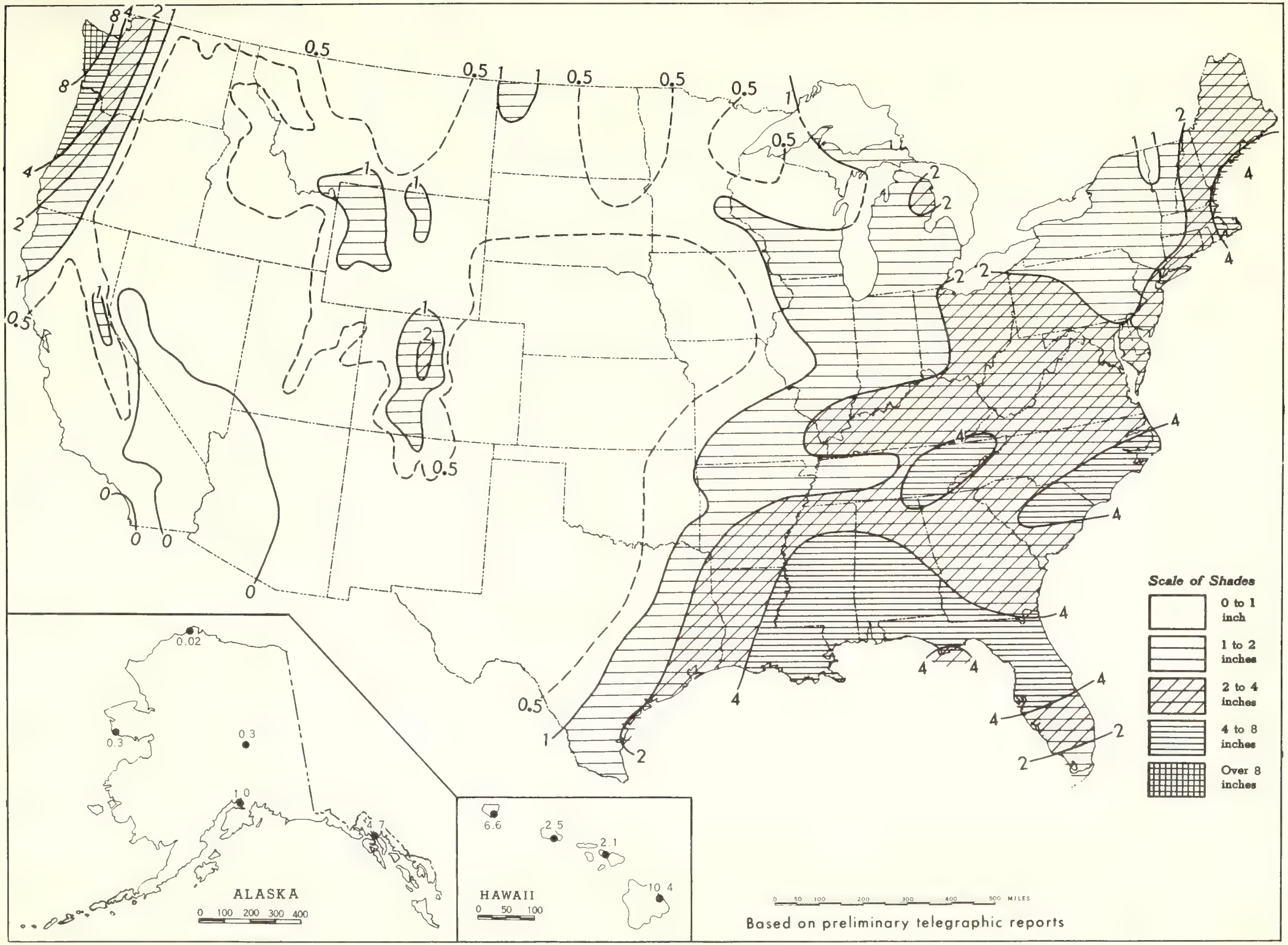


Chart III. Percentage of Normal Precipitation, February 1967.

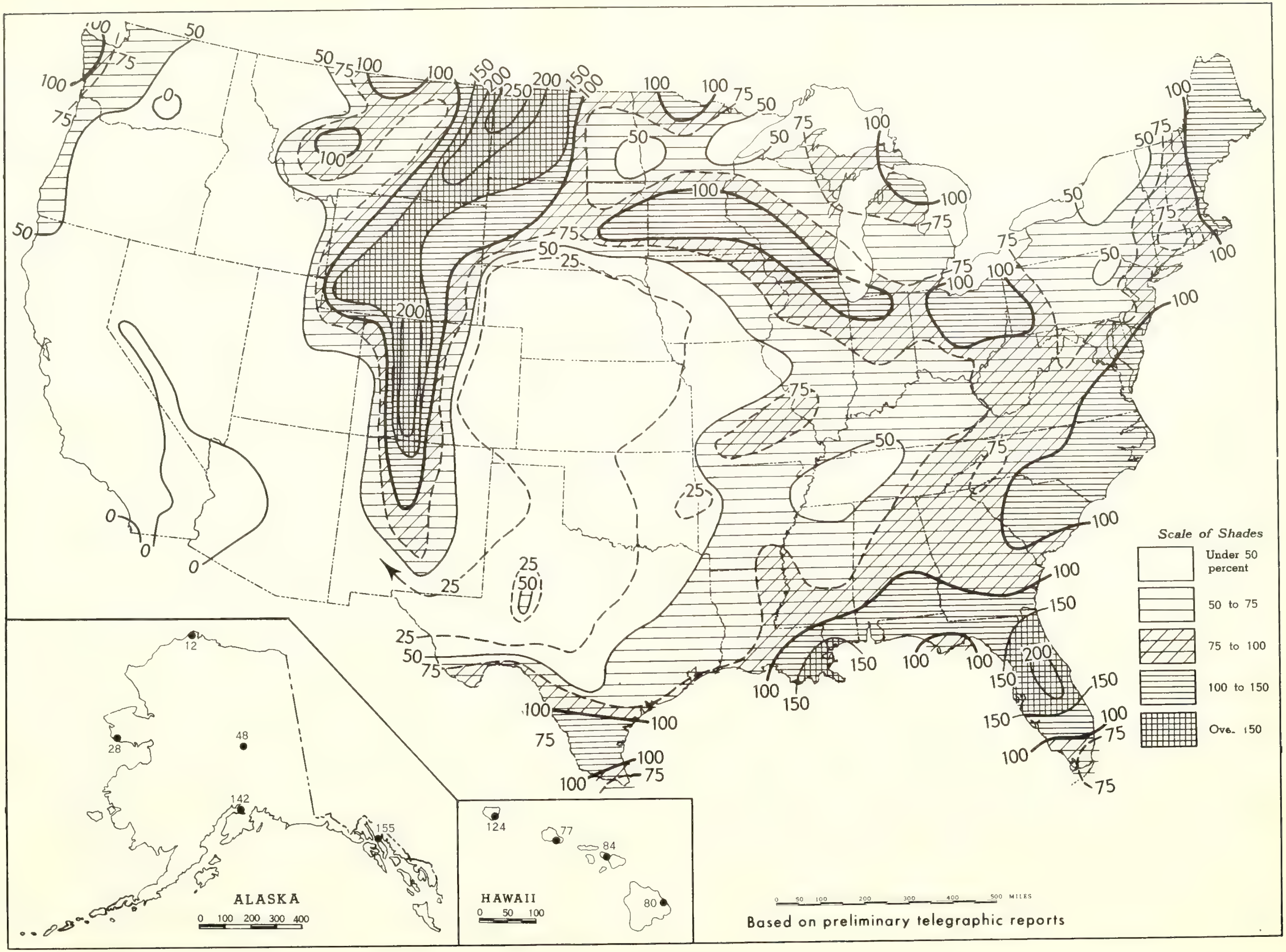
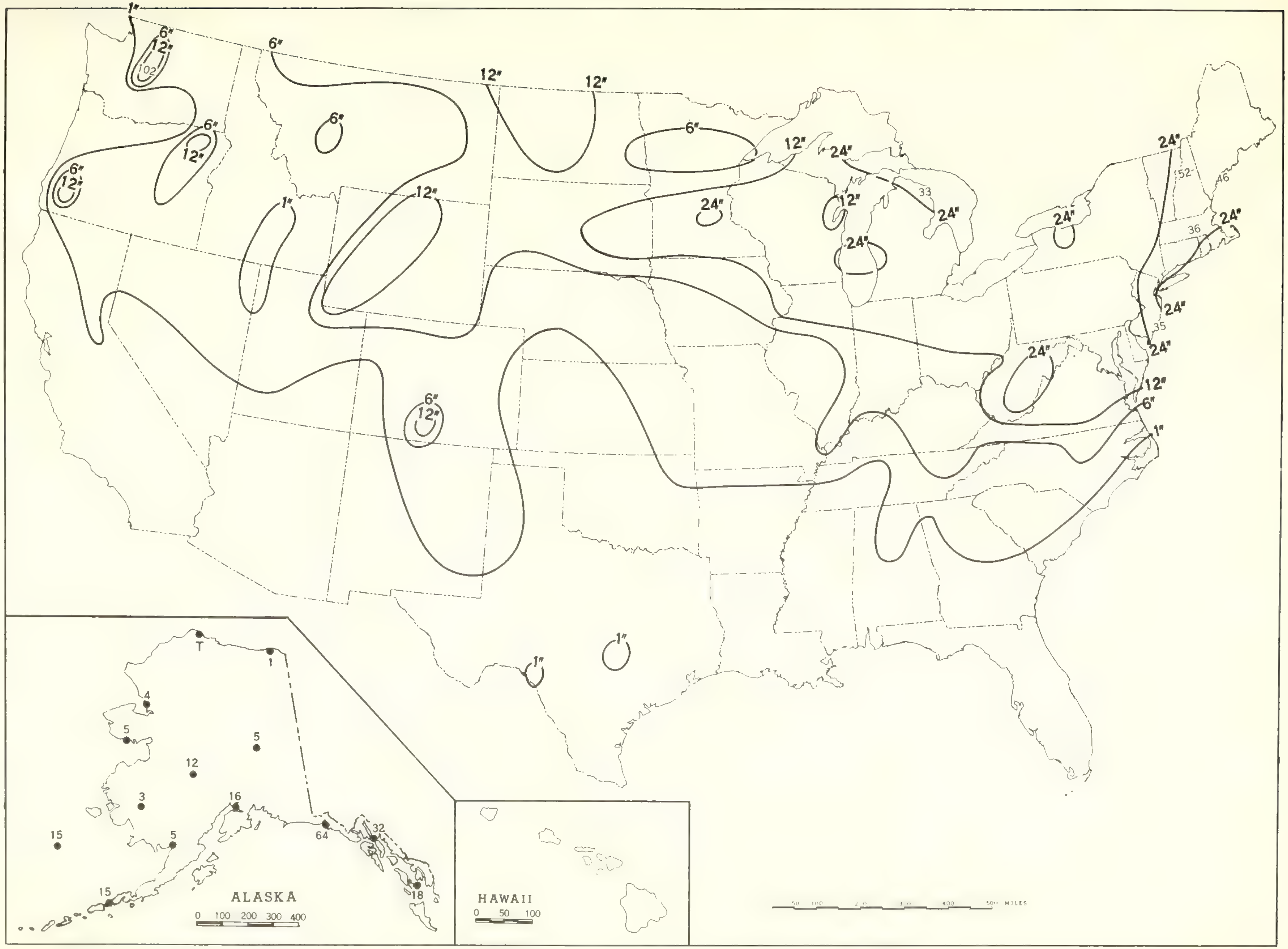
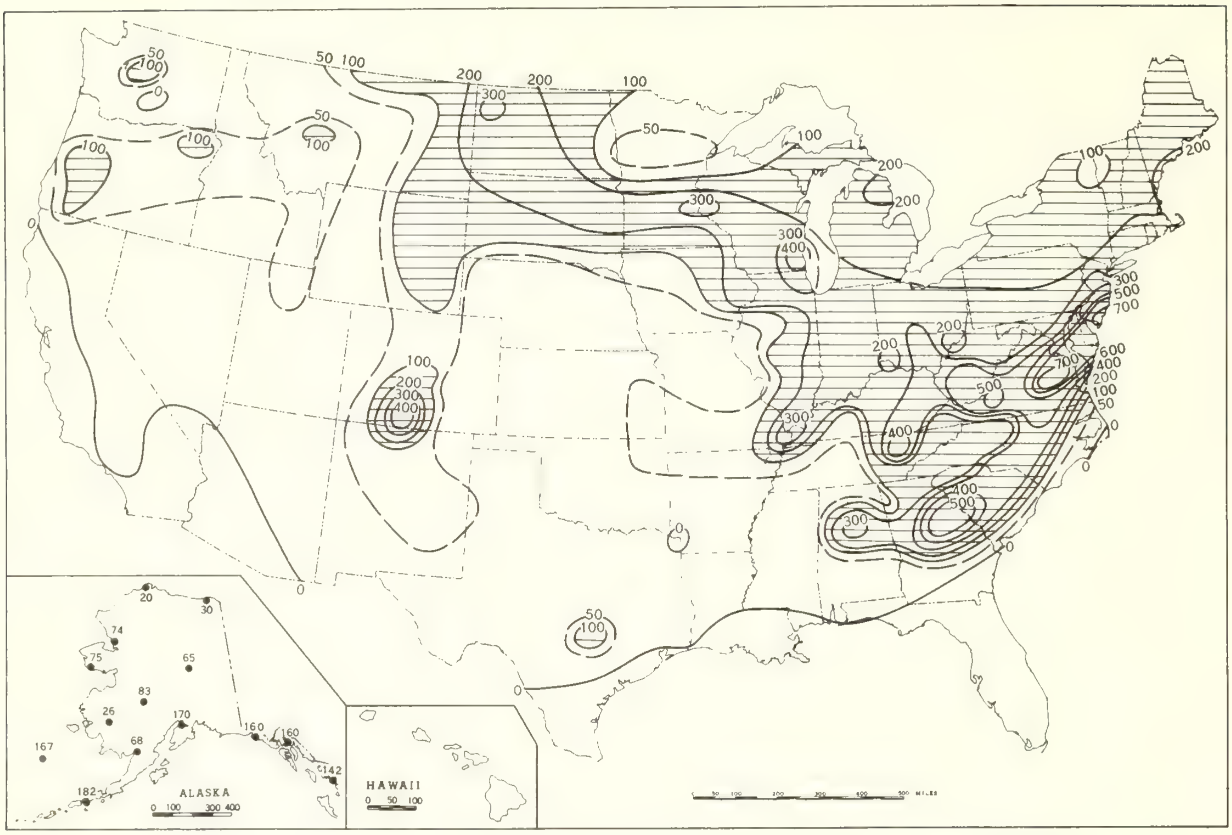


Chart IV. Total Snowfall (Inches), February 1967.



This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, February 1967.



B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., February 27, 1967.

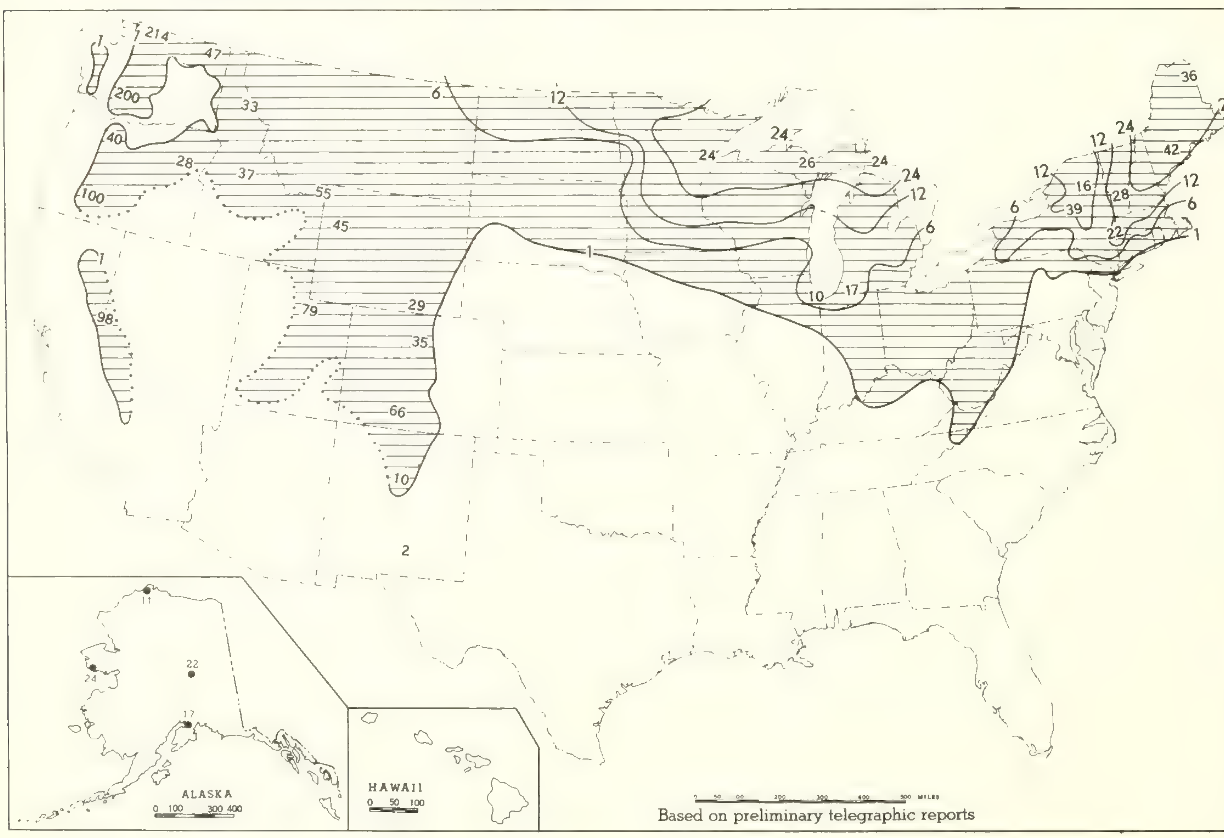
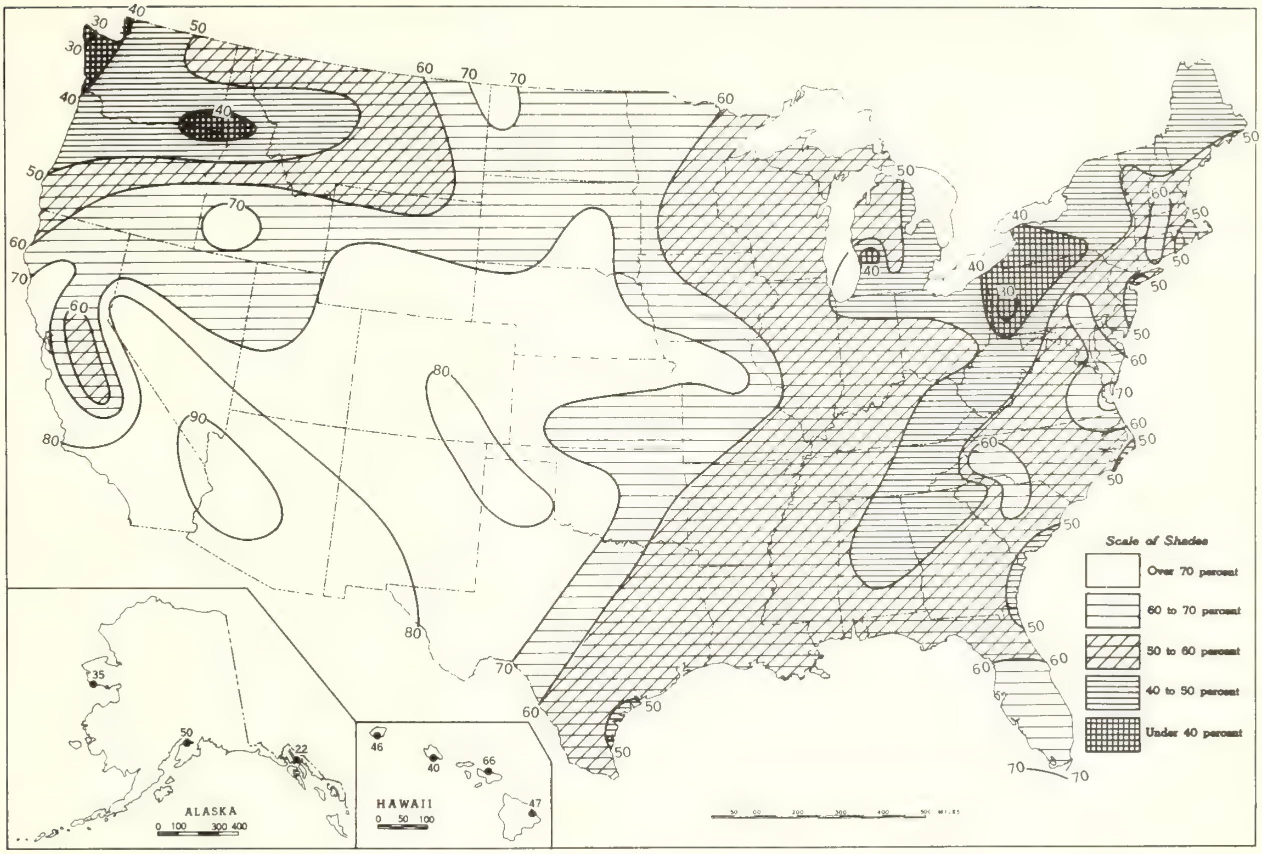
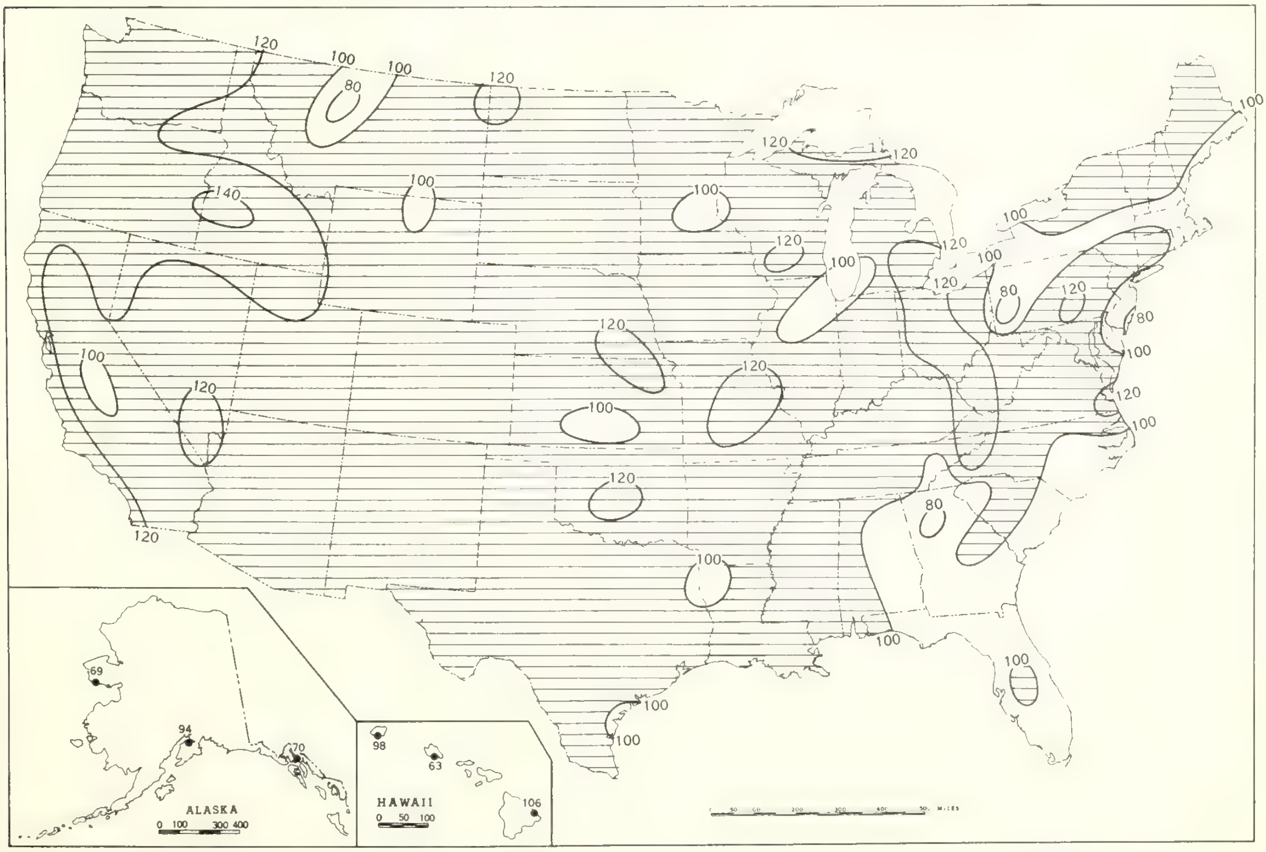


Chart VI. A. Percentage of Possible Sunshine, February 1967.

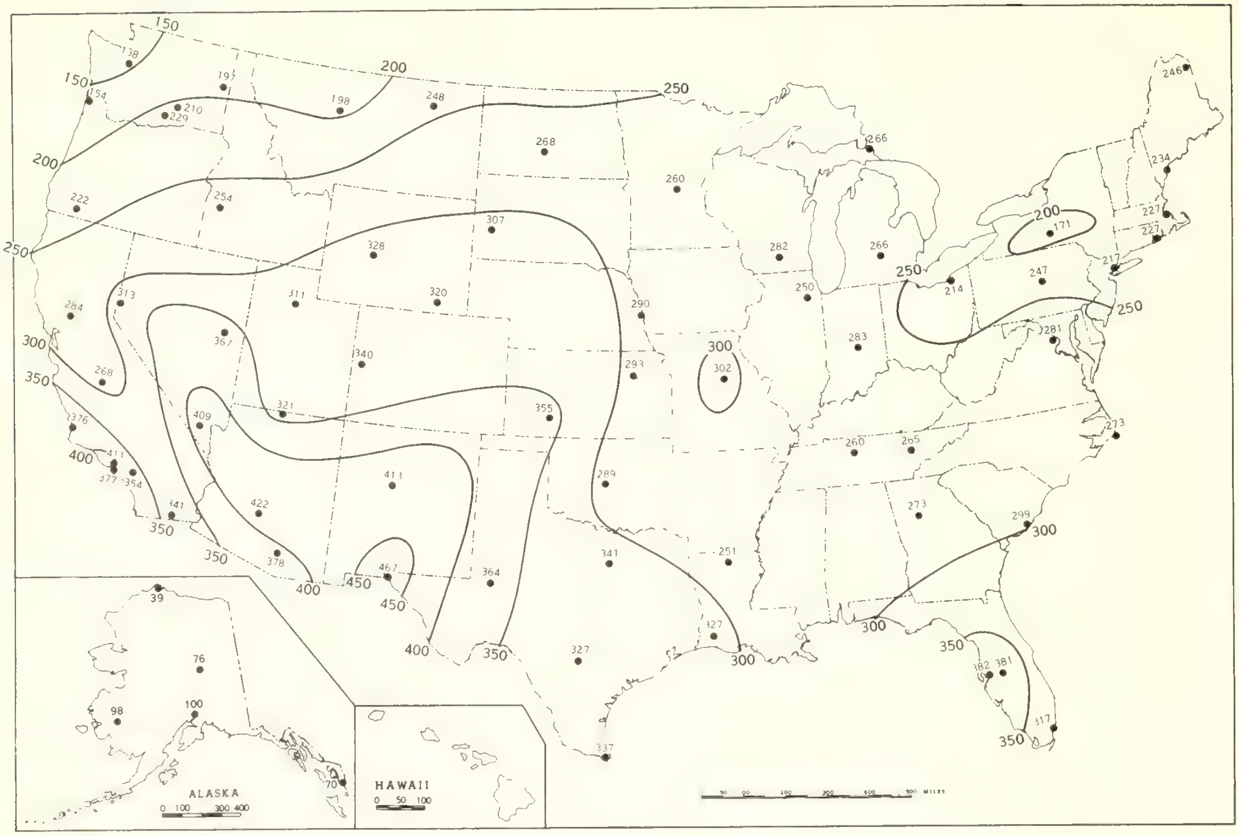


B. Percentage of Mean Monthly Sunshine, February 1967.

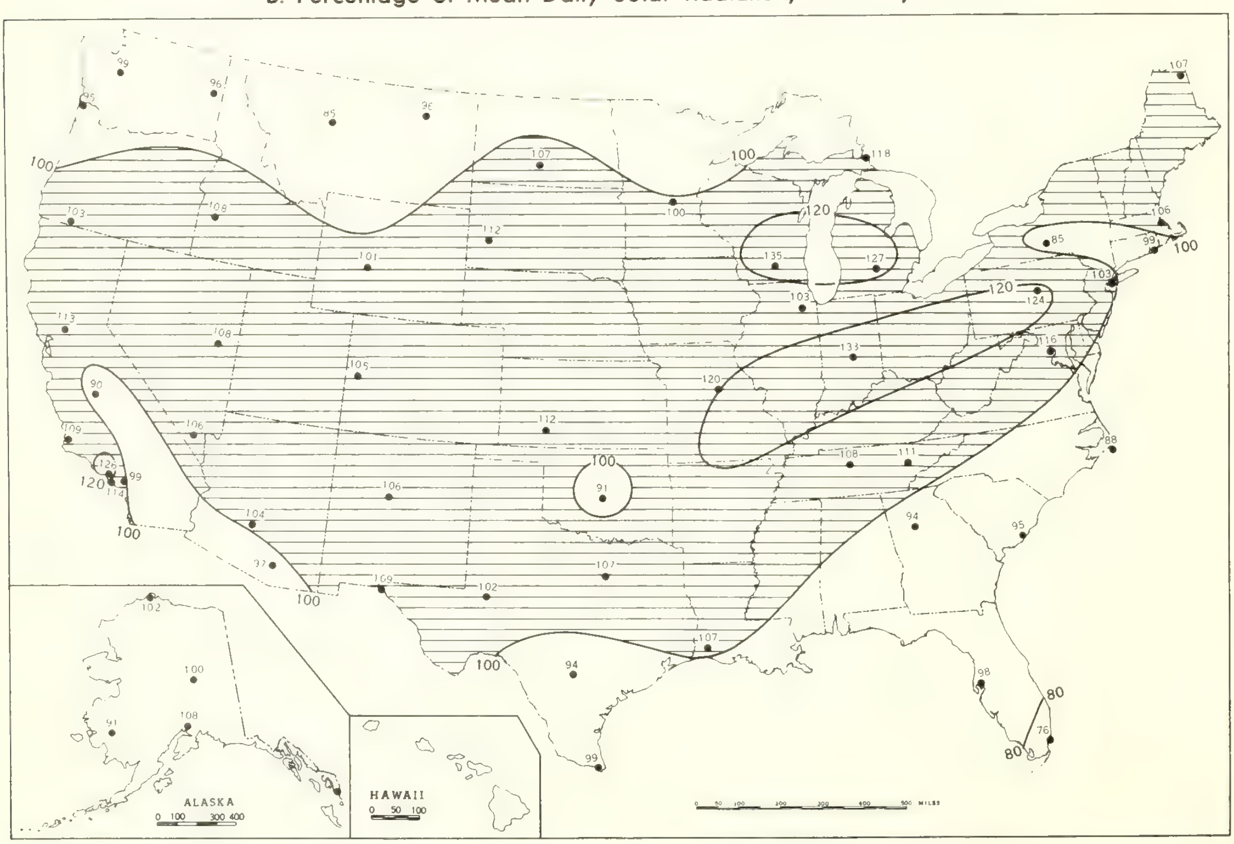


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, February 1967.

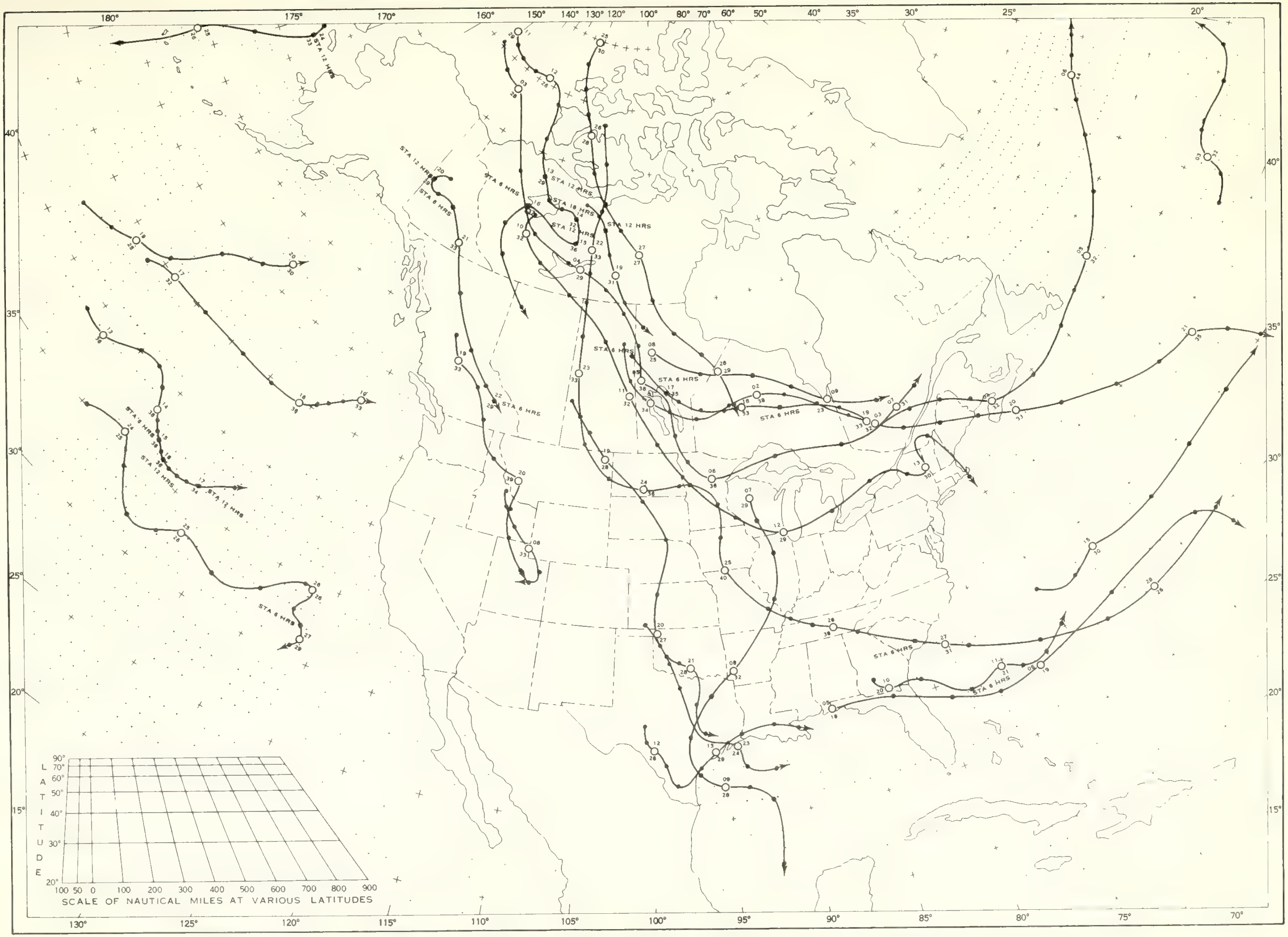


B. Percentage of Mean Daily Solar Radiation, February 1967.



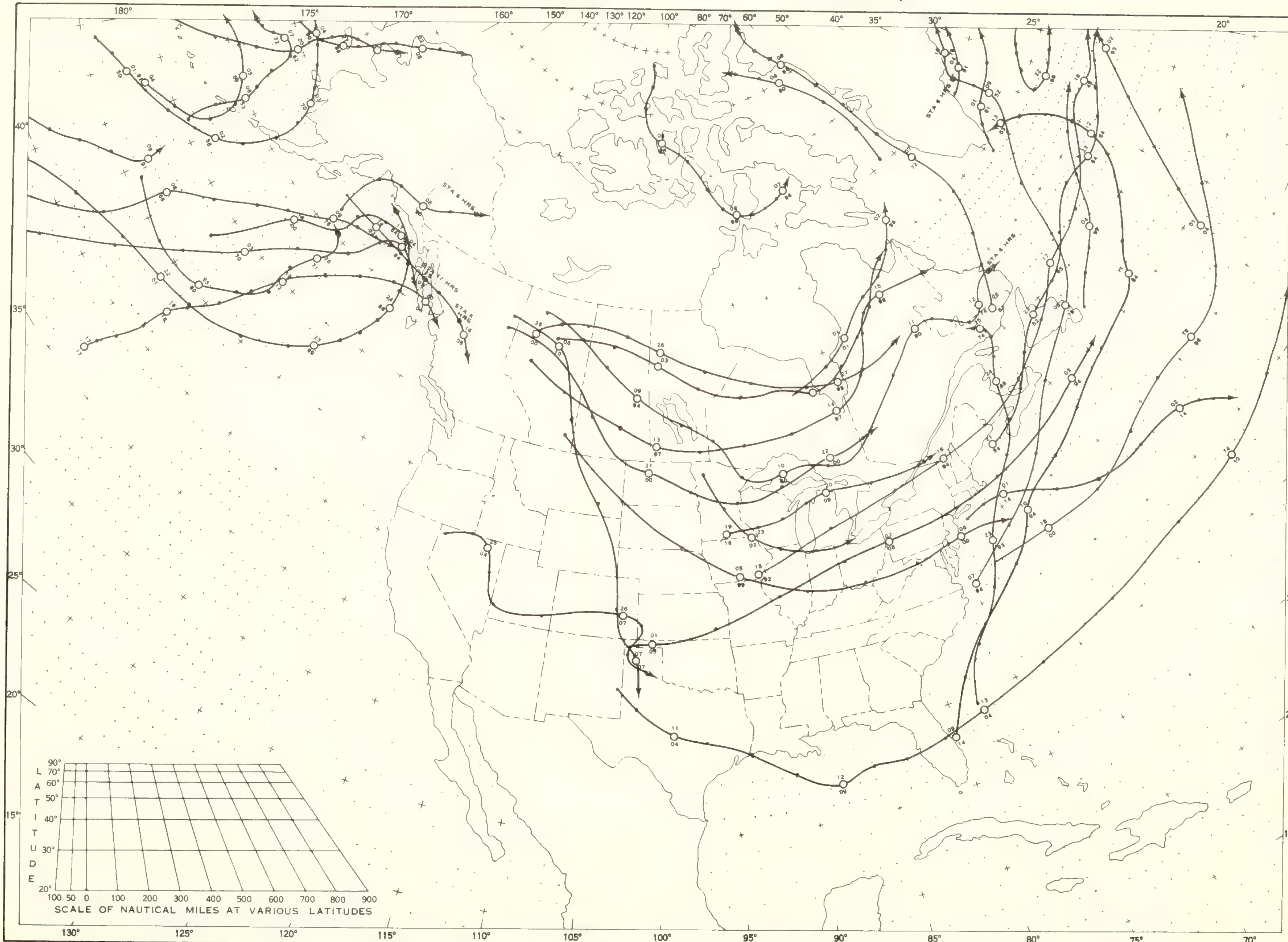
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, **February 1967.**



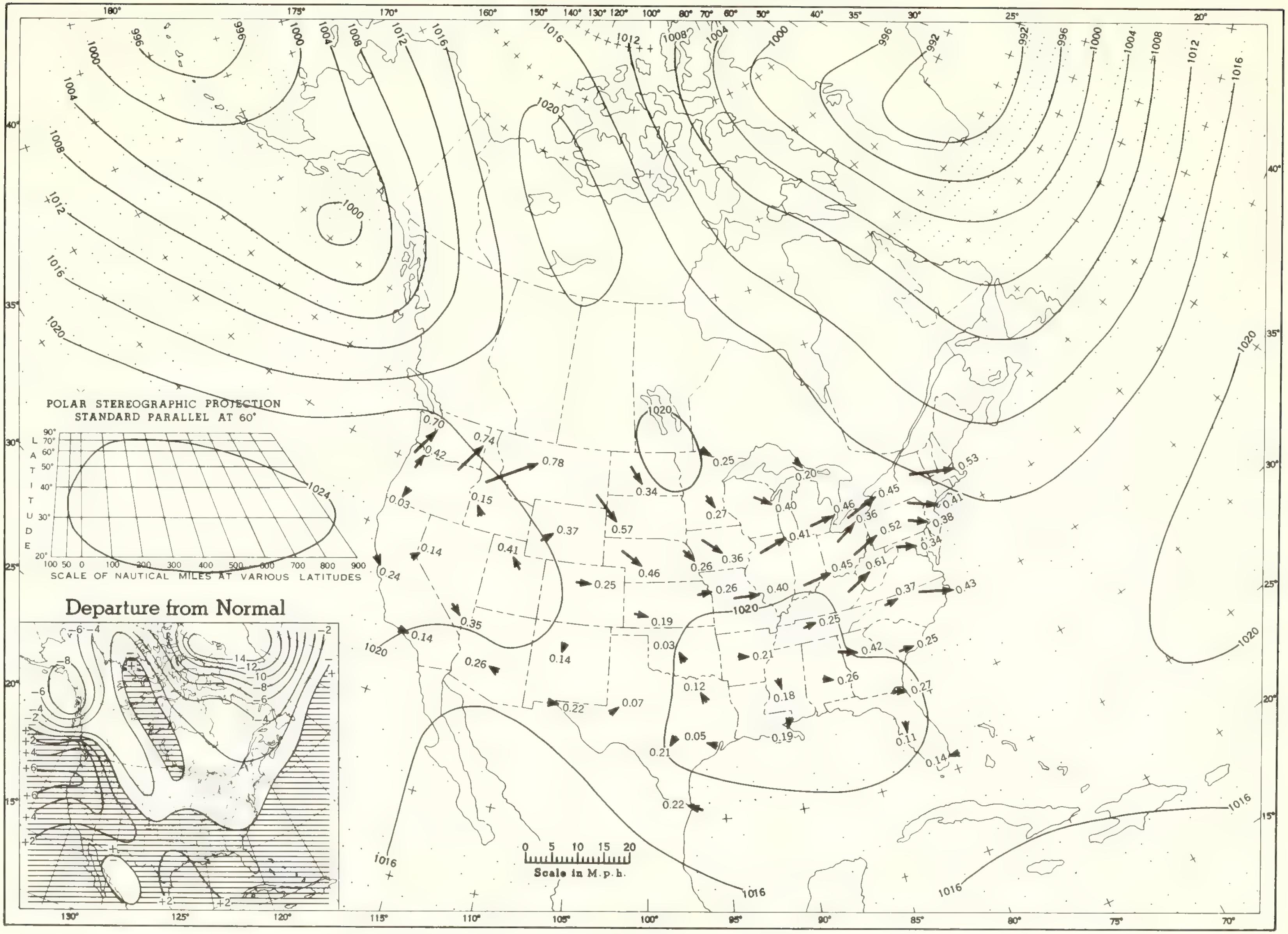
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, February 1967.



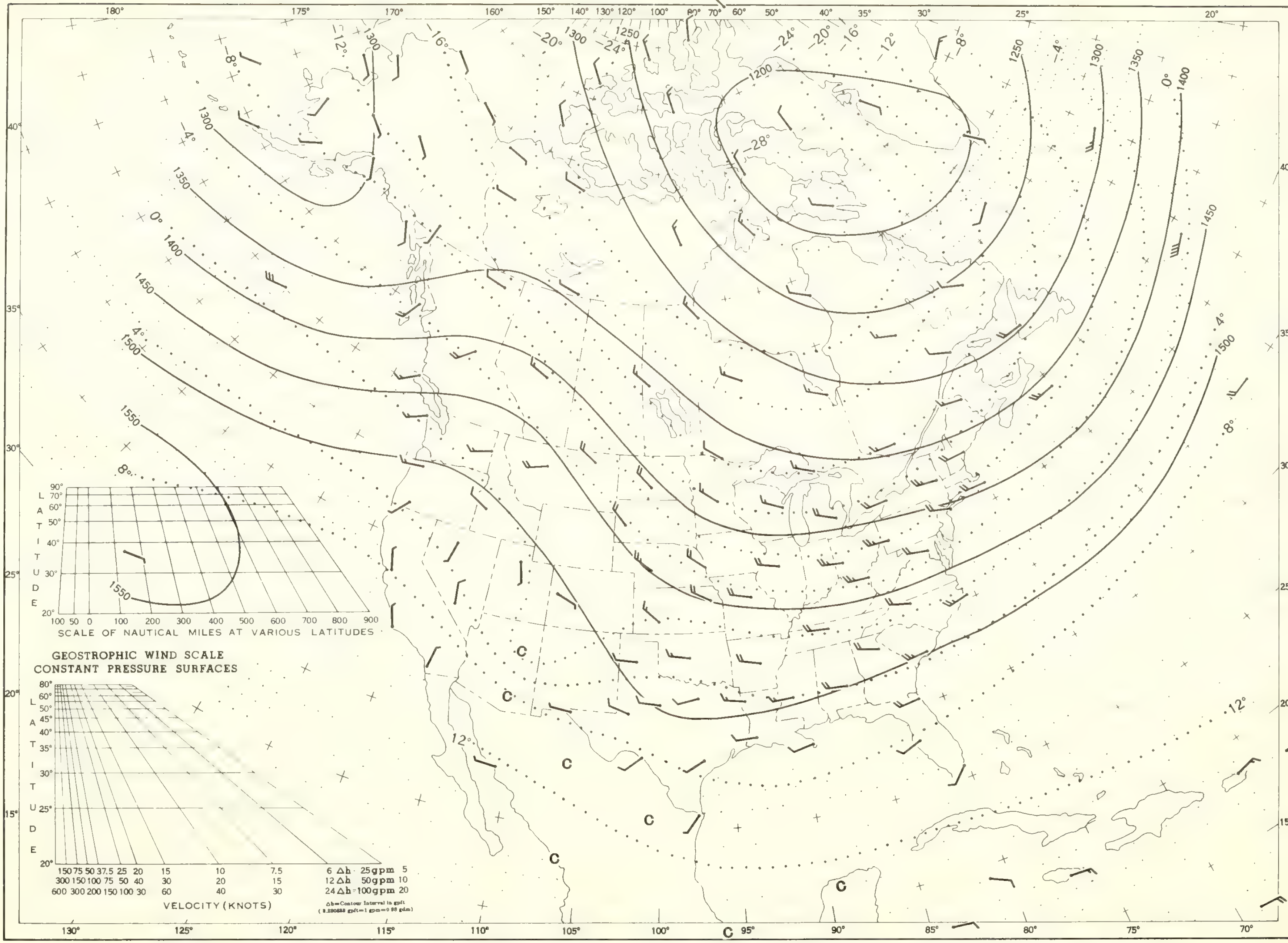
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, February 1967. Inset: Departure of Average Pressure (mb) from Normal, February 1967.



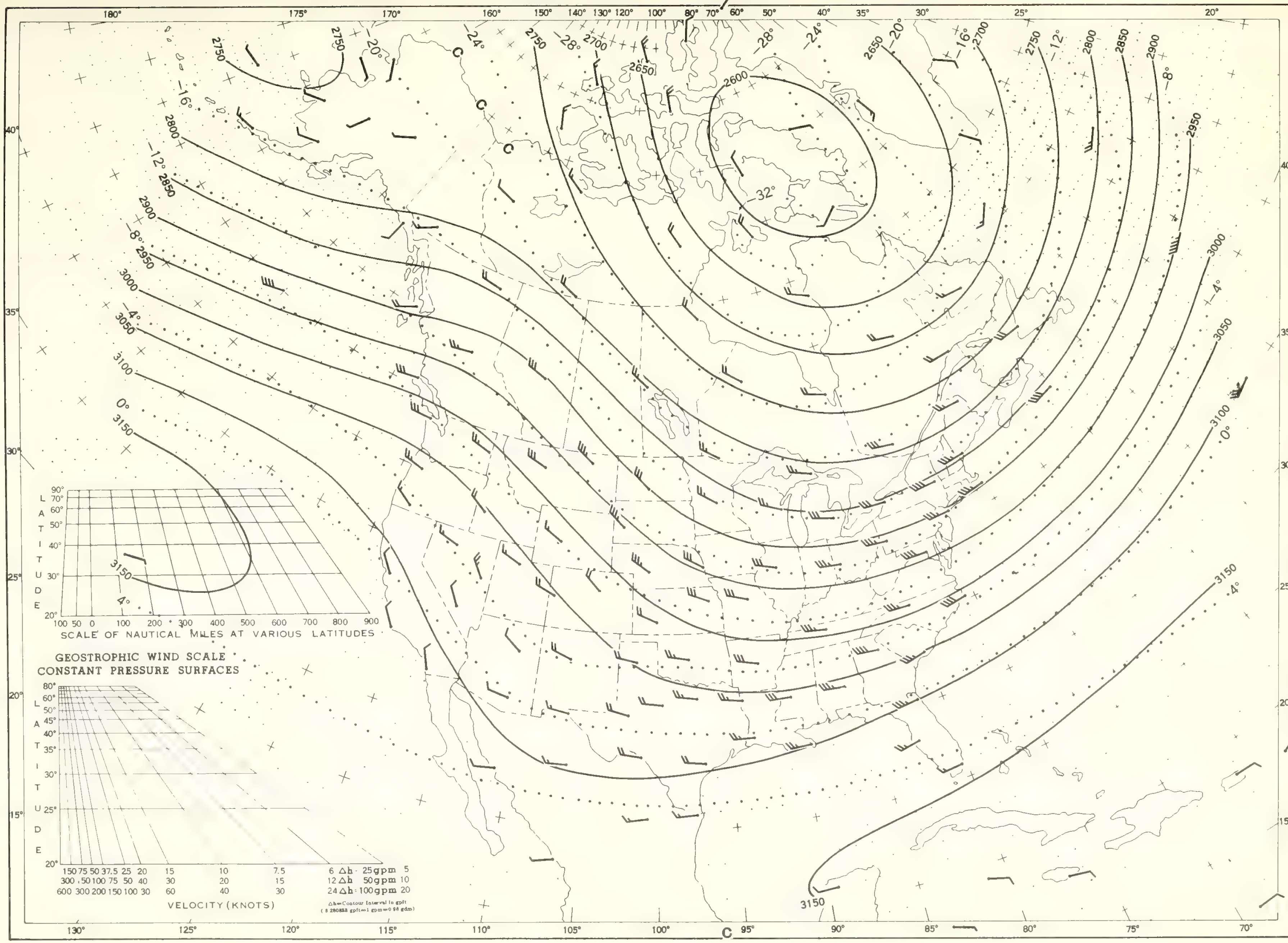
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed ÷ average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, February 1967. Average Height and Temperature, and Resultant Winds.



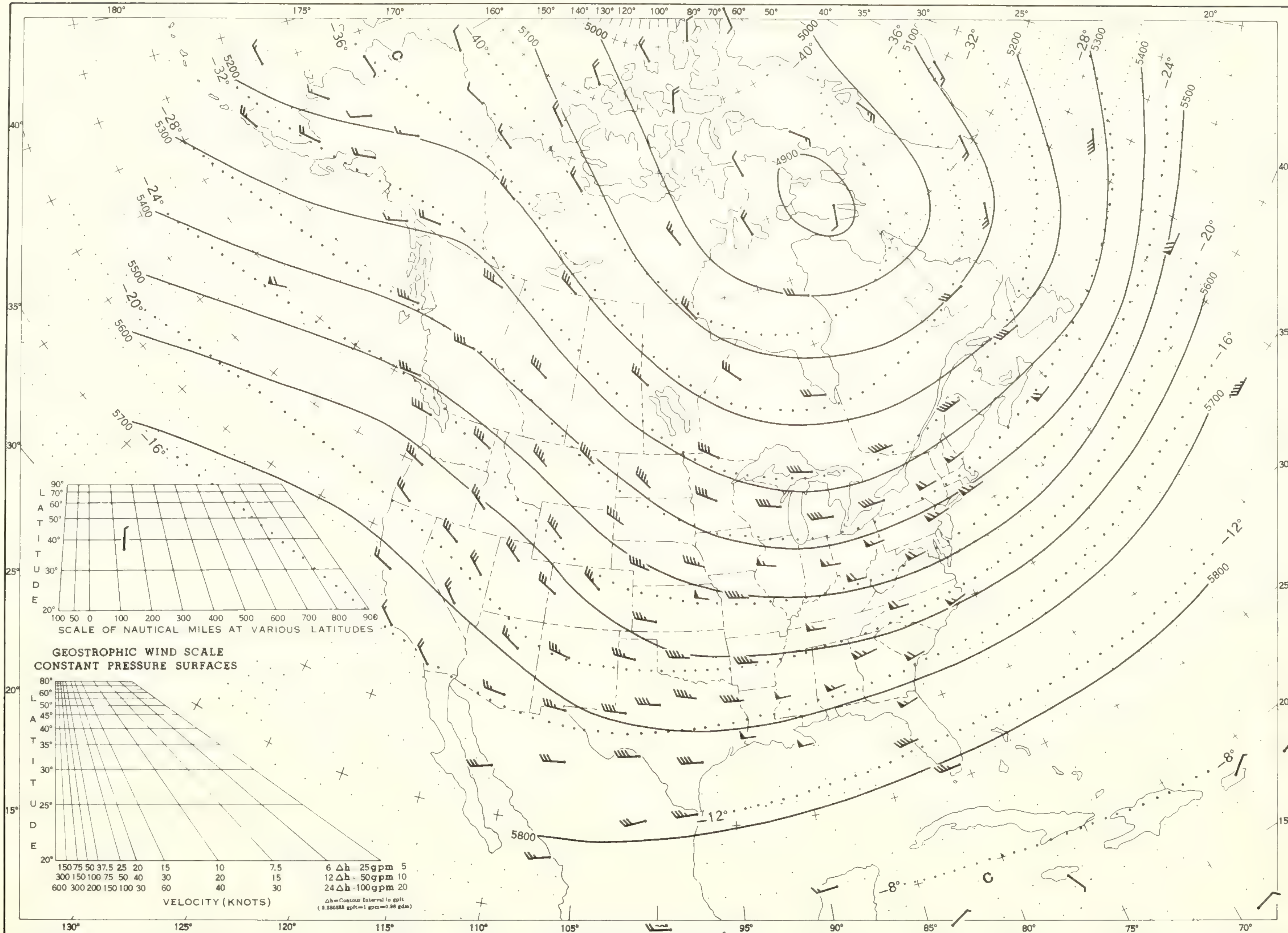
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, February 1967. Average Height and Temperature, and Resultant Winds.



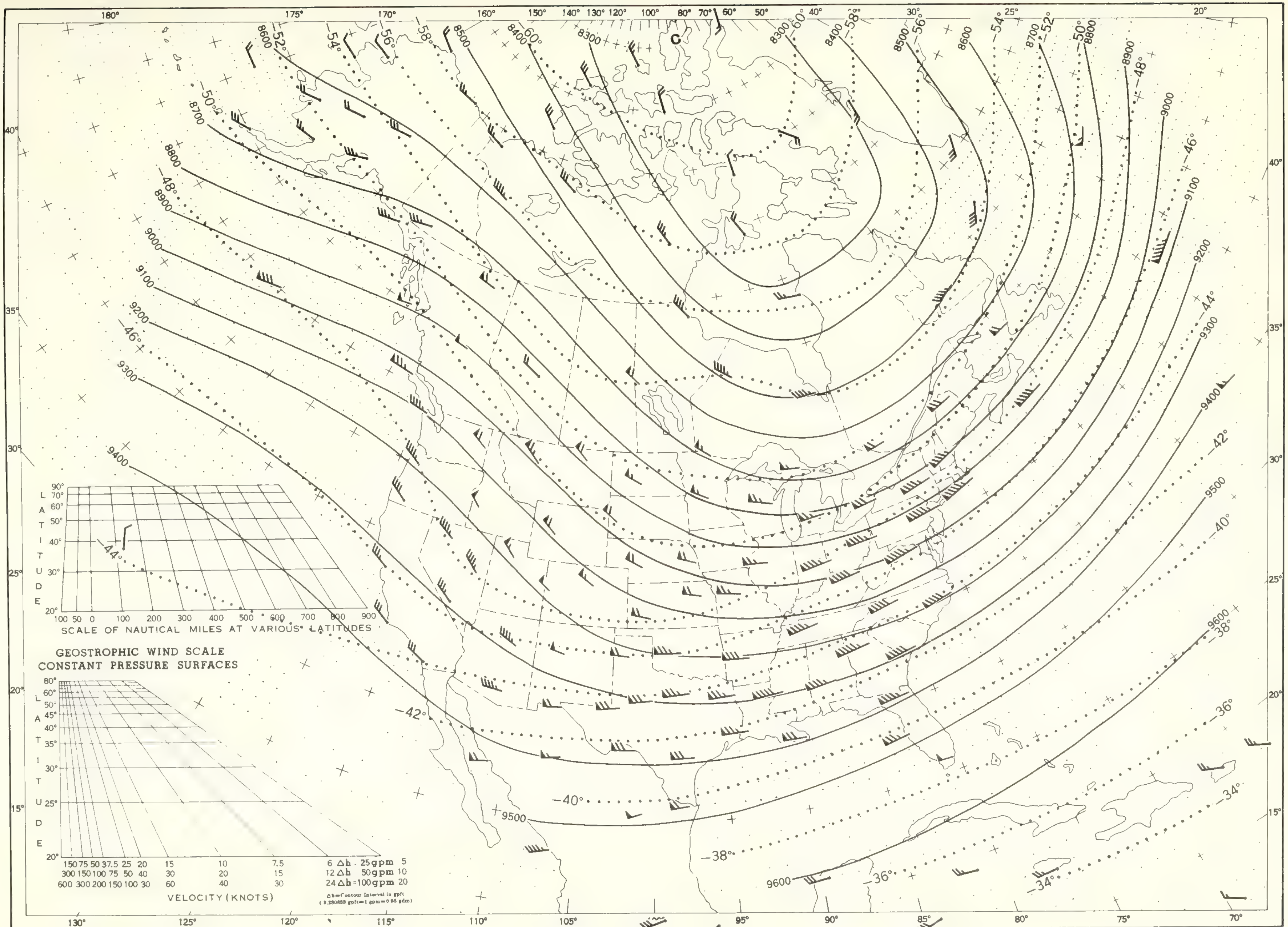
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, February 1967. Average Height and Temperature, and Resultant Winds.



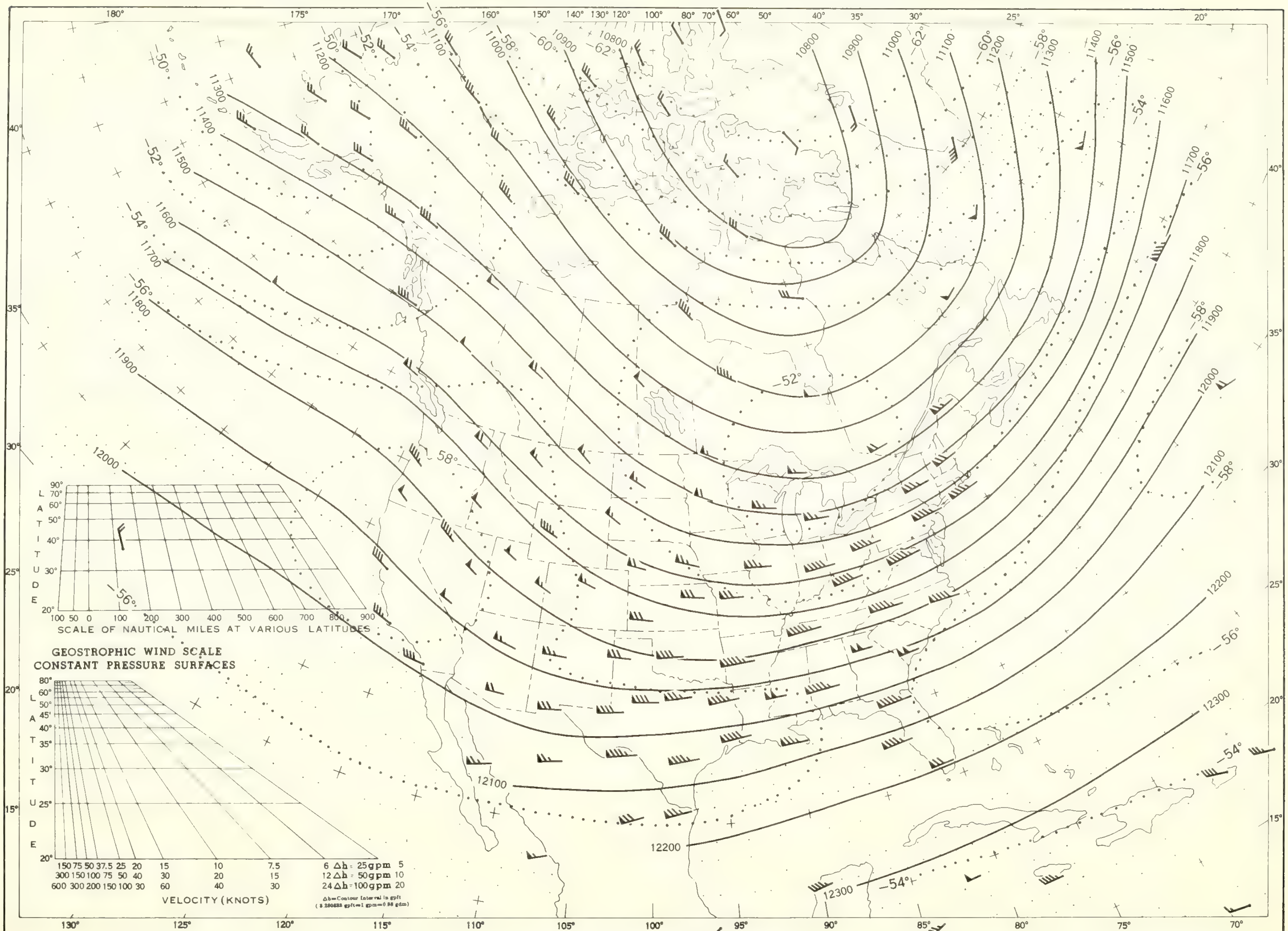
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, February 1967. Average Height and Temperature, and Resultant Winds.



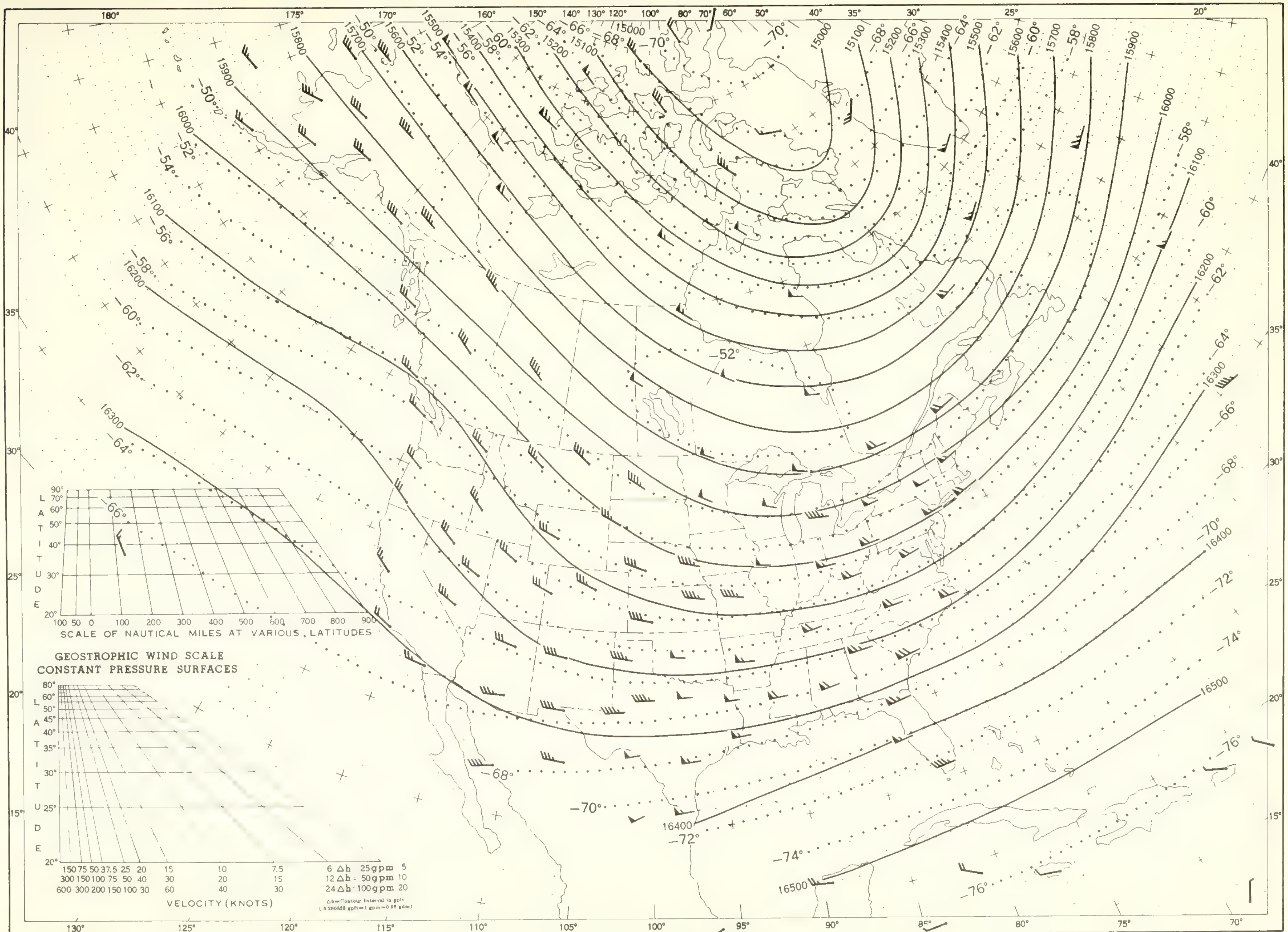
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, February 1967. Average Height and Temperature, and Resultant Winds.



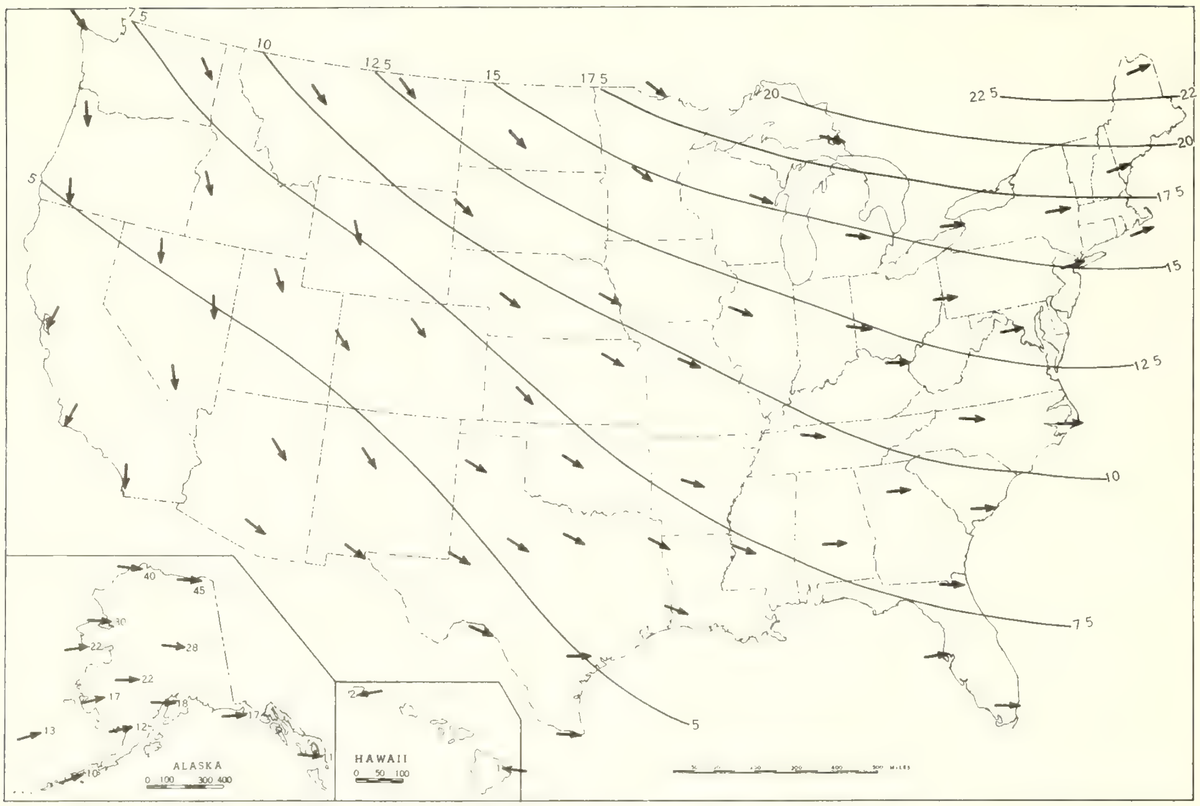
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, February 1967 Average Height and Temperature, and Resultant Winds.

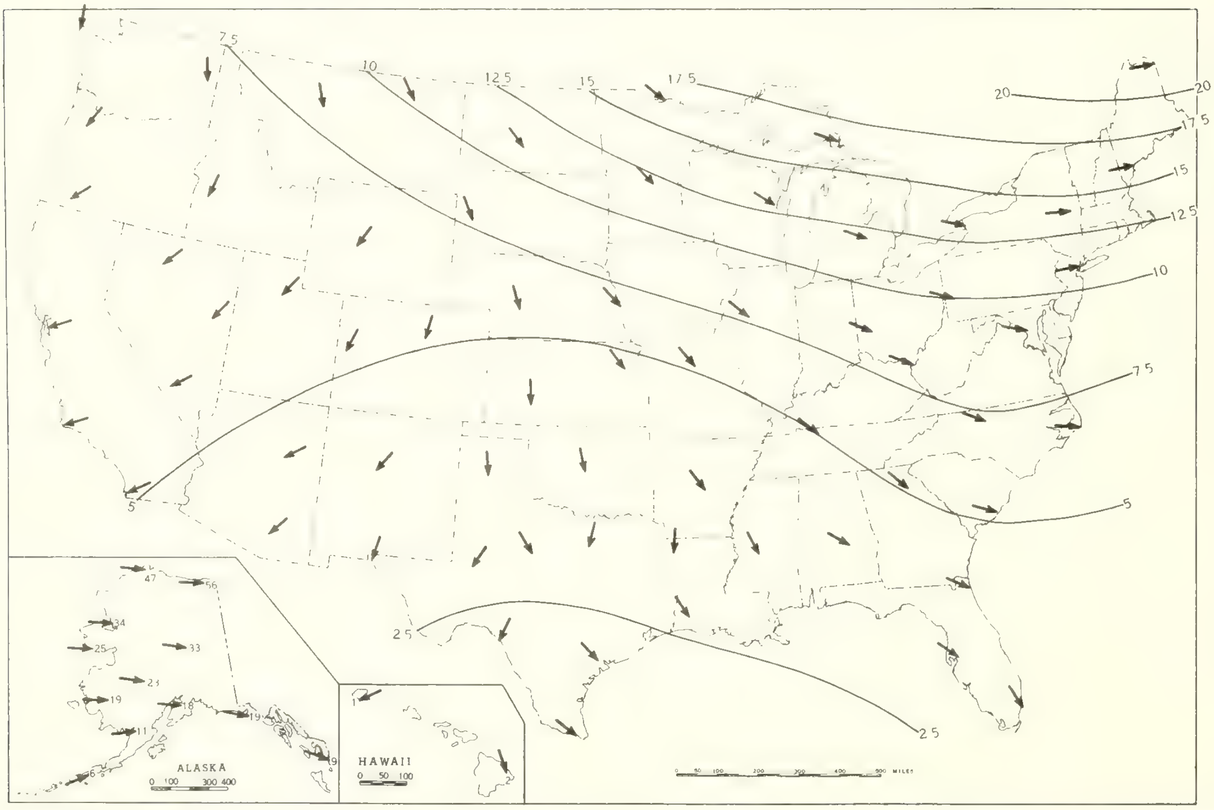


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, February 1967 Resultant Winds.



B. 30-mb. Surface, 1200 GMT, February 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. -6/9/67-1950

U. S. DEPARTMENT OF COMMERCE
ALEXANDER B. TROWBRIDGE, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

MARCH 1967
Volume 18 No. 3

ASHEVILLE: 1967

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 3 MARCH 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Heavy precipitation in Far West.
2. Continued drought in parts of Great Plains.
3. Heavy precipitation West Virginia to northern New Jersey.
4. Unusually warm in Central and Southeast.

TEMPERATURE.--In the 48 States temperatures for March were above normal except below in the Northeast and Northwest. Positive departures exceeded 4° from the central and lower Rocky Mountains to the eastern Piedmont region and ranged up to 8° in the lower Ohio Valley and north-central Texas where this March was among the warmest on record. This was the warmest March since 1910 at Albuquerque, N. Mex., and since 1934 at a number of other stations in the Far Southwest, and since 1946 at several places in the Midwest. This was the 13th consecutive warmer-than-normal month at Phoenix, Ariz., and the 7th consecutive at Denver, Colo. On the other hand, this was the coldest March since 1960 at Boston, Mass., and the month was colder than February at Missoula, Mont.

Below normal temperatures east of the Rockies the last week of February persisted throughout March in the Northeast and during the first 3 weeks in the Great Lakes region. The coldest weather east of the Rockies occurred during the third week when hard freezes extended far southward, causing heavy damage to peach and apple crops in Georgia and the Carolinas. Caribou, Maine, recorded -20° on the 13th, -12° on the 17th, and -11° on the 19th, all record lows there for so late in the season.

Above normal temperatures during most of the month melted the ice in most northern streams.

PRECIPITATION.--Precipitation for March generally was below normal in the 48 States. Above normal amounts were limited mostly to areas in the Northeast and Northwest. Driest areas where monthly totals were less than 50 percent of normal included the Colorado Valley in the Far Southwest, the northern, central, and southwestern Great Plains, the area from Louisiana and southern Arkansas to the Atlantic coast, and Maine and the St. Lawrence Valley in the Northeast. A number of stations in all these areas reported the driest March in many years. Mobile, Ala., recorded 0.59 inch for its driest March dating back to 1871; Buffalo, N. Y., 1.20 inches for its 4th driest March since 1871; Grand Island, Nebr., 0.01 inch, the least since 1907; and Aberdeen, S. Dak., 0.09 inch, the least during a 72-year record.

Dry weather effects were most severe in the Great Plains area where several preceding months had been very dry also. For example, Amarillo, Tex., reported the 6-month period ending with March 1967 the driest such period on record there. In eastern New Mexico, northwestern Texas, western Oklahoma, southwestern Kansas, and southeastern Colorado, in particular, pastures were short and wheat prospects were deteriorating.

Precipitation was well above normal in most of the Ohio Valley northeastward through New Jersey and southern New England, exceeding 150 percent of normal in much of West Virginia, southern Pennsylvania and adjacent areas of Maryland, and in northern New Jersey. This heavy precipitation fell in an area where extreme drought existed at the end of the summer of 1966, and it greatly helped to replenish depleted water supplies in the area.

Abnormally heavy precipitation in the Northwest helped build up a good supply of soil moisture at lower elevations, and increased snow accumulations in the mountains to near record depths for the time of year in the extreme northern Rockies and the Sierra-Nevada Mountains.

Floods occurred in West Virginia, eastern Kentucky, and parts of southern Pennsylvania as a result of heavy precipitation in those areas during the first half of the month. The floods were worst in West Virginia where thousands of families were driven from their homes, and most roads were closed temporarily. During the second half of the month much above normal temperatures caused rapid melting of a heavy snow cover and heavy rains in the upper Midwest caused flooding in parts of the upper Mississippi Basin and in the Red River of the North Basin.

SNOWFALL.--In the Far West snowfall was unusually heavy in California and the northern Rockies. Most of the heavy snow fell during a series of storms the second half of the month. During the third week 8 feet of snow fell in 60 hours at Squaw Valley, Calif., in the Sierras. Elko, Nev., recorded 23.2 inches for the month, a record there for any month. Snowfall was much below average in southern areas of the Far West and also below in some central areas. Mountain snowpacks are above average in California and Montana and the water outlook good to excellent. In the rest of the Far West the snowpack is average or above except below in Ariz., New Mexico, southern Utah and Nevada, and parts of Colorado.

East of the Rockies snowfall was mostly near to below normal, but was above in parts of the Northeast where major snowstorms occurred on the 6th and 7th, 15th and 16th, and 22d, and a few other scattered areas. Bridgeport, Conn., reported 21.8 inches, a March record; Hartford, Conn., measured 33.2 inches, the second greatest March total, which boosted the seasonal total to 81.4 inches, the most in 62 years of record. A total of 22.9 inches for Boston, Mass., was the most for March in 96 years; most of Boston's snow fell during the two big storms on the 6th and 7th and 15th and 16th. Albany, N. Y., measured 26.2 inches which was twice the March average and the fifth heaviest of record. Providence, R. I., recorded 24.9 inches, the second greatest for any month. At South Bend, Ind., 11.3 inches of snow was only slightly above average for March, but boosted the seasonal total to the greatest amount since 1893-94.

STORMS.--March 1967 was not a particularly stormy March, considering the number of severe local storms. Heavy snowstorms in the East caused the usual delay of traffic. A few days of blowing dust in the western edge of the Great Plains caused some damage to winter grain crops. Blizzard conditions occurred in parts of central Montana on the 10th and 11th.

As a cold front moved across the South on the 5th and

MARCH 1967

6th, severe thunderstorms caused one personal injury in Arkansas and tornadoes in Mississippi and Alabama caused two deaths and considerable property damage. On the 12th high winds caused five injuries in southeastern Kentucky and baseball-sized hail fell about 20 miles northwest of Evansville, Ind.

CONDENSED CLIMATOLOGICAL SUMMARY

MARCH 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	90	[illegible]	2 Stations	18	18	Waterloo	4.00	Fort Morgan	0.50
Alaska	Cape Sarichef Lght Sta	58	13	Wainwright	-46	31	Cape St Elias	8.86	2 Stations	T
Arizona	3 Stations	94	23+	Maverick	-13	6	McNary	3.45	9 Stations	.00
Arkansas	do	93	12	Gilbert	-2	7	Des Arc	5.03	Mountain Home C of Eng	.80
California	4 Stations	94	23+	White Mountain 2	-9	29	Honeydew 2WSW	21.34	14 Stations	.00
Colorado	3 Stations	90	30+	Taylor Park	-29	8	Palisade Lakes 6SSE	4.06	3 Stations	.00
Connecticut	Norwalk Gas Plant	72	12	Coventry	-24	19	Groton	6.86	Falls Village	3.79
Delaware	2 Stations	77	12+	Wilmington Porter Resvr	9	19	Wilmington Ncastle WBAP	5.45	Bridgeville 1NW	1.72
Florida	Avon Park	93	11	Carrabelle 1NNW	25	1	Marathon Shores	5.80	Indian Lake Estates	.07
Georgia	2 Stations	91	12+	Blairsville Exp Sta	9	18	Augusta WBAP	6.53	Brunswick	.00
Hawaii	Hilo WBAP	88	17	Mauna Loa Slope Obs.	29	3	Kahana 883, Oahu	45.80	Kona Airport 683, Hawaii	1.57
Idaho	Bruneau	77	22	Island Park Dam	-21	7	Warren	6.12	Kuna 2NNE	.26
Illinois	Harrisburg	85	13+	Marengo	-1	1	Centralia 2SW	4.79	Rockford 6ENE	.98
Indiana	Marengo	94	30	2 Stations	-10	1	Jeffersonville	5.73	Logansport Radio WSAL	.50
Iowa	Rock Rapids	90	24	Lake Park	-10	7	Greenfield	3.88	2 Stations	.08
Kansas	Fredonia 1E	93	10	Centralia	-10	8	Mound City	3.31	do	.00
Kentucky	Pikeville	88	13	Paducah FAA AP	5	7	Campbellsville	8.82	Fords Ferry Dam 50	2.02
Louisiana	Chatham	91	12	Plain Dealing	22	7	Crowley Exp Station	4.48	Rodessa	.55
Maine	2 Stations	65	12+	Squa Pan Dam	-33	18	Sanford 2NNW	2.32	The Forks	.45
Maryland	7 Stations	79	14+	Oakland 1SE	-6	19	Sines Deep Creek 2	8.37	Princess Anne	1.70
Massachusetts	Rochester	70	12	Tully Dam	-19	19	New Bedford	6.57	Adams	1.94
Michigan	2 Stations	79	30	2 Stations	-30	8+	Watersmeet	3.05	Benton Harbor Airport	.40
Minnesota	do	82	31+	Bigfork	-32	7	Spring Grove 1NW	2.55	Luverne	.00
Mississippi	do	89	15+	4 Stations	22	8+	Sarah	5.63	Pascagoula 2ENE	.55
Missouri	Doniphan	92	12	Edgerton	-11	8	Trenton	4.53	Pomme De Terre Dam	.58
Montana	Hardin	77	24	Wisdom	-29	7	Haugan	4.10	Biddle	.00
Nebraska	3 Stations	90	30+	Gordon	-5	15	Nebraska City	2.18	27 Stations	T
Nevada	Sunrise Manor Las Vegas	87	22	Currie Highway Sta	-5	15	Glenbrook	6.88	7 Stations	.00
New Hampshire	Epping	68	11	Fabyan	-30	19	Greenville	3.65	Milan 7NNW	.83
New Jersey	Atlantic City WBAP	79	11	Layton 2	-11	19	Phillipsburg Bridge	10.10	Cape May 3W	2.24
New Mexico	Jal	95	29	Eagle Nest	-11	6	Penasco Ranger Station	1.59	10 Stations	.00
New York	4 Stations	77	31	3 Stations	-20	19	Tannersville 2E	9.54	Canton 4SE	.11
North Carolina	5 Stations	89	16+	Grandfather Mountain	2	18	Lake Toxaway 2SW	6.36	Morehead City 2WNW	.32
North Dakota	Breien	86	29	Medora 22NNW	-29	7	Bisbee	1.10	Reeder 14N	.02
Ohio	Cincinnati WB City	84	13	2 Stations	-11	1	Waterloo	8.59	Toledo Sewage	.95
Oklahoma	Hollis	98	29	Buffalo	-5	8	Valliant 1E	4.84	2 Stations	.01
Oregon	Dorena Dam	76	23	Minam 7NE	-6	12	Valsetz	D17.05	McDermitt 26N	.23
Pennsylvania	Burgettstown 2W	87	27	Conneautville	-21	1	Ebensburg Sewage Pl	8.65	Erie WBAP	1.67
Puerto Rico	Guayama	95	2	Cayey 1E	50	29+	Jajome Alto	11.57	2 Stations	.00
Rhode Island	Providence WBAP	69	11	Kingston	-10	19	Kingston	7.22	Woonsocket	D5.09
South Carolina	Bamberg	91	12	2 Stations	13	18	Salem	3.87	Beaufort 7SW	1.03
South Dakota	3 Stations	85	29+	Deerfield 4NW	-22	7	Porcupine 16NW	1.28	McLaughlin	.00
Tennessee	Waverly	90	13	2 Stations	7	18	Tazewell	7.61	Chattanooga WBAP	1.17
Texas	Batesville 3S	102	13	Lipscomb	-1	[illegible]	McKinney	4.85	9 Stations	.00
Utah	Saint George	83	22	Woodruff	-13	15	Alta	6.30	Crisco	T
Vermont	Bellows Falls	67	12	West Burke	-26	19	Mays Mill	3.47	Bloomfield	.23
Virginia	Grundy 3NW	89	25	Big Meadows	2	18	Deerfield 1S	7.36	Cape Henry WB City	.77
Washington	4 Stations	70	26+	Chesaw 4NNW	1	13	Spruce	17.67	Sunnyside	.09
West Virginia	Williamson	88	14	Bayard	-9	19	Pickens 1	12.14	Petersburg	3.09
Wisconsin	2 Stations	82	30	Minong 4SW	-31	8	Madeline Island	5.90	Chilton	.11
Wyoming	3 Stations	81	29	Lake Yellowstone	-29	7	Moran 5WNW	2.24	Shoshoni	.03

\+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	998.3	1021.0	72	44	58.3	3.8	87	12	23	18	0	6	44	63	1.79	- 4.21	0.77	6	2	T	0	2.7	20	41	SW	6	11	7	13	5.6	72
HUNTSVILLE	600	997.3	1020.6	72	46	58.9	7.1	87	13+	22	18	0	6	42	56	1.63	- 3.94	1.26	3	2	T	T	2.8	17	26	34	6	10	7	14	6.0	
MOBILE	211	1012.9	1020.7	77	52	64.5	4.2	89	15	38	7	0	0	51	68	0.59	- 6.64	0.24	4	0	0.0	0	2.4	16	28	23	6	9	12	10	5.3	
MONTGOMERY	194	1013.9	1021.2	75	49	61.8	5.8	87	12	34	18	0	0	47	62	2.00	- 4.16	1.02	5	1	0.0	0	1.9	17	35	W	6	5	16	10	5.6	69
ALASKA																																
ANCHORAGE	114	1013.5	1018.5	32	14	23.2	- 1.4	43	4	- 2	10	0	30	9	54	0.98	0.47	0.38	8	0	8.8	22	1.9	36	29	15	4	15	4	12	4.8	70
ANNETTE	110	1008.1	1012.2	42	30	36.0	- 1.8	50	31+	16	26	0	20	25	70	3.01	- 6.54	0.95	15	0	9.4	4	3.7	6	26	12	27	6	6	19	6.9	
BARROW	31	1021.0	1021.7	- 2	-15	- 8.6	6.0	33	15	-30	23	0	31	-15	73	0.36	0.25	0.13	7	0	4.1	14	4.8	10	43	24	12	11	11	9	5.1	
BARTER ISLAND	39	1021.0	1023.2	- 3	-19	-10.9	4.0	36	15	-39	27	0	31	-18	70	1.44	1.24	0.55	10	0	15.0	17	2.9	25	64	27	12	7	9	15	6.6	
BETHEL	125	1013.9	1019.7	29	13	20.7	9.1	38	14	- 5	9	0	31	17	85	0.87	- 0.16	0.21	12	0	7.9	20	3.2	17	40	18	30	6	6	19	7.1	
COLD BAY	96	1015.9	1019.9	39	30	34.5	5.7	51	1	23	15	0	25	30	87	2.54	0.79	1.04	12	0	4.5	1	7.0	20	56	16	25	5	8	18	7.3	
FAIRBANKS	436	1003.4	1021.5	24	- 4	9.8	0.9	39	17	-32	24	0	31			1.90	1.50	0.60	15	0	28.4	37	0.9	29	36	25	12	8	5	18	6.6	
JUNEAU	12	1015.6	1016.4	32	16	24.1	- 6.3	44	5	- 4	26	0	29	13	65	1.34	- 1.93	0.36	11	0	6.6	3	6.9	10	29	10	16	8	5	18	6.4	57
KING SALMON	49	1017.6	1019.6	33	20	26.6	7.1	47	31	6	25	0	27	18	70	2.41	1.45	0.72	11	0	5.7	2	0.7	36	45	16	4	12	5	14	5.4	
KOTZEBUE	10	1018.3	1018.6	19	2	10.5	12.6	32	15	-19	1	0	31	6	80	0.34	0.06	0.08	10	0	8.8	35	8.9	12	51	25	11	8	9	14	6.6	
MC GRATH	344	1007.8	1021.2	30	5	17.5	9.2	40	16	-30	25	0	31	8	66	1.67	0.74	0.49	10	0	24.1	30	1.3	26	29	19	30	8	5	18	6.6	
NOME	13	1016.3	1017.2	25	9	16.8	8.9	33	30	-26	1	0	31	12	79	0.39	- 0.49	0.10	13	0	3.8	27	5.5	9	41	25	11	3	5	23	8.3	21
ST. PAUL ISLAND	22	1013.9	1015.0	37	29	33.2	9.0	41	30	19	21	0	25	30	86	1.85	0.79	0.36	20	0	9.0	7	10.3	18	43	27	7	1	11	19	8.0	
SHEMYA	122	1000.3	1003.9	37	30	33.1	0.7	39	28+	22	4+	0	26	29	87	3.56	0.99	0.80	24	0	6.9	1	11.9	21	53	19	28	0	7	24	8.7	
YAKUTAT	28	1014.2	1015.2	34	11	22.3	- 9.1	42	16+	- 5	25	0	31	15	72	3.90	- 4.79	2.04	10	0	32.3	43	3.2	9	30	5	16	10	6	15	6.1	
ARIZONA																																
FLAGSTAFF	6993	786.0	1015.4	54	24	39.0	3.4	66	17+	6	30	0	26	16	46	1.11	- 0.34	0.83	5	0	10.9	6	7.1	21	29	20	31	6	8	17	6.4	
PHOENIX	1117	974.9	1013.8	79	47	62.8	3.8	90	23+	34	6	2	0	31	34	0.43	- 0.23	0.42	2	0	0.0	0	1.3	15	40Y	W	24	11	8	12	5.4	85
TUCSON	2584	925.8	1013.6	78	47	62.1	4.1	89	28	32	7	0	1	23	27	0.41	- 0.12	0.31	4	1	0.0	0	3.2	21	37	SW	29	9	9	13	5.9	85
WINSLOW	4895	850.7	1015.3	67	31	49.1	3.5	80	23	13	8	0	17	15	30	0.24	- 0.15	0.19	3	0	0.1	T	6.7	20	46	19	29	12	6	13	5.7	
YUMA	194	1007.1	1014.4	79	51	65.3	2.3	91	23+	39	6	4	0	33	33	0.07	- 0.17	0.07	1	0	0.0	0	2.9	27	29	NW	24	12	7	12	5.4	86
ARKANSAS																																
FORT SMITH	447	1000.7	1017.4	73	43	58.3	7.2	93	12	17	7	4	6	41	57	1.21	- 2.26	0.63	5	3	4.0	3	1.8	17	30	W	13	5	10	16	6.9	65
LITTLE ROCK	257	1009.1	1018.9	71	47	58.9	7.1	85	13+	25	7	0	5	45	63	3.11	- 1.70	2.04	4	2	T	T	3.4	17	31	S	20	8	9	14	6.2	67
TEXARKANA	391	1005.1	1018.3	75	50	62.6	7.7	88	11	28	7	0	3	47	60	1.96	- 2.78	0.96	5	2	0.0	0	5.8	18				10	11	10	5.2	
CALIFORNIA																																
BAKERSFIELD	475	999.7	1017.4	67	45	56.1	- 0.8	77	16	35	30	0	0	40	59	0.52	- 0.54	0.34	6	0	0.0	0	2.5	36	23	36	29+	8	11	12	5.7	
BISHOP	4108	870.6		64	31	47.5	- 0.1	76	2+	20	30+	0	21			0.50	- 0.05	0.34	4		0.5	T										
BLUE CANYON	5280			43	29	35.9	- 3.6	60	7	19	29	0	22			15.94	7.49	3.81	17		64.1	43			32	18	16+	6	4	21	7.5	
EUREKA U	43			52	41	46.7	- 2.0	67	22	34	11+	0	0			7.44	2.19	1.62	19		0.0	0			42	NW	3	6	6	19	7.2	44
FRESNO	328	1005.4	1017.3	65	44	54.4	- 0.6	75	9	33	5	0	0	44	73	3.15	1.19	1.13	9	1	0.0	0	0.7	36	25	NW	29	10	4	17	6.2	66
LONG BEACH	34	1016.3	1017.8	68	49	58.1	1.4	83	1	38	30+	0	0	43	63	1.51	0.14	0.39	7	0	0.0	0	3.0	24	28	34	29	9	8	14	6.0	
LOS ANGELES	97	1013.5	1017.3	66	53	59.3	2.3	76	1	44	5	0	0	48	70	1.47	- 0.32	0.44	7	1	0.0	0	4.5	25	35Y	N	29	9	8	14	6.0	
LOS ANGELES U	270			69	53	61.0	1.6	88	1	43	5	0	0			2.50	0.24	1.16	8		0.0	0			29	N	29	11	8	12	5.5	64
MT SHASTA R	3544			47	29	37.7	- 3.5	64	8	20	11	0	23			8.49	4.03	2.87	17		41.0	17										
OAKLAND	6	1017.3	1017.6	58	48	53.2	- 0.4	65	20+	42	4	0	0	43	71	4.62	2.20	1.28	11	1	0.0	0	4.6	24	28	15	30+	8	9	14	6.1	
RED BLUFF	342	1003.4	1016.0	60	41	50.6	- 3.5	76	7	30	29	0	1	38	65	2.69	- 0.01	0.87	13	2	0.0	0	3.2	17	42	SE	16	7	7	17	6.7	47
SACRAMENTO	17	1015.9	1016.9	60	41	50.8	- 2.6	71	17	32	5	0	1	43	77	3.91	1.55	1.38	11	2	0.0	0	4.2	20	32	SW	9	10	8	13	5.6	61
SANDBERG R	4517	861.8		50	35	42.2	- 2.8	71	1	21	30	0	12	29	67	2.10	0.66	0.88	7		8.9	8	3.6	23	38	19	11	7	9	15	6.3	
SAN DIEGO	13	1016.6	1017.5	65	53	59.0	0.0	80	1	44	30	0	0	49	70	1.14	- 0.43	0.54	6	0	0.0	0	2.7	26	25	NW	29	7	8	16	6.4	64
SAN FRANCISCO	8	1016.9	1017.5	60	45	52.4	- 0.9	67	15	39	14+	0	0	40	66	5.04	2.35	1.27	13	1	0.0	0	5.8	26	44	S	16	8	9	14	6.2	
SAN FRANCISCO U	52			58	47	52.7	- 2.0	65	27+	41	11	0	0			4.35	1.42	0.94	16	0	0.0	0			32	SW	10					71
SANTA CATALINA	1568			58	47	52.3	- 2.2	77	1	41	31	0	0			1.07	- 0.88	0.47	6	0	0.0	0						8	8	15	5.9	
SANTA MARIA	236			61	41	50.9	- 2.4	67	27+	31	30+	0	3			2.31	0.25	0.75	10		0.0	0						11	5	15	6.0	
STOCKTON	22	1016.6	1017.6	62	42	51.9	- 1.8	70	16	30	5	0	1	42	71	2.84	0.79	0.88	10	0	0.0	0	2.6	25	26	27	28+	8	8	15	6.1	
COLORADO																																
ALAMOSA	7536	769.4		54	20	37.2	5.1	68	28	- 8	6	0	29			0.15	- 0.11	0.09	3		4.0	3						8	11	12	5.7	
COLORADO SPRINGS	6145	808.0	1013.6	58	28	42.9	6.7	76	23	3	6	0	19	14	39	0.18	- 0.43	0.12	4	1	2.1	2	1.9	19	40	23	29	9	6	16	6.5	
DENVER	5283	832.7	1011.5	59	27	42.9	6.5	79	29	4	8	0	24	19	48	0.79	- 0.42	0.36	5	0	6.6	4	1.4	19	38	S	29	7	7	17	6.6	75
GRAND JUNCTION	4855	849.6	1012.4	62	35	48.5	7.0	73	28+	17	6	0	12	17	32	0.18	- 0.57	0.11	3	0	0.2	T	2.0	16	47	SW	29	6	11	14	6.6	64

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	852.7	1012.7	62	29	45.4	5.3	79	29	2	8	0	18	16	35	0.23	- 0.29	0.17	2	0	3.0	2	1.3	26	57	SW	29	11	7	13	5.5	81
CONNECTICUT																																
BRIDGEPORT	7	1020.3	1021.1	41	26	33.6	- 3.9	60	11	4	19	0	23	25	72	6.44	2.19	2.38	11	1	21.8	13	4.4	35	37	32	1	8	8	15	6.2	
HARTFORD	169	1014.2	1020.9	42	25	33.3	- 2.7	62	11+	- 6	19	0	25	22	67	4.43	0.63	1.66	10	0	33.2	13	3.6	36	28	NW	1	6	8	17	6.9	58
NEW HAVEN	6	1021.0		42	26	33.7	- 3.2	61	11	5	19	0	26			5.35	0.73	2.24	10		21.2	11			26	NW	7+	7	8	16	6.6	59
DELAWARE																																
WILMINGTON	78	1018.3	1021.4	48	31	39.4	- 1.9	73	11	12	19	0	15	30	72	5.45	1.43	2.63	12	2	2.7	1	1.6	1	27	33	16+	8	6	17	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1019.0	1021.4	55	35	45.0	0.2	78	14+	18	19	0	10	31	62	3.49	0.28	1.75	10	1	0.7	T	1.3	36	42	NW	16	7	8	16	6.9	53
FLORIDA																																
APALACHICOLA U	13			71	56	63.2	2.2	81	13	40	19	0	0			2.39	- 2.13	2.00	5	2	0.0	0			33	E	27	11	12	8	5.0	71
DAYTONA BEACH	31	1020.3	1021.7	77	58	67.0	3.2	89	11	46	24	0	0	57	73	0.31	- 3.25	0.30	2	0	0.0	0	2.5	8	29	2	16	12	12	7	5.3	
FORT MYERS	15	1020.3	1020.5	80	60	69.9	1.7	85	10	51	25+	0	0	58	70	0.72	- 1.90	0.62	2	1	0.0	0	3.1	8	30	7	31	12	12	7	4.7	
JACKSONVILLE	20	1020.7	1021.6	77	54	65.5	3.3	91	12	40	1	2	0	52	67	0.81	- 2.68	0.78	2	0	0.0	0	0.7	7	35	E	31+	11	11	9	5.2	67
KEY WEST	4	1018.6	1019.2	80	71	75.9	3.4	86	8	64	1	0	0	65	72	0.59	- 1.18	0.41	6	0	0.0	0	8.9	9	29	E	28	16	9	6	3.8	85
LAKELAND U	214			78	59	68.5	2.0	87	10	46	19	0	0			1.31	- 2.94	0.50	3		0.0	0						12	12	7	4.9	72
MIAMI	7	1019.6	1019.8	80	66	72.8	2.3	88	7	53	18	0	0	62	72	3.60	1.33	1.85	10	1	0.0	0	6.0	10	29	6	31	8	13	10	5.4	
ORLANDO	108	1016.9	1021.3	79	57	68.3	2.4	88	11	47	19	0	0			1.31	- 2.10	0.94	5	1	0.0	0	2.2	7	29	3	16	11	13	7	5.2	
PENSACOLA	112	1017.3	1021.3	73	53	63.0	2.0	83	15	38	7	0	0	51	73	0.87	- 5.17	0.80	5		0.0	0	2.2	12	34	SE	26+	11	12	8	5.0	81
TALLAHASSEE	55	1019.0	1021.4	79	50	64.1	3.5	90	15	33	17	1	0	50	68	1.29	- 3.89	0.65	4	1	0.0	0	1.0	12	22	20	7	8	17	6	5.2	
TAMPA	19	1020.7	1020.8	79	57	67.8	1.8	85	26	46	19	0	0	57	74	0.66	- 3.09	0.55	5	0	0.0	0	2.0	8	23	3	16	11	12	8	5.1	81
WEST PALM BEACH	15	1019.6	1020.3	80	63	71.5	1.6	90	7	53	25	1	0	60	71	2.49	- 0.95	1.78	8	2	0.0	0	6.4	10	28	8	31	9	13	9	5.2	
GEORGIA																																
ATHENS	802	991.9	1020.9	71	43	57.0	5.4	83	12	23	18	0	6	40	58	2.27	- 2.83	1.32	4	2	0.0	0	2.2	28	28	27	6	8	13	10	5.6	
ATLANTA	1010	984.1	1021.0	69	45	56.7	5.3	83	12	24	18	0	4	40	59	3.63	- 1.74	2.02	5	3	0.0	0	2.0	25	30	NW	15	9	10	12	5.6	61
AUGUSTA	145	1015.9	1021.1	73	44	58.5	3.6	87	12	23	19	0	4	43	63	6.53	2.36	5.31	6	2	0.0	0	1.5	21	28	25	7	9	14	8	5.5	
COLUMBUS	385			75	47	60.8	5.5	86	12+	29	18	0	2	46	64	1.40	- 4.61	0.50	4		0.0	0	0.7	25	29	20	6	9	9	13	5.7	
MACON	354	1008.5	1021.7	75	46	60.4	3.5	88	12	26	19	0	4	43	58	1.51	- 3.43	0.63	6	2	0.0	0	1.3	23	31	S	6	10	11	10	5.3	83
ROME	637			71	39	54.7	4.3	85	13+	21	19+	0	11			1.48	- 4.39	0.61	6		0.0	0										
SAVANNAH	46	1020.0	1021.8	76	48	61.7	3.4	90	12	29	2	1	2	46	65	0.50	- 3.47	0.31	3	1	0.0	0	1.2	16	29	N	16+	11	12	8	4.9	72
HAWAII																																
HILO	27	1014.2	1015.3	81	67	74.1	3.5	88	17	62	7	0	0	66	79	9.46	- 5.24	2.71	27	2	0.0	0	1.8	15	21	E	12	1	7	23	8.4	34
HONOLULU	7	1014.2	1014.6	80	67	73.8	1.0	83	31+	61	16+	0	0	65	76	6.78	3.89	2.73	16	0	0.0	0	5.6	7	27	NE	31	3	9	19	7.8	40
KAHULUI	48	1012.2	1014.6	80	65	72.2	0.0	83	12+	57	3	0	0	63	74	10.90	8.68	5.42	13	1	0.0	0	5.2	7	28	NE	1	3	8	20	7.8	44
LIHUE	103	1010.2	1015.4	77	66	71.4	0.4	81	17+	58	14	0	0	64	81	8.91	4.35	1.89	18	1	0.0	0	4.9	7	24	E	26	1	6	24	8.5	33
IDAHO																																
BOISE	2838	913.0	1014.0	52	32	42.0	0.3	66	22	17	4	0	17	25	55	0.37	- 0.95	0.24	6	0	0.3	T	3.4	13	31	SE	16	5	4	22	7.5	64
IDAHO FALLS 46W R	4938			43	23	32.7	2.7	56	22	5	7	0	30			0.54	- 0.08	0.36	7		4.7	4	6.3	24	35	SW	29					
LEWISTON	1413			51	33	42.1	- 0.5	64	17	22	4	0	14			1.18	0.00	0.37	11		0.3	T						2	6	23	8.4	
POCATELLO	4454	859.8	1014.2	48	27	37.5	1.7	63	22	8	7	0	25	22	59	1.21	0.19	0.38	13	0	5.7	2	7.4	21	37	S	11	5	5	21	7.5	59
ILLINOIS																																
CAIRO U	314			63	45	53.7	5.5	81	30+	12	7	0	8			2.16	- 2.63	1.36	8		8.0	7			34	NE	17	6	12	13	6.2	58
CHICAGO O HARE	658	994.6	1019.6	44	29	36.5	1.8	79	30	3	1	0	17	29	76	2.30	- 0.38	1.25	12	1	8.8	8	0.4	26	35	35	16	2	8	21	7.9	
CHICAGO MIDWAY	607	996.6		45	32	38.6	2.3	78	30	13	17+	0	14	28	68	2.32	- 0.42	0.93	10	1	5.7	5	1.2	18	37	NW	16	3	8	20	7.8	38
MOLINE	582	996.6	1018.7	48	30	39.0	3.6	79	30	8	8	0	20	29	71	1.68	- 0.71	0.83	8	2	2.2	1	1.3	12	32	NW	21+	5	5	21	7.7	37
PEORIA	652	994.6	1019.1	49	32	40.2	2.6	81	30	9	8	0	17	33	77	2.33	- 0.52	1.08	11	2	2.7	2	1.9	13	33	NW	16	3	8	20	7.9	47
ROCKFORD	724	991.5	1019.1	43	29	35.9	1.9	76	30	7	8	0	21	27	72	1.63	- 0.83	0.87	6	1	6.5	6	0.7	15	24	20	30	4	6	21	7.8	
SPRINGFIELD	588	995.9	1018.6	52	36	43.8	3.6	81	30	11	8	0	12	36	75	2.61	- 0.27	1.53	9	0	2.4	2	2.0	13	38	S	1	3	10	18	7.5	50
INDIANA																																
EVANSVILLE	381	1005.4	1019.7	61	38	49.2	3.9	82	30+	5	7	0	12	39	73	3.54	- 0.77	1.09	8	3	7.2	7	1.9	22	34	NW	17	7	8	16	6.7	55
FORT WAYNE	791	989.5	1020.3	44	28	36.2	- 0.1	75	31+	-10	1	0	20	28	75	2.77	- 0.01	1.12	12	1	8.8	3	0.8	14	33	N	16	2	8	21	8.0	47

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temp: Average maximum	Temp: Average minimum	Temp: Average	Temp: Departure from normal	Temp: Highest	Temp: Date	Temp: Lowest	Temp: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precip: Total	Precip: Departure from normal	Precip: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
INDIANAPOLIS	792	989.8	1019.6	53	35	44.0	5.1	80	30	13	1	0	12	34	69	3.33	- 0.08	1.06	12	4	3.0	2	0.6	19	41	NW	16	2	9	20	7.7	43
SOUTH BEND	773	990.9	1019.7	44	29	36.5	1.6	77	30	- 2	1	0	16	29	75	1.73	- 1.01	1.03	12	0	11.3	18	1.6	18	23	23	31	2	8	21	8.3	
IOWA																																
BURLINGTON	692			51	32	41.2	3.9	82	30	7	8	0	16	32	73	1.93	- 0.78		7	3	T		1.0	13	28	19	30	5	8	18	7.2	
DES MOINES	938	982.7	1018.4	52	29	40.3	6.5	83	30+	1	8	0	22	27	63	1.64	- 0.45	0.89	7	2	0.5	T	1.3	9	34	S	30	5	6	20	7.3	57
DUBUQUE	1056	978.3		43	27	35.0	3.1	77	30	2	8	0	22			3.06	0.30	1.26	6		10.0	9						3	4	24	8.0	
SIOUX CITY	1095	976.6	1017.4	52	27	39.9	6.8	82	24	2	7	0	21	25	60	0.26	- 1.20	0.15	5	2	0.5	1	0.8	11	42	S	30	6	8	17	6.9	70
WATERLOO	868	985.8	1018.3	47	26	36.6	4.6	84	30	1	8	0	23	29	77	2.47	0.42	1.63	6	3	3.9	2	1.1	10	31	18	30	4	7	20	7.6	
KANSAS																																
CONCORDIA	1470	962.4	1016.2	59	31	45.2	5.4	86	29+	2	7	0	17		59	1.11	- 0.38	0.61	8	2	0.3	T	2.6	12	44	S	24	7	9	15	6.6	60
DODGE CITY	2582	923.1	1014.6	63	31	46.9	5.1	85	29	- 1	8	0	14	24	49	0.14	- 1.02	0.08	4	1	0.6	T	2.9	16	38	S	29	9	6	16	6.2	66
GOODLAND	3650	886.2	1014.4	59	26	42.3	5.8	84	29	2	8	0	24	21	55	0.46	- 0.60	0.32	3	0	4.0	1	2.9	18	35	24	30	8	12	11	5.9	
TOPEKA	876	985.1	1017.2	60	34	47.0	5.3	85	29	- 4	8	0	14	32	60	1.91	- 0.10	1.05	10	1	0.8	1	1.7	14	43	SW	24	5	6	20	7.6	50
WICHITA	1321	967.8	1016.0	64	37	50.5	6.0	88	29+	0	8	0	10	30	50	0.57	- 1.07	0.32	8	4	0.7	T	3.1	16	45	S	29	9	4	18	6.6	62
KENTUCKY																																
COVINGTON	869	987.8	1020.0	55	35	44.8	4.2	78	26+	14	18	0	12	33	67	3.63	- 0.16	0.80	13	2	8.1	8	1.6	25	32	35	17	5	6	20	7.5	
LEXINGTON	966	984.1	1020.1	61	39	50.0	6.8	81	13	16	18	0	9	36	62	6.03	1.28	2.56	9	3	4.3	4	2.7	20	28	22	2	7	8	16	6.6	
LOUISVILLE	477	1001.7	1019.6	62	40	50.6	7.3	83	13	19	18+	0	10	37	64	4.37	- 0.22	1.89	12	4	9.3	8	1.4	21	40	N	17	7	9	15	6.6	55
LOUISIANA																																
ALEXANDRIA	92	1015.6	1019.8	75	49	61.9	3.5	88	11	31	8+	0	3	51	74	1.94	- 3.03	1.01	4	1	0.0	0	3.1	17	23	28	6	13	6	12	5.5	
BATON ROUGE	64	1017.3	1020.1	77	52	64.7	4.0	86	15+	38	7	0	0	51	66	1.90	- 3.01	1.29	4	1	0.0	0	3.1	15	23	32	6	10	13	8	5.3	
LAKE CHARLES	9	1018.6	1019.8	77	55	65.9	4.8	85	28	36	7	0	0	56	75	1.05	- 3.19	0.68	4	2	0.0	0	4.9	15	24	17	5	7	15	9	5.9	
NEW ORLEANS	3	1019.3	1020.2	75	51	63.2	1.8	83	15+	35	17	0	0	54	73	1.60	- 3.74	1.18	6	0	0.0	0	3.1	13	29	19	6	12	13	6	5.0	
SHREVEPORT	254	1009.1	1018.3	76	51	63.5	6.9	88	11	26	7	0	2	49	66	1.02	- 3.13	0.49	4	0	0.0	0	5.3	17	27	20	4	10	11	10	5.5	73
MAINE																																
CARIBOU	624	996.3		30	5	17.4	- 5.4	46	29	-20	13	0	31			1.07	- 1.31	0.48	8		10.5	35						8	9	14	6.3	
PORTLAND	47	1018.3	1020.5	36	17	26.5	- 4.9	53	11	-10	19	0	29	16	63	2.16	- 2.18	0.84	11	1	17.5	36	2.5	35	27	NW	1	8	3	20	7.3	54
MARYLAND																																
BALTIMORE	148	1015.6	1021.3	51	32	41.8	- 1.3	78	14	15	19+	0	13	28	63	4.39	0.57	2.42	11	2	2.5	2	1.1	34	40	NW	16	7	7	17	6.4	53
MASSACHUSETTS																																
BLUE HILL OBS R	629			38	24	30.9	- 4.0	65	11	- 2	19	0	25			6.17	1.63	2.30	12		41.0	17			40	NW	1					43
BOSTON	15	1019.3	1020.4	39	28	33.2	- 4.5	64	11	6	19	0	21	21	65	4.67	0.45	2.07	12	1	22.9	10	4.3	35	29	NW	1	4	11	16	7.1	49
NANTUCKET	43	1019.3	1019.8	39	26	32.5	- 3.6	48	11	10	19+	0	24	26	79	4.85	0.31	1.85	12	0	20.7	7	5.2	35	38	N	17	2	9	20	7.6	54
PITTSFIELD	1170			37	18	27.4	- 3.3	60	11	- 6	19	0	30			3.10	- 0.12	1.32	12		27.2	27										
WORCESTER	986	982.4	1020.7	36	21	28.8	- 4.0	61	11	- 4	19	0	26	18	65	3.73	- 0.38	1.46	12	1	34.6	19	3.7	32	30	29	4+	8	7	16	6.6	
MICHIGAN																																
ALPENA	689	993.9	1020.1	37	13	25.1	- 0.6	68	31	-20	8	0	29	15	63	1.14	- 0.88	0.59	8	0	10.4	27	1.2	22	26	NW	17	8	9	14	6.4	56
DETROIT	619			43	27	34.9	0.1	73	31+	7	1	0	23	25	70	0.96	- 1.46	0.51	11	0	5.8		1.0	29	29	28	17					
DETROIT M WAYNE CO	633	994.9	1019.9	44	28	35.9	1.0	75	31	2	1	0	19	27	71	1.03	- 1.38	0.77	9	0	5.8	3	0.7	33	30	NW	17	5	7	19	7.3	52
DETROIT WILLOW RUN	711	991.5	1020.5	42	25	33.7	- 1.6	74	31	3	1	0	25			0.75	- 1.65	0.58	9	0	5.1	4	1.4	29	35	33	17	4	7	20	7.3	
FLINT	770	991.2	1020.1	39	23	30.9	- 1.8	74	31	-11	1	0	24	22	68	0.58	- 1.56	0.16	12	1	10.8	11	1.8	20	25	27	17+	4	7	20	7.5	
GRAND RAPIDS	784	989.8	1019.7	42	26	34.1	1.4	75	30	- 5	1	0	21	27	75	2.49	0.21	1.17	11	1	10.3	8	1.1	18	26	N	16	2	7	22	8.0	45
HOUGHTON LAKE	1149	976.6	1020.3	38	16	27.0		66	30	-23	1	0	28	20	74	1.32		0.45	8	1	9.4	11	1.6	22	21	34	16	5	9	17	7.0	
LANSING	841	986.8	1019.7	41	24	32.2	- 0.2	74	30	-12	1	0	24	24	72	1.16	- 1.24	0.85	10	0	9.4	9	2.1	21	28	W	16	2	10	19	7.5	53
MARQUETTE U	677			37	20	28.3	1.6	69	31	- 5	8	0	26			1.33	- 0.58	0.57	12		10.4	26			41	S	30	6	8	17	6.9	61
MUSKEGON	627	996.3	1019.8	42	25	33.5	0.6	77	30	- 5	1	0	22	25	73	2.04	- 0.01	0.99	10	1	12.9	9	1.8	17	31	20	27	1	13	17	7.7	
SAULT STE MARIE	721	992.2	1020.0	31	12	21.6	- 2.2	52	31	-21	8	0	30	14	72	1.58	- 0.23	0.68	9	1	6.8	25	0.1	8	32	NW	17	7	7	17	6.8	59
MINNESOTA																																
DULUTH	1428	965.5	1018.8	34	16	24.8	3.5	65	30	-17	7	0	28	14	64	0.66	- 0.96	0.21	10	0	6.9	25	1.5	25	37	NW	6	6	7	18	6.8	58
INTERNATIONAL FALLS	1179	973.9	1018.8	31	9	20.1	0.7	70	30	-28	7	0	28	9	61	0.99	- 0.04	0.38	11	1	6.5	21	2.6	23	35	16	1	6	7	18	6.9	
MINNEAPOLIS	834	987.5	1019.1	38	22	29.8	2.4	80	30	-10	7	0	23	21	70	0.96	- 0.57	0.38	5	1	2.6	23	0.0	25	45	SW	30	7	6	18	6.9	58

See footnotes at end of table

CLIMATOLOGICAL DATA

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State and Station		Pressure		Temperature								No. of days				Precipitation							Wind					No. of days (sunrise to sunset)				
																			No. of days		Snow, Sleet				Fastest mile							
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ROCHESTER	1297	969.5	1018.9	39	23	31.2	3.3	75	30	-5	7	0	24	24	75	1.52	-0.12	0.98	5	2	5.6	6	1.3	21	35	25	30	6	8	17	7.1	
ST CLOUD	1034	979.3	1018.5	36	17	26.2	0.6	72	30	-19	7	0	26		69	0.39	-0.89	0.25	3		3.3	17						6	7	18	6.9	
MISSISSIPPI																																
JACKSON	310	1008.1	1020.2	75	46	60.5	4.0	86	11	29	8	0	5	48	69	2.32	-3.42	1.54	4	0	0.0	0	3.7	18	34	SE	30	14	5	12	5.2	73
MERIDIAN	290	1009.5	1020.8	76	46	61.0	4.5	87	11	31	19+	0	5	44	60	2.45	-3.87	1.48	4	0	0.0	0	2.4	19	28	26	6	7	14	10	5.7	
MISSOURI																																
COLUMBIA	778	988.8	1017.6	58	38	47.9	6.0	84	30+	9	8	0	12	35	66	2.49	-0.16	0.78	11	4	1.4	1	1.7	12	35	SW	30	3	8	20	7.5	65
KANSAS CITY	742	989.8	1017.3	59	37	47.8	4.5	85	29	6	8	0	10	33	61	2.85	0.36	1.71	6	1	1.1	1	1.5	13	33	S	24	5	7	19	7.5	47
SAINT JOSEPH	811			62	34	47.9	7.7	86	24	-5	8	0	17	33	67	1.13	-1.20	0.48	8	3	0.2	T	1.0	12	35	19	24	5	10	16	7.1	
ST LOUIS	535	998.3	1018.9	58	39	48.3	5.7	84	24	17	8	0	11	37	70	2.77	-0.31	1.07	7	3	1.2	1	1.3	15	29	NW	16	2	12	17	7.6	50
SPRINGFIELD	1268	971.9	1017.5	63	38	50.4	6.4	83	11	5	8	0	11	36	63	1.66	-1.18	0.60	10	3	1.7	2	3.4	17	30	S	30	6	6	19	7.1	54
MONTANA																																
BILLINGS	3567	888.3	1015.1	41	21	31.3	-2.4	71	23	0	15+	0	27	18	63	1.55	0.50	0.50	15	0	16.2	6	3.2	29	45	NE	6	4	7	20	7.5	72
GLASGOW	2284	931.9		31	12	21.8	-4.9	57	28	-16	15	0	29			0.83	0.27	0.28	11		14.8	10						5	5	21	7.5	
GREAT FALLS	3662	885.2	1016.6	38	17	27.2	-3.5	64	23	-16	14	0	27	10	51	2.18	1.26	1.01	11	0	21.3	7	5.8	25	47	SW	8	2	7	22	7.9	69
HAVRE	2582	921.4	1016.4	34	14	24.3	-2.6	63	23	-16	14	0	30	17	76	1.28	0.68	0.58	12	0	14.4	4	2.6	27	38	NW	23+	4	3	24	8.2	54
HELENA	3828	877.8	1016.5	40	18	29.0	-2.4	62	23+	-3	15+	0	29	16	59	1.43	0.73	0.41	11	0	14.9	8	5.8	27	38	N	6	3	4	24	7.9	56
KALISPELL	2965	908.2	1015.0	39	23	30.7	-1.1	50	23	10	12+	0	31	21	71	1.09	0.13	0.27	14	1	10.0	2	1.2	4	31	1	10	2	8	21	8.2	
MILES CITY	2629	920.4	1016.0	40	18	29.2	-1.7	64	28+	-12	15	0	27	20	71	1.78	1.13		11	0	17.8		2.9	33								
MISSOULA	3190	901.5	1015.5	43	25	34.0	0.3	56	22	4	7	0	30	24	72	1.09	0.36	0.25	16	0	8.9	3	0.7	33	29	W	11	0	8	23	8.7	46
NEBRASKA																																
GRAND ISLAND	1841	949.5	1016.8	57	28	42.6	6.9	88	24	5	7	0	22	24	54	0.01	-1.26	0.01	1	1	T	T	0.7	15	37	20	30+	3	12	16	7.2	
LINCOLN U	1150			56	31	43.6	5.5	87	29	5	7	0	19			0.88	-0.85	0.67	3		T	0			45	SW	30	4	11	16	7.1	64
NORFOLK	1544			53	27	40.3	7.0	84	24	0	7	0	23			0.06	-1.53	0.02	3		0.5	T						7	7	17	6.9	
NORTH PLATTE	2775	916.4	1015.6	56	24	39.9	4.9	84	29	4	7	0	25	20	53	0.09	-0.89	0.06	2	1	0.7	1	0.7	9	34	NE	25	2	11	18	7.6	64
OMAHA	977	981.7	1017.6	59	32	45.5	8.6	89	24	6	8	0	15	28	55	0.82	-0.63	0.51	6	2	0.3	T	1.5	12	42	S	30	6	9	16	6.7	63
SCOTTSBLUFF	3957	876.7	1014.0	57	26	41.3	6.0	82	29	3	7	0	25	22	55	0.29	-0.57	0.15	6	0	2.1	1	1.4	30	43	29	30	4	9	18	7.2	
VALENTINE	2587			51	25	37.7	6.4	80	23	-1	15	0	22			0.71	-0.30	0.56	4		3.0	2			36	W	30	5	9	17	7.1	60
NEVADA																																
ELKO	5050	841.2	1013.8	49	25	37.3	1.7	66	23	10	15	0	25	25	68	1.79	0.96	0.97	11	0	23.2	14	2.0	22	23	21	9	6	8	17	6.6	
ELY	6253	804.9	1012.5	50	27	38.4	4.9	64	22	12	30	0	23	21	55	0.37	-0.48	0.14	7	1	4.4	2	6.7	19	38	SW	12+	8	8	15	6.2	66
LAS VEGAS	2162	936.7	1013.0	72	47	59.3	4.5	84	23	33	6	0	0	24	28	T	-0.35	T	0	0	0.0	0	6.1	20	36	SW	3	9	13	9	5.4	88
RENO	4404	862.9	1013.7	54	28	40.6	-0.9	68	22+	14	14	0	24	24	57	1.93	1.25	0.81	9	0	15.6	8	3.0	24	57	W	23	7	8	16	6.4	75
WINNEMUCCA	4299	864.9	1013.9	53	25	39.0	1.0	66	22	8	5	0	27	21	53	1.32	0.51	0.44	7	0	11.1	6	2.8	22	31	SW	11+	6	6	19	7.1	46
NEW HAMPSHIRE																																
CONCORD	342	1007.8	1021.0	39	16	27.1	-4.6	64	11	-16	19	0	29			1.75	-1.51	0.71	11	1	19.6	26	2.7	33	31	W	1	8	7	16	6.7	55
MT WASHINGTON OBS	6262			17	1	9.1	-2.6	42	31	-26	18	0	31			2.82	-2.92	0.78	15	0	22.8	6			97Y	NW	1	4	6	21	7.9	37
NEW JERSEY																																
ATLANTIC CITY	64	1019.0	1021.5	48	29	38.6	-2.5	79	11	7	19	0	20	29	72	3.78	-0.13	1.85	11	2	2.1	T	1.5	36	28	33	16	10	2	19	6.5	50
ATLANTIC CITY U	11			45	33	39.1	-2.0	72	14	13	19	0	12			2.82	-1.19	1.07	12						41	NNW	16					
NEWARK	7	1020.3	1021.4	45	30	37.6	-2.9	70	11	8	19	0	16	27	70	5.86	1.77	2.07	13	1	18.0	8	3.3	32	29	30	1	7	8	16	6.3	
TRENTON U	56			46	32	38.9	-1.8	71	11	9	19	0	14			5.12	1.28	2.26	13		13.3	3			34	NW	16	8	8	15	6.3	48
NEW MEXICO																																
ALBUQUERQUE	5311	837.1	1013.4	67	37	52.0	6.2	80	28	20	6	0	7	15	26	0.25	-0.23	0.13	3	1	1.1	T	3.2	24	47	SW	29	10	11	10	5.5	78
CLAYTON	4969			65	30	47.4	6.5	79	29+	5	7	0	17			0.09	-0.54	0.06	3		1.1	1						9	7	15	6.0	
RATON	6379			62	26	43.9	5.8	75	2	0	8	0	24			0.09	-0.43	0.05	3		1.3	T						9	6	16	6.0	
ROSWELL	3617	890.6		78	36	57.2	7.7	94	28	12	8	4	8	23	31	0.07	-0.43	0.06	2	1	0.6	T	3.6	19	40	SW	29	10	11	10	5.3	77
SILVER CITY	5373			69	37	52.6	4.3	80	28	20	6	0	7			0.02	-0.43	0.02	1		0.0	0						12	12	7	4.7	
NEW YORK																																
ALBANY	275	1010.5	1021.7	39	19	29.0	-4.0	60	31	-10	19	0	30	19	67	2.56	-0.16	0.91	15	0	26.2	11	1.8	30	34	NW	4	8	4	19	6.8	56
BINGHAMTON	1590	959.7	1020.7	36	22	29.4	-1.9	65	31	-6	19	0	26	21	73	2.78	-0.11	0.58	15	0	26.3	8	1.0	28	28	NW	1	6	8	17	7.4	46

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	993.9	1020.5	39	23	30.9	- 0.6	74	31	- 4	18	0	25	25	78	1.20	- 2.04	0.23	16	0	10.8	5	1.1	24	29	W	17+	3	6	22	8.0	48
NEW YORK U	132	1017.3	1020.5	45	31	37.6	- 2.9	72	11	8	19	0	16	25	66	5.97	1.96	2.33	11	1	17.4	10	2.8	35	29	NW	16+					53
J.F. KENNEDY	13	1020.3	1021.3	42	28	34.9	- 3.8	64	11	7	19	0	20	27	75	5.48	1.33	2.03	13	0	15.5	8	2.8	35	35	4	17	8	6	17	6.0	
NEW YORK LA GUARDIA	11	1019.6	1021.5	44	31	37.8	- 3.0	70	11	10	19	0	14	26	66	5.77	1.54	2.35	12	1	14.9	9	3.5	35	34	NW	1	7	7	17	6.5	
ROCHESTER	547	1000.7	1021.7	40	25	32.5	0.2	77	31	- 2	18	0	24	23	69	1.31	- 1.70	0.47	11	0	16.0	9	1.2	27	25	NW	17+	5	7	19	7.4	53
SYRACUSE	410	1006.1	1021.4	40	23	31.6	- 1.0	70	31	- 5	18	0	23	21	65	1.34	- 2.26	0.34	16	1	10.4	7	1.9	1	27	E	21+	7	7	17	7.0	52
NORTH CAROLINA																																
ASHEVILLE	2140	943.4	1020.4	65	35	49.8	5.2	81	15	17	19+	0	14	36	67	2.86	- 1.96	1.78	8	5	T	0	1.3	34	40	34	16+	9	14	8	5.3	82
CAPE HATTERAS R	7	1021.0	1021.5	58	43	50.4	- 0.6	72	11	19	2	0	5	42	74	0.98	- 3.18	0.39	5	1	0.0	0	3.9	36	39	WSW	17+	11	6	14	5.6	63
CHARLOTTE	736	992.9	1020.7	67	41	53.9	3.9	86	15	21	18	0	8	38	60	2.48	- 1.91	1.26	9	3	0.0	0	1.8	22	35	SW	7	11	9	11	5.2	74
GREENSBORO	897	988.8	1021.0	67	39	53.0	5.6	87	15	16	18	0	10	38	62	1.21	- 2.48	0.50	11	1	0.0	0	1.8	24	36	NW	15	12	9	10	5.3	75
RALEIGH	434	1004.7	1021.0	67	40	53.7	4.2	87	15	19	19+	0	8	37	59	1.62	- 1.73	0.74	7	2	0.0	0	1.0	24	44	32	15	13	8	10	5.1	68
WILMINGTON	28	1020.3	1021.8	70	46	58.0	3.8	88	15	27	2	0	4	44	65	0.93	- 3.10	0.35	6	1	0.0	0	0.6	23	38	NW	16	11	9	11	5.5	72
NORTH DAKOTA																																
BISMARCK	1647	955.6	1017.1	40	17	28.1	1.9	80	29	- 9	7	0	29	16	62	0.28	- 0.50	0.12	6	0	4.1	2	2.0	32	36	W	31	4	8	19	7.4	70
FARGO	896	984.1	1017.9	37	17	26.8	2.5	78	30	-15	7	0	28	18	69	0.34	- 0.41	0.27	7	1	4.9	5	0.5	26	39	SE	29+	6	9	16	7.0	69
WILLISTON	1899	945.8	1016.8	35	12	23.3	- 1.0	58	28+	-15	14	0	30	17	76	0.70	- 0.01	0.22	10	0	6.2	7	2.8	29	52	NW	31	5	10	16	7.0	71
OHIO																																
AKRON	1208	974.6	1020.1	47	29	38.2	1.3	78	26	3	1	0	19	30	75	3.07	- 0.25	0.82	16	3	13.8	9	1.4	25	23	32	17	4	5	22	7.9	
CINCINNATI OBS	761			56	37	46.5	3.8	81	26	14	1	0	12			3.72	- 0.17	1.11	12		9.0	9			25	NW	17					56
CLEVELAND	777	990.5	1020.5	45	30	37.2	2.1	80	26	9	19	0	18	30	78	2.08	- 1.05	0.55	15	1	7.3	6	1.1	27	29	N	15	3	9	19	7.8	50
COLUMBUS	812	989.8	1020.5	50	31	40.4	1.5	79	26	- 2	1	0	15	32	74	4.40	1.24	1.32	13	4	11.4	7	1.0	29	36	N	17	4	8	19	7.7	55
DAYTON	1002	983.4	1020.2	49	31	40.2	1.3	75	26	3	1	0	18	33	78	3.77	0.65	1.25	14	3	7.8	4	1.2	21	41	NW	17	3	7	21	7.9	45
MANSFIELD	1295			46	29	37.4	2.2	76	26	2	1	0	21	30	77	3.21	- 0.57	1.12	15	3	11.2	4	2.0	24				3	7	21	8.0	
TOLEDO	676	994.9	1020.8	44	26	34.8	- 0.4	76	26	2	1	0	24	27	73	1.72	- 0.54	0.71	12	2	9.8	5	0.5	31	31	N	16	3	7	21	7.7	44
YOUNGSTOWN	1178	976.3	1020.2	44	27	35.1	- 0.2	75	31+	1	1	0	23	27	73	3.36	0.01	1.02	14	1	13.9	6	1.2	29	23	35	15+	4	7	20	7.7	
OKLAHOMA																																
OKLAHOMA CITY	1285	969.2	1015.8	69	43	56.4	7.9	93	11	9	8	3	4	38	56	2.49	0.52	0.70	9	8	0.4	T	3.5	15	37	S	22	5	11	15	6.8	81
TULSA	650	992.2	1016.5	68	42	55.1	7.0	94	11	5	8	4	7	38	57	1.42	- 1.01	0.79	7	4	1.1	1	3.5	18	33	SW	2	6	12	13	6.5	67
OREGON																																
ASTORIA	8	1013.2	1014.1	49	35	42.2	- 2.3	56	21	27	3	0	10	37	85	8.38	- 0.54	1.17	25	0	0.7	T	3.6	17	35	18	23	4	1	26	8.3	
BURNS U	4151	869.3	1014.1	46	24	35.0	- 2.4	60	16	12	12+	0	30	24	67	2.44	1.47	0.91	14		23.1	9	3.3	26				4	10	17	7.0	
EUGENE	359	1001.4	1015.1	53	37	45.0	- 1.0	70	22	28	4	0	5	37	79	2.90	- 1.42	0.89	16	1	T	T	4.4	20	40	19	22	3	6	22	7.9	
MEACHAM	4050	872.3	1014.6	38	24	30.8	- 2.5	55	16	14	12+	0	30	22	74	2.23	- 1.73	0.65	16		25.5	20	1.8	22				2	5	24	8.5	
MEDFORD	1298	967.5	1015.7	55	34	44.4	0.1	68	22	23	4	0	12	34	73	2.08	0.30	0.78	13	1	0.4	T	1.0	20	32	14	15	7	6	18	7.0	
PENDLETON	1482	960.0	1014.3	53	34	43.5	- 1.6	69	16	23	4	0	11	30	62	0.89	- 0.31	0.31	11	0	3.3	2	4.5	22	32	23	23	5	5	21	7.5	
PORTLAND	21	1013.9	1015.0	52	36	44.0	- 2.1	61	5	25	12	0	6	38	82	4.31	0.48	1.46	22	2	T	0	5.1	17	41	S	23	2	3	26	8.6	48
SALEM	196	1007.5	1014.9	52	34	43.1	- 2.2	67	22	24	5+	0	11	36	80	3.84	- 0.84	0.80	20	1	T	T	6.1	19	35	18	22	3	4	24	8.0	
SEXTON SUMMIT R	3836	879.8	1014.5	41	29	34.6	- 4.0	57	6	22	3	0	23			3.40	- 0.07	0.86	20		25.0	8			39	18	22+	7	2	22	7.2	
PACIFIC AREA																																
CANTON ISLAND	8			88	78	82.7	- 0.4	90	13	74	14	1	0			1.07	- 1.42	0.53	8		0.0	0						11	15	5	4.6	
ENIWETOK	13	1008.5	1009.2	86	78	82.0	0.7	88	18+	74	24+	0	0	74	78	4.49	2.63	1.46	15		0.0	0	13.1	7								
TAGUAC GUAM R	361			83	69	75.9	- 2.9	85	29+	61	4	0	0			11.28	8.64	3.03	27		0.0	0			25	NE	3+					50
JOHNSTON	7	1012.5	1013.0	80	72	76.3	- 0.9	84	17	68	20	0	0	69	80	6.69	4.35	3.21	14	1	0.0	0	9.8	9	30	E	22	9	10	12	5.8	46
KOROR R	94	1005.4	1009.0	87	75	81.2	0.5	90	22	72	2+	1	0	75	84	7.20	- 0.43	2.03	24	2	0.0	0	5.7	4	73	S	2	0	0	31	9.9	68
KWAJALEIN	8	1008.5	1009.2	86	75	80.4	- 0.1	87	27+	73	26+	0	0	74	82	17.19	10.73	2.15	26	0	0.0	0	14.6	7	32	9	26	0	9	22	8.5	
MAJURO	10	1008.8	1009.1	85	76	80.2	- 0.4	87	25	72	19	0	0	74	82	12.46	0.74	1.87	27	2	0.0	0	10.4	8	34	NE	26	1	7	23	8.4	48
MARCUS ISLAND	20	1013.9	1015.7	76	66	70.9	- 1.8	81	22	60	14+	0	0	62	75	5.23	3.62	3.78	10	0	0.0	0	11.7	6	34	N	25	11	10	10	5.2	67
PAGO PAGO	12	1009.5	1009.6	88	75	81.7		91	22	71	26	8	0	75	81	4.95		1.08	20	1	0.0	0	5.4	9	29	SE	4	1	17	13	7.4	77
PONAPE R	123	1002.7	1008.0	87	74	80.4	- 0.2	90	23+	70	21	4	0	74	85	21.82	7.27	7.13	27	0	0.0	0	5.6	10	22	NE	1	0	4	27	8.7	56
TRUK MOEN ISLAND	5	1007.8	1008.1	85	76	80.7	- 0.1	89	18	73	24+	0	0	75	83	24.02	16.27	4.70	22	4	0.0	0	7.7	7	27	S	16	0	3	28	9.2	75
WAKE	11	1013.2	1013.4	80	72	76.1	- 1.7	83	27+	67	5	0	0	67	75	6.14	4.67	2.31	14	0	0.0	0	13.8	8	48	8	6	10	8	13	6.2	
YAP R	62	1006.8	1008.6	86	74	80.1	- 0.9	89	22+	69	1	0	0	74	83	5.37	- 0.01	1.23	24	0	0.0	0	7.7	3	21	NE	17+	0	2	29	9.4	55

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1007.1	1021.5	44	26	35.1	- 2.5	64	31+	- 1	19	0	25	23	66	6.68	2.89	2.35	13	2	17.4	4	2.3	34	29	33	16	10	6	15	6.2	
ERIE	731	992.9	1020.5	42	27	34.6	1.0	79	31	0	18+	0	22	24	69	1.67	- 1.21	0.53	12	0	8.8	5	0.7	20	26	3	15	4	7	20	7.7	
HARRISBURG	338	1008.1	1021.3	48	30	38.8	- 1.5	70	10	9	19	0	18	27	66	5.26	1.83	1.90	13	1	10.2	3	1.0	36	29	NW	17	6	7	18	6.9	55
PHILADELPHIA	5	1020.3	1021.4	47	30	38.5	- 2.5	71	11	11	19	0	18	28	68	4.53	0.73	2.25	13	1	6.4	T	1.7	36	30	N	17	7	8	16	6.5	51
PITTSBURGH	1137	974.9	1020.0	49	31	40.2	3.4	78	26	5	1	0	17	31	73	6.10	2.78	1.57	13	4	20.0	12	2.1	30	30	24	13	3	7	21	7.9	39
READING U	266			47	32	39.5	- 1.8	71	10	7	19	0	14			5.31	1.53	2.17	13		13.2	6			42	E	7	10	9	12	5.5	55
SCRANTON	930	986.1	1021.3	43	27	34.9	- 1.3	67	31	- 4	19	0	21	24	67	3.91	1.09	1.29	13	0	29.7	13	1.4	30	24	W	17+	5	9	17	7.0	57
WILLIAMSPORT	524	1001.4	1021.1	43	25	34.3	- 3.1	66	31	- 1	19	0	24	26	74	5.36	1.63	1.48	15	1	29.5	13	1.2	1	25	26	3	6	8	17	7.0	
RHODE ISLAND																																
BLOCK ISLAND	110			38	28	33.2	- 3.5	49	30	8	19	0	22			5.28	1.21	2.58	11		19.3	7						8	7	16	6.4	
PROVIDENCE	51	1018.6	1020.8	41	26	33.3	- 3.7	69	11	1	19	0	22	22	65	5.49	1.35	2.44	10	1	24.9	10	4.6	34	26	31	1	9	7	15	6.6	48
SOUTH CAROLINA																																
CHARLESTON	40	1019.6	1021.3	73	47	60.0	3.3	89	12	27	2	0	3	46	66	2.81	- 1.12	1.50	6	2	0.0	0	1.6	18	51Y	N	16	8	14	9	5.4	76
CHARLESTON U	9			68	52	60.0	2.5	85	15+	33	18	0	0			2.25	- 1.37	1.47	4		0.0	0			34	N	16+					
COLUMBIA	241	1013.2	1021.3	71	44	57.1	2.7	85	12	20	19	0	4	43	66	3.08	- 1.18	1.04	6	2	0.0	0	1.0	25	29	36	12	10	13	8	5.4	77
GNVLE-SPARTANBURG	957	986.1	1021.0	70	43	56.5	5.1	88	15	20	18	0	5	37	54	1.98	- 2.77	0.57	9	3	0.0	0	2.0	26	34	NW	16+	11	10	10	5.1	69
SOUTH DAKOTA																																
ABERDEEN	1296	969.2	1017.2	44	22	33.1	4.9	77	29	- 4	7	0	27	20	62	0.09	- 1.00	0.07	2	1	1.2	1	1.1	10	36	21	29	5	9	17	7.0	
HURON	1282	969.5	1017.0	47	25	36.3	7.6	80	29	- 3	7	0	23	24	63	0.19	- 0.92	0.10	4	0	2.1	2	0.8	12	38	S	29	4	9	18	7.5	75
RAPID CITY	3162	902.1	1015.3	46	25	35.2	4.1	81	29	0	7	0	22	22	64	0.82	- 0.19	0.29	10	0	7.6	3	1.6	36	40	NW	24	4	8	19	7.8	56
SIOUX FALLS	1418	964.8	1017.3	49	25	37.1	7.0	83	24	- 5	7	0	24	23	61	0.14	- 1.40	0.06	4	1	1.0	1	0.5	12	43	27	30	6	9	16	6.7	
TENNESSEE																																
BRISTOL	1507	965.8	1020.8	64	37	50.2	4.2	79	27+	15	18	0	14	36	63	3.02	- 0.96	1.11	8	3	T	T	2.1	27	35	25	7	11	6	14	5.8	
CHATTANOOGA	665	995.6	1020.5	68	40	53.9	2.7	83	13+	22	19+	0	9	41	67	1.17	- 4.47	0.65	5	1	T	T	2.0	21	26	NE	15+	6	16	9	5.8	68
KNOXVILLE	980	984.8	1019.9	67	43	54.7	5.1	81	14+	21	18	0	9	41	63	4.08	- 0.65	2.96	8	3	0.0	0	3.3	26	30	SW	5	8	12	11	5.9	66
MEMPHIS	258	1009.5	1019.8	67	46	56.7	5.6	83	13+	25	7	0	6	43	63	4.65	- 0.42	2.63	7	3	0.3	T	4.3	19	28	NW	15	8	8	15	6.3	67
NASHVILLE	590	997.6	1019.6	70	44	57.0	7.9	86	13+	20	18	0	9	40	58	4.44	- 0.75	3.65	6	2	T	T	4.5	21	31	NW	6	6	12	13	6.2	67
OAK RIDGE R	905			67	39	52.9	5.4	83	13	20	18	0	10			6.11	0.52	3.97	8		T	T			36Y		15	11	8	12	5.6	
TEXAS																																
ABILENE	1762	953.6	1014.8	77	50	63.5	8.5	96	29	19	8	4	4	43	53	1.01	- 0.03	0.63	5	5	T	T	6.4	19	37	S	30+	10	7	14	5.7	80
AMARILLO	3604	889.6	1012.8	69	37	53.4	5.8	87	29	7	8	0	9	27	45	0.42	- 0.40	0.22	4	4	0.4	T	6.5	22	36	SW	11	7	11	13	6.0	79
AUSTIN	597	994.9	1017.0	79	55	67.3	7.6	96	28	32	8	5	1	51	61	1.09	- 1.04	0.35	6	1	0.0	0	6.2	18	36	NW	6	9	12	10	5.7	64
BROWNSVILLE	19	1015.9	1016.5	79	62	70.1	2.2	87	14	45	7	0	0	63	83	0.44	- 0.60	0.44	1	0	0.0	0	10.9	14	43	NW	6	7	15	9	5.8	60
CORPUS CHRISTI	41	1015.6	1017.0	78	60	69.2	4.0	88	28+	40	7	0	0	60	77	0.08	- 1.36	0.06	2	0	0.0	0	11.6	14	38	N	6	7	10	14	6.6	49
DALLAS	481	999.3	1016.6	77	52	64.6	8.5	91	12+	24	8	2	1	48	58	1.80	- 1.05	0.73	5	3	T	0	7.6	16	33	S	30	9	9	13	5.9	70
DEL RIO	1026	979.0	1014.9	82	56	68.8	5.8	97	28	37	8	7	0	47	52	0.58	- 0.24	0.56	4	1	0.0	0	7.6	13	31	36	6	8	12	11	5.7	
EL PASO	3918	881.5	1012.7	76	43	59.6	4.7	88	28	25	1	0	5	23	26	0.17	- 0.18	0.16	2	2	0.0	0	4.6	25	43	W	29+	10	12	9	5.1	95
FORT WORTH	537	996.3	1016.6	76	50	63.3	7.4	90	12+	24	8	2	2	47	60	2.09	- 0.42	0.83	6	5	T	T	6.7	18	30	3	15	9	10	12	6.0	
GALVESTON U	7			70	61	65.4	4.0	75	31+	40	7	0	0			1.55	- 1.31	1.05	4		0.0	0			29	NW	6					71
HOUSTON U	41			75	59	67.2	4.8	83	12	38	7	0	0			0.77	- 1.63	0.60	4		0.0	0										
HOUSTON	50	1016.3	1018.4	79	57	67.6	6.3	88	15	33	7	0	0	56	73	1.83	- 0.84	1.68	6	2	0.0	0	7.1	15	28	32	6+	5	15	11	6.4	65
LUBBOCK	3254	902.8	1013.9	72	40	55.8	6.2	89	29	12	8	0	8	30	45	2.09	1.36	0.95	5	7	T	0	5.5	22	40	31	19+	9	9	13	5.8	
MIDLAND	2851	915.7	1013.4	76	45	60.5	5.3	92	29	19	8	1	5	34	46	1.45	1.09	0.93	4	2	0.0	0	5.2	20	38	1	7	10	12	9	5.2	
PORT ARTHUR	16			75	53	63.9	2.8	86	15	30	7	0	1	56	80	0.91	- 2.53	0.64	4	2	0.0	0	6.1	14	38	NW	6	8	11	12	5.9	69
SAN ANGELO	1903	948.2	1014.4	80	50	64.8	7.8	97	29	24	8	7	4	42	48	0.78	- 0.15	0.75	4	4	0.0	0	6.6	19	37	16	30	10	8	13	5.5	
SAN ANTONIO	788	988.8	1016.9	79	55	66.9	5.9	92	28	29	7	5	2	51	61	2.18	0.51	1.28	5	2	0.0	0	6.0	15	40	N	6	7	10	14	6.2	60
VICTORIA	104	1013.5	1017.8	78	57	67.8	4.6	86	28+	35	7	0	0	57	74	0.49	- 1.83	0.26	5	2	0.0	0	7.2	14	44Y	N	6	3	12	16	7.2	
WACO	501	999.0	1017.1	78	53	65.3	7.4	96	28	27	8	5	2	48	59	1.93	- 0.42	0.99	6	4	0.0	0	8.7	16	30	32	6	13	7	11	5.1	
WICHITA FALLS	994	978.7	1015.1	79	47	62.9	9.1	98	29	16	8	8	3	41	51	1.30	- 0.24	0.60	6	6	0.6	T	5.3	17	46	1	7	7	8	16	6.6	
UTAH																																
MILFORD	5028	843.6		58	28	42.5	4.0	71	22	6	30+	0	22			1.10	0.07	0.60	4		12.9	7						7	9	15	6.4	
SALT LAKE CITY	4220	868.9	1013.6	56	33	44.2	3.8	70	28	19	30	0	15	25	54	1.94	0.38	0.73	8	1	11.8	6	4.2	16	45	S	11	7	7	17	6.7	70
WENDOVER	4237			54	33	43.6	2.1	69	23	22	8	0	14			0.86	0.47	0.80	4		8.5	5										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1008.1	1021.3	34	16	25.3	- 1.4	61	31	-11	9	0	28	14	62	0.51	- 1.60	0.16	9	0	6.1	5	1.2	29	34	S	13	5	9	17	7.1	67
VIRGINIA																																
LYNCHBURG	916	986.5		59	34	46.0	0.5	77	11	15	18	0	13	31	61	2.61	- 1.00	0.94	10	3	T	0	1.8	27	33	W	7	11	9	11	5.3	63
NORFOLK	22	1020.3	1021.5	57	38	47.7	- 0.3	84	6	24	2	0	7	35	65	1.34	- 2.11	0.68	7	2	T	0	0.9	35	42	W	7	9	10	12	5.8	80
RICHMOND	164	1015.2	1021.4	60	34	46.6	- 1.1	80	11	17	19	0	13	35	69	2.34	- 1.08	0.65	9	3	T	T	0.3	25	33	NW	17+	8	8	15	6.0	63
ROANOKE	1149	978.0	1020.4	61	36	48.5	3.0	81	11	15	18	0	11	31	56	4.51	0.98	2.57	10	4	0.8	T	2.3	27	52	32	15	9	11	11	5.5	
WALLOPS ISLAND	9	1021.7	1022.1	49	33	40.9		74	11	18	19	0	14	33	80	1.86		0.69	8	4	0.1	0	1.6	33	59Y	NW	16	8	6	17	6.5	
WASHINGTON																																
OLYMPIA	195	1006.8	1014.1	49	33	41.0	- 3.2	57	16	23	13	0	16	35	81	4.31	- 1.09	0.82	22	0	1.1	1	4.8	20	31	18	23	3	2	26	8.7	
QUILLAYUTE	179	1005.1	1012.6	47	34	40.4	- 2.5	58	6	26	3	0	13	37	90	11.73	0.65	3.58	23	0	2.7	T	2.9	15	33	S	16	5	2	24	7.8	28
SEATTLE TACOMA	400	997.3	1014.0	48	36	42.2	- 1.6	55	16	28	13+	0	5	36	83	3.71	- 0.08	0.75	20	1	T	0	3.8	19	40	20	23	3	2	26	8.5	40
SPOKANE	2356	927.9	1013.0	45	29	37.1	- 1.0	55	17	19	12	0	22	27	70	1.72	0.22	0.56	10	0	6.4	2	5.0	19	34	SW	23	3	6	22	7.8	41
STAMPEDE PASS R	3958	873.7		33	24	28.2	- 1.8	43	5	15	11	0	31			8.49	- 2.11	1.48	24		67.5	39						1	6	24	8.6	
WALLA WALLA U	949			54	38	45.9	- 0.1	69	16	28	4	0	8			1.99	0.40	0.83	10		4.3	1			28	W	23	3	6	22	7.8	38
YAKIMA	1052	974.6	1013.7	54	30	41.7	- 0.3	64	6	19	12	0	21	26	57	0.45	- 0.17	0.24	7	0	T	0	3.2	24	33	25	8	5	9	17	6.9	
WEST INDIES																																
SAN JUAN P.R.	13	1014.6	1017.2	82	70	75.9	0.6	84	31+	65	19	0	0	65	69	1.46	- 0.74	0.72	15	0	0.0	0	7.9	7	26	NE	20	9	20	2	4.5	75
SWAN ISLAND	28			84	74	79.1	- 0.9	85	17+	70	30	0	0			0.59	- 0.04	0.26	3		0.0	0						23	5	3	2.7	
WEST VIRGINIA																																
BECKLEY	2504	930.2	1020.4	56	34	44.8		74	26	7	18	0	13	32	66	6.50		2.22	16	3	6.3	5	4.3	23	33	28	17	7	5	19	6.9	
CHARLESTON	939	985.1	1019.7	60	37	48.5	4.1	80	26+	14	19	0	14	37	68	6.80	2.46	2.86	14	3	2.2	1	2.6	25	25	24	17	4	11	16	7.2	
ELKINS	1970	947.9	1020.2	55	30	42.5	3.0	77	26	3	19	0	18	33	73	7.69	3.55	2.25	17	5	7.0	4	3.8	27	33	35	6	2	9	20	7.7	
HUNTINGTON	827	989.5	1020.0	60	36	48.1	3.3	82	13	14	19+	0	13	34	63	7.52	3.32	3.43	12	5	3.0	2	1.8	25	29	33	17	3	11	17	7.3	
PARKERSBURG U	615			57	36	46.2	3.5	82	26	14	1	0	15			4.93	1.40	2.08	12		5.5	3			32	W	17					51
WISCONSIN																																
GREEN BAY	682	993.2	1019.7	38	21	29.5	1.3	73	30	-10	1	0	26	22	74	1.13	- 0.21	0.65	8	0	4.0	9	1.4	25	26	S	31+	8	5	18	6.7	44
LA CROSSE	651	993.9	1019.2	43	24	33.3	2.8	80	30	- 5	8	0	23	23	68	2.14	0.07	1.10	7	3	6.1	7	0.7	16	29	28	30	7	7	17	7.0	
MADISON	858	986.8	1019.3	43	24	33.3	4.2	78	30	0	8	0	24	23	67	1.49	- 0.35	0.50	7	2	4.5	3	0.5	21	32	S	30	3	7	21	7.9	46
MILWAUKEE	672	993.6	1019.8	40	26	33.2	2.2	77	30	4	8	0	24	26	75	1.35	- 0.96	0.52	12	0	7.4	3	0.5	25	30	NW	16+	4	9	18	7.7	47
WYOMING																																
CASPER	5338	833.1	1012.6	50	23	36.4	4.3	70	23	- 4	7	0	24	19	55	0.66	- 0.37	0.26	11	0	8.8	1	10.2	23	44	22	29	4	11	16	7.3	
CHEYENNE	6126	808.3	1013.2	52	26	39.0	6.6	73	29	2	7+	0	23	17	47	0.76	- 0.45	0.30	12	1	3.4	1	6.5	26	42	NW	30+	6	7	18	7.2	54
LANDER	5563	824.2	1012.1	48	25	36.7	4.5	66	23	- 2	7	0	24	19	53	0.73	- 0.42	0.36	8	0	17.8	7	3.9	25	47	S	29	4	11	16	6.8	68
SHERIDAN	3964	875.4	1015.0	45	21	32.8	1.8	71	29	-12	7	0	28	18	56	1.18	- 0.24	0.27	11	0	16.5	6	3.6	30	47	SW	29	0	12	19	7.9	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "**Elevations - Station Pressure**" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	998.3	1021.0	22.2	6.7	14.6	2.1	30.6	12	- 5.0	18	0	6	6.7	63	45	-107	20	6	2	T	0	1.2	20	18.3	SW	6	11	7	13	5.6	72
HUNTSVILLE	183	997.3	1020.6	22.2	7.8	14.9	3.9	30.6	13+	- 5.6	18	0	6	5.6	56	41	-100	32	3	2	T	T	1.3	17	11.6	34	6	10	7	14	6.0	
MOBILE	64	1012.9	1020.7	25.0	11.1	18.1	2.3	31.7	15	3.3	7	0	0	10.6	68	15	-169	6	4	0	0	0	1.1	16	12.5	23	6	9	12	10	5.3	
MONTGOMERY	59	1013.9	1021.2	23.9	9.4	16.6	3.2	30.6	12	1.1	18	0	0	8.3	62	51	-106	26	5	1	0	0	0.8	17	15.6	W	6	5	16	10	5.6	69
ALASKA												B																				
ANCHORAGE	35	1013.5	1018.5	0.0	-10.0	- 4.9	-0.8	6.1	4	-18.9	10	0	30	-12.8	54	25	12	10	8	0	224	559	0.8	36	13.0	15	4	15	4	12	4.8	70
ANNETTE	34	1008.1	1012.2	5.6	- 1.1	2.2	-1.0	10.0	31+	- 8.9	26	0	20	- 3.9	70	76	-166	24	15	0	239	102	1.7	6	11.6	12	27	6	6	19	6.9	
BARROW	9	1021.0	1021.7	-18.9	-26.1	-22.6	3.3	0.6	15	-34.4	23	0	31	-26.1	73	9	6	3	7	0	104	356	2.1	10	19.2	24	12	11	11	9	5.1	
BARTER ISLAND	12	1021.0	1023.2	-19.4	-28.3	-23.8	2.2	2.2	15	-39.4	27	0	31	-27.8	70	37	31	14	10	0	381	432	1.3	25	28.6	27	12	7	9	15	6.6	
BETHEL	38	1013.9	1019.7	- 1.7	-10.6	- 6.3	5.1	3.3	14	-20.6	9	0	31	- 8.3	85	22	- 4	5	12	0	201	508	1.4	17	17.9	18	30	6	6	19	7.1	
COLD BAY	29	1015.9	1019.9	3.9	- 1.1	1.4	3.2	10.6	1	- 5.0	15	0	25	- 1.1	87	65	20	26	12	0	114	25	3.1	20	25.0	16	25	5	8	18	7.3	
FAIRBANKS	133	1003.4	1021.5	- 4.4	-20.0	-12.3	0.5	3.9	17	-35.6	24	0	31			48	38	15	15	0	721	940	0.4	29	16.1	25	12	8	5	18	6.6	
JUNEAU	4	1015.6	1016.4	0.0	- 8.9	- 4.4	-3.5	6.7	5	-20.0	26	0	29	-10.6	65	34	- 49	9	11	0	168	76	3.1	10	13.0	10	16	8	5	18	6.4	57
KING SALMON	15	1017.6	1019.6	0.6	- 6.7	- 3.0	3.9	8.3	31	-14.4	25	0	27	- 7.8	70	61	37	18	11	0	145	51	0.3	36	20.1	16	4	12	5	14	5.4	
KOTZEBUE	3	1018.3	1018.6	- 7.2	-16.7	-11.9	7.0	0.0	15	-28.3	1	0	31	-14.4	80	9	2	2	10	0	224	889	4.0	12	22.8	25	11	8	9	14	6.6	
MC GRATH	105	1007.8	1021.2	- 1.1	-15.0	- 8.1	5.1	4.4	16	-34.4	25	0	31	-13.3	66	42	19	12	10	0	612	762	0.6	26	13.0	19	30	8	5	18	6.6	
NOME	4	1016.3	1017.2	- 3.9	-12.8	- 8.4	4.9	0.6	30	-32.2	1	0	31	-11.1	79	10	- 12	3	13	0	97	686	2.5	9	18.3	25	11	3	5	23	8.3	21
ST. PAUL ISLAND	7	1013.9	1015.0	2.8	- 1.7	0.7	5.0	5.0	30	- 7.2	21	0	25	- 1.1	86	47	20	9	20	0	229	178	4.6	18	19.2	27	7	1	11	19	8.0	
SHEMYA	37	1000.3	1003.9	2.8	- 1.1	0.6	0.4	3.9	28+	- 5.6	4+	0	26	- 1.7	87	90	25	20	24	0	175	25	5.3	21	23.7	19	28	0	7	24	8.7	
YAKUTAT	9	1014.2	1015.2	1.1	-11.7	- 5.4	-5.1	5.6	16+	-20.6	25	0	31	- 9.4	72	99	-122	52	10	0	820	1092	1.4	9	13.4	5	16	10	6	15	6.1	
ARIZONA																																
FLAGSTAFF	2131	786.0	1015.4	12.2	- 4.4	3.9	1.9	18.9	17+	-14.4	30	0	26	- 8.9	46	28	- 9	21	5	0	277	152	3.2	21	13.0	20	31	6	8	17	6.4	
PHOENIX	340	974.9	1013.8	26.1	8.3	17.1	2.1	32.2	23+	1.1	6	2	0	- 0.6	34	11	- 6	11	2	0	0	0	0.6	15	17.9Y	W	24	11	8	12	5.4	85
TUCSON	788	925.8	1013.6	25.6	8.3	16.7	2.3	31.7	28	0.0	7	0	1	- 5.0	27	10	- 3	8	4	1	0	0	1.4	21	16.5	SW	29	9	9	13	5.9	85
WINSLOW	1492	850.7	1015.3	19.4	- 0.6	9.5	1.9	26.7	23	-10.6	8	0	17	- 9.4	30	6	- 4	5	3	0	T	T	3.0	20	20.6	19	29	12	6	13	5.7	
YUMA	59	1007.1	1014.4	26.1	10.6	18.5	1.3	32.8	23+	3.9	6	4	0	0.6	33	2	- 4	2	1	0	0	0	1.3	27	13.0	NW	24	12	7	12	5.4	86
ARKANSAS																																
FORT SMITH	136	1000.7	1017.4	22.8	6.1	14.6	4.0	33.9	12	- 8.3	7	4	6	5.0	57	31	- 57	16	5	3	102	76	0.8	17	13.4	W	13	5	10	16	6.9	65
LITTLE ROCK	78	1009.1	1018.9	21.7	8.3	14.9	3.9	29.4	13+	- 3.9	7	0	5	7.2	63	79	- 43	52	4	2	T	T	1.5	17	13.9	S	20	8	9	14	6.2	67
TEXARKANA	119	1005.1	1018.3	23.9	10.0	17.0	4.3	31.1	11	- 2.2	7	0	3	8.3	60	50	- 71	24	5	2	0	0	2.6	18				10	11	10	5.2	
CALIFORNIA																																
BAKERSFIELD	145	999.7	1017.4	19.4	7.2	13.4	-0.4	25.0	16	1.7	30	0	0	4.4	59	13	- 14	9	6	0	0	0	1.1	36	10.3	36	29+	8	11	12	5.7	
BISHOP	1252	870.6		17.8	- 0.6	8.6	-0.1	24.4	2+	- 6.7	30+	0	21			13	- 1	9	4		13	T										
BLUE CANYON	1609			6.1	- 1.7	2.2	-2.0	15.6	7	- 7.2	29	0	22			405	190	97	17		1628	1092			14.3	18	16+	6	4	21	7.5	
EUREKA U	13			11.1	5.0	8.2	-1.1	19.4	22	1.1	11+	0	0			189	56	41	19		0	0			18.8	NW	3	6	6	19	7.2	44
FRESNO	100	1005.4	1017.3	18.3	6.7	12.4	-0.3	23.9	9	0.6	5	0	0	6.7	73	80	30	29	9	1	0	0	0.3	36	11.2	NW	29	10	4	17	6.2	66
LONG BEACH	10	1016.3	1017.8	20.0	9.4	14.5	0.8	28.3	1	3.3	30+	0	0	6.1	63	38	4	10	7	0	0	0	1.3	24	12.5	34	29	9	8	14	6.0	
LOS ANGELES	30	1013.5	1017.3	18.9	11.7	15.2	1.3	24.4	1	6.7	5	0	0	8.9	70	37	- 8	11	7	1	0	0	2.0	25	15.6Y	N	29	9	8	14	6.0	
LOS ANGELES U	82			20.6	11.7	16.1	0.9	31.1	1	6.1	5	0	0			64	6	29	8		0	0			13.0	N	29	11	8	12	5.5	64
MT SHASTA R	1080			8.3	- 1.7	3.2	-1.9	17.8	8	- 6.7	11	0	23			216	102	73	17		1041	432										
OAKLAND	2	1017.3	1017.6	14.4	8.9	11.8	-0.2	18.3	20+	5.6	4	0	0	6.1	71	117	56	33	11	1	0	0	2.1	24	12.5	15	30+	8	9	14	6.1	
RED BLUFF	104	1003.4	1016.0	15.6	5.0	10.3	-1.9	24.4	7	- 1.1	29	0	1	3.3	65	68	0	22	13	2	0	0	1.4	17	18.8	SE	16	7	7	17	6.7	47
SACRAMENTO	5	1015.9	1016.9	15.6	5.0	10.4	-1.4	21.7	17	0.0	5	0	1	6.1	77	99	39	35	11	2	0	0	1.9	20	14.3	SW	9	10	8	13	5.6	61
SANDBERG R	1377	861.8		10.0	1.7	5.7	-1.6	21.7	1	- 6.1	30	0	12	- 1.7	67	53	17	22	7		226	203	1.6	23	17.0	19	11	7	9	15	6.3	
SAN DIEGO	4	1016.6	1017.5	18.3	11.7	15.0	0.0	26.7	1	6.7	30	0	0	9.4	70	29	- 11	14	6	0	0	0	1.2	26	11.2	NW	29	7	8	16	6.4	64
SAN FRANCISCO	2	1016.9	1017.5	15.6	7.2	11.3	-0.5	19.4	15	3.9	14+	0	0	4.4	66	128	60	32	13	1	0	0	2.6	26	19.7	S	16	8	9	14	6.2	
SAN FRANCISCO U	16			14.4	8.3	11.5	-1.1	18.3	27+	5.0	11	0	0			110	36	24	16	0	0	0			14.3	SW	10					71
SANTA CATALINA	478			14.4	8.3	11.3	-1.2	25.0	1	5.0	31	0	0			27	- 22	12	6	0	0	0						8	8	15	5.9	
SANTA MARIA	72			16.1	5.0	10.5	-1.3	19.4	27+	- 0.6	30+	0	3			59	6	19	10		0	0						11	5	15	6.0	
STOCKTON	7	1016.6	1017.6	16.7	5.6	11.1	-1.0	21.1	16	- 1.1	5	0	1	5.6	71	72	20	22	10	0	0	0	1.2	25	11.6	27	28+	8	8	15	6.1	
COLORADO																																
ALAMOSA	2297	769.4		12.2	- 6.7	2.9	2.8	20.0	28	-22.2	6	0	29			4	- 3	2	3		102	76						8	11	12	5.7	
COLORADO SPRINGS	1873	808.0	1013.6	14.4	- 2.2	6.1	3.7	24.4	23	-16.1	6	0	19	-10.0	39	5	- 11	3	4	1	53	51	0.8	19	17.9	23	29	9	6	16	6.5	
DENVER	1610	832.7	1011.5	15.0	- 2.8	6.1	3.6	26.1	29	-15.6	8	0	24	- 7.2	48	20	- 11	9	5	0	168	102	0.6	19	17.0	S	29	7	7	17	6.6	75
GRAND JUNCTION	1480	849.6	1012.4	16.7	1.7	9.2	3.9	22.8	28+	- 8.3	6	0	12	- 8.3	32	5	- 14	3	3	0	5	T	0.9	16	21.0	SW	29	6	11	14	6.6	64
PUEBLO	1428	852.7	1012.7	16.7	- 1.7	7.4	2.9	26.1	29	-16.7	8	0	18	- 8.9	35	6	- 7	4	2	0	76	51	0.6	26	25.5	SW	29	11	7	13	5.5	81

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1020.3	1021.1	5.0	- 3.3	0.9	-2.2	15.6	11	-15.6	19	0	23	- 3.9	72	164	56	60	11	1	554	330	2.0	35	16.5	32	1	8	8	15	6.2	
HARTFORD	52	1014.2	1020.9	5.6	- 3.9	0.7	-1.5	16.7	11+	-21.1	19	0	25	- 5.6	67	113	16	42	10	0	843	330	1.6	36	12.5	NW	1	6	8	17	6.9	58
NEW HAVEN	2	1021.0		5.6	- 3.3	0.9	-1.8	16.1	11	-15.0	19	0	26			136	19	57	10		538	279			11.6	NW	7+	7	8	16	6.6	59
DELAWARE																																
WILMINGTON	24	1018.3	1021.4	8.9	- 0.6	4.1	-1.1	22.8	11	-11.1	19	0	15	- 1.1	72	138	36	67	12	2	69	25	0.7	1	12.1	33	16+	8	6	17	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1019.0	1021.4	12.8	1.7	7.2	0.1	25.6	14+	- 7.8	19	0	10	- 0.6	62	89	7	44	10	1	18	T	0.6	36	18.8	NW	16	7	8	16	6.9	53
FLORIDA																																
APALACHICOLA U	4			21.7	13.3	17.3	1.2	27.2	13	4.4	19	0	0			61	- 54	51	5	2	0	0			14.8	E	27	11	12	8	5.0	71
DAYTONA BEACH	9	1020.3	1021.7	25.0	14.4	19.4	1.8	31.7	11	7.8	24	0	0	13.9	73	8	- 83	8	2	0	0	0	1.1	8	13.0	2	16	12	12	7	5.3	
FORT MYERS	5	1020.3	1020.5	26.7	15.6	21.1	0.9	29.4	10	10.6	25+	0	0	14.4	70	18	- 48	16	2	1	0	0	1.4	8	13.4	7	31	12	12	7	4.7	
JACKSONVILLE	6	1020.7	1021.6	25.0	12.2	18.6	1.8	32.8	12	4.4	1	2	0	11.1	67	21	- 68	20	2	0	0	0	0.3	7	15.6	E	31+	11	11	9	5.2	67
KEY WEST	1	1018.6	1019.2	26.7	21.7	24.4	1.9	30.0	8	17.8	1	0	0	18.3	72	15	- 30	10	6	0	0	0	4.0	9	13.0	E	28	16	9	6	3.8	85
LAKELAND U	65			25.6	15.0	20.3	1.1	30.6	10	7.8	19	0	0			33	- 75	13	3		0	0						12	12	7	4.9	72
MIAMI	2	1019.6	1019.8	26.7	18.9	22.7	1.3	31.1	7	11.7	18	0	0	16.7	72	91	34	47	10	1	0	0	2.7	10	13.0	6	31	8	13	10	5.4	
ORLANDO	33	1016.9	1021.3	26.1	13.9	20.2	1.3	31.1	11	8.3	19	0	0			33	- 53	24	5	1	0	0	1.0	7	13.0	3	16	11	13	7	5.2	
PENSACOLA	34	1017.3	1021.3	22.8	11.7	17.2	1.1	28.3	15	3.3	7	0	0	10.6	73	22	-131	20	5		0	0	1.0	12	15.2	SE	26+	11	12	8	5.0	81
TALLAHASSEE	17	1019.0	1021.4	26.1	10.0	17.8	1.9	32.2	15	0.6	17	1	0	10.0	68	33	- 99	17	4	1	0	0	0.4	12	9.8	20	7	8	17	6	5.2	
TAMPA	6	1020.7	1020.8	26.1	13.9	19.9	1.0	29.4	26	7.8	19	0	0	13.9	74	17	- 78	14	5	0	0	0	0.9	8	10.3	3	16	11	12	8	5.1	81
WEST PALM BEACH	5	1019.6	1020.3	26.7	17.2	21.9	0.9	32.2	7	11.7	25	1	0	15.6	71	63	- 24	45	8	2	0	0	2.9	10	12.5	8	31	9	13	9	5.2	
GEORGIA																																
ATHENS	244	991.9	1020.9	21.7	6.1	13.9	3.0	28.3	12	- 5.0	18	0	6	4.4	58	58	- 72	34	4	2	0	0	1.0	28	12.5	27	6	8	13	10	5.6	
ATLANTA	308	984.1	1021.0	20.6	7.2	13.7	2.9	28.3	12	- 4.4	18	0	4	4.4	59	92	- 44	51	5	3	0	0	0.9	25	13.4	NW	15	9	10	12	5.6	61
AUGUSTA	44	1015.9	1021.1	22.8	6.7	14.7	2.0	30.6	12	- 5.0	19	0	4	6.1	63	166	60	135	6	2	0	0	0.7	21	12.5	25	7	9	14	8	5.5	
COLUMBUS	117			23.9	8.3	16.0	3.1	30.0	12+	- 1.7	18	0	2	7.8	64	36	-117	13	4		0	0	0.3	25	13.0	20	6	9	9	13	5.7	
MACON	108	1008.5	1021.7	23.9	7.8	15.8	1.9	31.1	12	- 3.3	19	0	4	6.1	58	38	- 87	16	6	2	0	0	0.6	23	13.9	S	6	10	11	10	5.3	83
ROME	194			21.7	3.9	12.6	2.4	29.4	13+	- 6.1	19+	0	11			38	-112	15	6		0	0										
SAVANNAH	14	1020.0	1021.8	24.4	8.9	16.5	1.9	32.2	12	- 1.7	2	1	2	7.8	65	13	- 88	8	3	1	0	0	0.5	16	13.0	N	16+	11	12	8	4.9	72
HAWAII																																
HILO	8	1014.2	1015.3	27.2	19.4	23.4	1.9	31.1	17	16.7	7	0	0	18.9	79	240	-133	69	27	2	0	0	0.8	15	9.4	E	12	1	7	23	8.4	34
HONOLULU	2	1014.2	1014.6	26.7	19.4	23.2	0.6	28.3	31+	16.1	16+	0	0	18.3	76	172	99	69	16	0	0	0	2.5	7	12.1	NE	31	3	9	19	7.8	40
KAHULUI	15	1012.2	1014.6	26.7	18.3	22.3	0.0	28.3	12+	13.9	3	0	0	17.2	74	277	220	138	13	1	0	0	2.3	7	12.5	NE	1	3	8	20	7.8	44
LIHUE	31	1010.2	1015.4	25.0	18.9	21.9	0.2	27.2	17+	14.4	14	0	0	17.8	81	226	110	48	18	1	0	0	2.2	7	10.7	E	26	1	6	24	8.5	33
IDAHO																																
BOISE	865	913.0	1014.0	11.1	0.0	5.6	0.2	18.9	22	- 8.3	4	0	17	- 3.9	55	9	- 24	6	6	0	8	T	1.5	13	13.9	SE	16	5	4	22	7.5	64
IDAHO FALLS 46W R	1505			6.1	- 5.0	0.4	1.5	13.3	22	-15.0	7	0	30			14	- 2	9	7		119	102	2.8	24	15.6	SW	29					
LEWISTON	431			10.6	0.6	5.6	-0.3	17.8	17	- 5.6	4	0	14			30	0	9	11		8	T						2	6	23	8.4	
POCATELLO	1358	859.8	1014.2	8.9	- 2.8	3.1	0.9	17.2	22	-13.3	7	0	25	- 5.6	59	31	5	10	13	0	145	51	3.3	21	16.5	S	11	5	5	21	7.5	59
ILLINOIS																																
CAIRO U	96			17.2	7.2	12.1	3.1	27.2	30+	-11.1	7	0	8			55	- 67	35	8		203	178			15.2	NE	17	6	12	13	6.2	58
CHICAGO O HARE	201	994.6	1019.6	6.7	- 1.7	2.5	1.0	26.1	30	-16.1	1	0	17	- 1.7	76	58	- 10	32	12	1	224	203	0.2	26	15.6	35	16	2	8	21	7.9	
CHICAGO MIDWAY	185	996.6		7.2	0.0	3.7	1.3	25.6	30	-10.6	17+	0	14	- 2.2	68	59	- 11	24	10	1	145	127	0.5	18	16.5	NW	16	3	8	20	7.8	38
MOLINE	177	996.6	1018.7	8.9	- 1.1	3.9	2.0	26.1	30	-13.3	8	0	20	- 1.7	71	43	- 18	21	8	2	56	25	0.6	12	14.3	NW	21+	5	5	21	7.7	37
PEORIA	199	994.6	1019.1	9.4	0.0	4.6	1.4	27.2	30	-12.8	8	0	17	0.6	77	59	- 13	27	11	2	69	51	0.8	13	14.8	NW	16	3	8	20	7.9	47
ROCKFORD	221	991.5	1019.1	6.1	- 1.7	2.2	1.1	24.4	30	-13.9	8	0	21	- 2.8	72	41	- 21	22	6	1	165	152	0.3	15	10.7	20	30	4	6	21	7.8	
SPRINGFIELD	179	995.9	1018.6	11.1	2.2	6.6	2.0	27.2	30	-11.7	8	0	12	2.2	75	66	- 7	39	9	0	61	51	0.9	13	17.0	S	1	3	10	18	7.5	50
INDIANA																																
EVANSVILLE	116	1005.4	1019.7	16.1	3.3	9.6	2.2	27.8	30+	-15.0	7	0	12	3.9	73	90	- 20	28	8	3	183	178	0.8	22	15.2	NW	17	7	8	16	6.7	55
FORT WAYNE	241	989.5	1020.3	6.7	- 2.2	2.3	-0.1	23.9	31+	-23.3	1	0	20	- 2.2	75	70	0	28	12	1	224	76	0.4	14	14.8	N	16	2	8	21	8.0	47
INDIANAPOLIS	241	989.8	1019.6	11.7	1.7	6.7	2.8	26.7	30	-10.6	1	0	12	1.1	69	85	- 2	27	12	4	76	51	0.3	19	18.3	NW	16	2	9	20	7.7	43
SOUTH BEND	236	990.9	1019.7	6.7	- 1.7	2.5	0.9	25.0	30	-18.9	1	0	16	- 1.7	75	44	- 26	26	12	0	287	457	0.7	18	10.3	23	31	2	8	21	8.3	
IOWA																																
BURLINGTON	211			10.6	0.0	5.1	2.2	27.8	30	-13.9	8	0	16	0.0	73	49	- 20		7	3	T		0.4	13	12.5	19	30	5	8	18	7.2	
DES MOINES	286	982.7	1018.4	11.1	- 1.7	4.6	3.6	28.3	30+	-17.2	8	0	22	- 2.8	63	42	- 11	23	7	2	13	T	0.6	9	15.2	S	30	5	6	20	7.3	57

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DUBUQUE	322	978.3		6.1	- 2.8	1.7	1.7	25.0	30	-16.7	8	0	22			78	8	32	6		254	229						3	4	24	8.0	
SIOUX CITY	334	976.6	1017.4	11.1	- 2.8	4.4	3.8	27.8	24	-16.7	7	0	21	- 3.9	60	7	- 30	4	5	2	13	25	0.4	11	18.8	S	30	6	8	17	6.9	70
WATERLOO	265	985.8	1018.3	8.3	- 3.3	2.6	2.6	28.9	30	-17.2	8	0	23	- 1.7	77	63	11	41	6	3	99	51	0.5	10	13.9	18	30	4	7	20	7.6	
KANSAS																																
CONCORDIA	448	962.4	1016.2	15.0	- 0.6	7.3	3.0	30.0	29+	-16.7	7	0	17		59	28	- 10	15	8	2	8	T	1.2	12	19.7	S	24	7	9	15	6.6	60
DODGE CITY	787	923.1	1014.6	17.2	- 0.6	8.3	2.8	29.4	29	-18.3	8	0	14	- 4.4	49	4	- 26	2	4	1	15	T	1.3	16	17.0	S	29	9	6	16	6.2	66
GOODLAND	1113	886.2	1014.4	15.0	- 3.3	5.7	3.2	28.9	29	-16.7	8	0	24	- 6.1	55	12	- 15	8	3	0	102	25	1.3	18	15.6	24	30	8	12	11	5.9	
TOPEKA	267	985.1	1017.2	15.6	1.1	8.3	2.9	29.4	29	-20.0	8	0	14	0.0	60	49	- 3	27	10	1	20	25	0.8	14	19.2	SW	24	5	6	20	7.6	50
WICHITA	403	967.8	1016.0	17.8	2.8	10.3	3.3	31.1	29+	-17.8	8	0	10	- 1.1	50	14	- 27	8	8	4	18	T	1.4	16	20.1	S	29	9	4	18	6.6	62
KENTUCKY																																
COVINGTON	265	987.8	1020.0	12.8	1.7	7.1	2.3	25.6	26+	-10.0	18	0	12	0.6	67	92	- 4	20	13	2	206	203	0.7	25	14.3	35	17	5	6	20	7.5	
LEXINGTON	294	984.1	1020.1	16.1	3.9	10.0	3.8	27.2	13	- 8.9	18	0	9	2.2	62	153	33	65	9	3	109	102	1.2	20	12.5	22	2	7	8	16	6.6	
LOUISVILLE	145	1001.7	1019.6	16.7	4.4	10.3	4.1	28.3	13	- 7.2	18+	0	10	2.8	64	111	- 6	48	12	4	236	203	0.6	21	17.9	N	17	7	9	15	6.6	55
LOUISIANA																																
ALEXANDRIA	28	1015.6	1019.8	23.9	9.4	16.6	1.9	31.1	11	- 0.6	8+	0	3	10.6	74	49	- 77	26	4	1	0	0	1.4	17	10.3	28	6	13	6	12	5.5	
BATON ROUGE	20	1017.3	1020.1	25.0	11.1	18.2	2.2	30.0	15+	3.3	7	0	0	10.6	66	48	- 76	33	4	1	0	0	1.4	15	10.3	32	6	10	13	8	5.3	
LAKE CHARLES	3	1018.6	1019.8	25.0	12.8	18.8	2.7	29.4	28	2.2	7	0	0	13.3	75	27	- 81	17	4	2	0	0	2.2	15	10.7	17	5	7	15	9	5.9	
NEW ORLEANS	1	1019.3	1020.2	23.9	10.6	17.3	1.0	28.3	15+	1.7	17	0	0	12.2	73	41	- 95	30	6	0	0	0	1.4	13	13.0	19	6	12	13	6	5.0	
SHREVEPORT	77	1009.1	1018.3	24.4	10.6	17.5	3.8	31.1	11	- 3.3	7	0	2	9.4	66	26	- 80	12	4	0	0	0	2.4	17	12.1	20	4	10	11	10	5.5	73
MAINE																																
CARIBOU	190	996.3		- 1.1	-15.0	- 8.1	-3.0	7.8	29	-28.9	13	0	31			27	- 33	12	8		267	889						8	9	14	6.3	
PORTLAND	14	1018.3	1020.5	2.2	- 8.3	- 3.1	-2.7	11.7	11	-23.3	19	0	29	- 8.9	63	55	- 55	21	11	1	445	914	1.1	35	12.1	NW	1	8	3	20	7.3	54
MARYLAND																																
BALTIMORE	45	1015.6	1021.3	10.6	0.0	5.4	-0.7	25.6	14	- 9.4	19+	0	13	- 2.2	63	112	14	61	11	2	64	51	0.5	34	17.9	NW	16	7	7	17	6.4	53
MASSACHUSETTS																																
BLUE HILL OBS R	192			3.3	- 4.4	- 0.6	-2.2	18.3	11	-18.9	19	0	25			157	41	58	12		1041	432			17.9	NW	1					43
BOSTON	5	1019.3	1020.4	3.9	- 2.2	0.7	-2.5	17.8	11	-14.4	19	0	21	- 6.1	65	119	11	53	12	1	582	254	1.9	35	13.0	NW	1	4	11	16	7.1	49
NANTUCKET	13	1019.3	1019.8	3.9	- 3.3	0.3	-2.0	8.9	11	-12.2	19+	0	24	- 3.3	79	123	8	47	12	0	526	178	2.3	35	17.0	N	17	2	9	20	7.6	54
PITTSFIELD	357			2.8	- 7.8	- 2.6	-1.8	15.6	11	-21.1	19	0	30			79	- 3	34	12		691	686										
WORCESTER	301	982.4	1020.7	2.2	- 6.1	- 1.8	-2.2	16.1	11	-20.0	19	0	26	- 7.8	65	95	- 10	37	12	1	879	483	1.7	32	13.4	29	4+	8	7	16	6.6	
MICHIGAN																																
ALPENA	210	993.9	1020.1	2.8	-10.6	- 3.8	-0.3	20.0	31	-28.9	8	0	29	- 9.4	63	29	- 22	15	8	0	264	686	0.5	22	11.6	NW	17	8	9	14	6.4	56
DETROIT	189			6.1	- 2.8	1.6	0.1	22.8	31+	-13.9	1	0	23	- 3.9	70	24	- 37	13	11	0	147		0.4	29	13.0	28	17					
DETROIT M WAYNE CO	193	994.9	1019.9	6.7	- 2.2	2.2	0.6	23.9	31	-16.7	1	0	19	- 2.8	71	26	- 35	20	9	0	147	76	0.3	33	13.4	NW	17	5	7	19	7.3	52
DETROIT WILLOW RUN	217	991.5	1020.5	5.6	- 3.9	0.9	-0.9	23.3	31	-16.1	1	0	25			19	- 42	15	9	0	130	102	0.6	29	15.6	33	17	4	7	20	7.3	
FLINT	235	991.2	1020.1	3.9	- 5.0	- 0.6	-1.0	23.3	31	-23.9	1	0	24	- 5.6	68	15	- 40	4	12	1	274	279	0.8	20	11.2	27	17+	4	7	20	7.5	
GRAND RAPIDS	239	989.8	1019.7	5.6	- 3.3	1.2	0.8	23.9	30	-20.6	1	0	21	- 2.8	75	63	5	30	11	1	262	203	0.5	18	11.6	N	16	2	7	22	8.0	45
HOUGHTON LAKE	350	976.6	1020.3	3.3	- 8.9	- 2.8		18.9	30	-30.6	1	0	28	- 6.7	74	34		11	8	1	239	279	0.7	22	9.4	34	16	5	9	17	7.0	
LANSING	256	986.8	1019.7	5.0	- 4.4	0.1	-0.1	23.3	30	-24.4	1	0	24	- 4.4	72	29	- 31	22	10	0	239	229	0.9	21	12.5	W	16	2	10	19	7.5	53
MARQUETTE U	206			2.8	- 6.7	- 2.1	0.9	20.6	31	-20.6	8	0	26			34	- 15	14	12		264	660			18.3	S	30	6	8	17	6.9	61
MUSKEGON	191	996.3	1019.8	5.6	- 3.9	0.8	0.3	25.0	30	-20.6	1	0	22	- 3.9	73	52	0	25	10	1	328	229	0.8	17	13.9	20	27	1	13	17	7.7	
SAULT STE MARIE	220	992.2	1020.0	- 0.6	-11.1	- 5.8	-1.2	11.1	31	-29.4	8	0	30	-10.0	72	40	- 6	17	9	1	173	635	0.0	8	14.3	NW	17	7	7	17	6.8	59
MINNESOTA																																
DULUTH	435	965.5	1018.8	1.1	- 8.9	- 4.0	1.9	18.3	30	-27.2	7	0	28	-10.0	64	17	- 24	5	10	0	175	635	0.7	25	16.5	NW	6	6	7	18	6.8	58
INTERNATIONAL FALLS	359	973.9	1018.8	- 0.6	-12.8	- 6.6	0.4	21.1	30	-33.3	7	0	28	-12.8	61	25	- 1	10	11	1	165	533	1.2	23	15.6	16	1	6	7	18	6.9	
MINNEAPOLIS	254	987.5	1019.1	3.3	- 5.6	- 1.2	1.3	26.7	30	-23.3	7	0	23	- 6.1	70	24	- 14	10	5	1	66	584	0.0	25	20.1	SW	30	7	6	18	6.9	58
ROCHESTER	395	969.5	1018.9	3.9	- 5.0	- 0.4	1.8	23.9	30	-20.6	7	0	24	- 4.4	75	39	- 3	25	5	2	142	152	0.6	21	15.6	25	30	6	8	17	7.1	
ST CLOUD	315	979.3	1018.5	2.2	- 8.3	- 3.2	0.3	22.2	30	-28.3	7	0	26		69	10	- 23	6	3		84	432						6	7	18	6.9	
MISSISSIPPI																																
JACKSON	94	1008.1	1020.2	23.9	7.8	15.8	2.2	30.0	11	- 1.7	8	0	5	8.9	69	59	- 87	39	4	0	0	0	1.7	18	15.2	SE	30	14	5	12	5.2	73
MERIDIAN	88	1009.5	1020.8	24.4	7.8	16.1	2.5	30.6	11	- 0.6	19+	0	5	6.7	60	62	- 98	38	4	0	0	0	1.1	19	12.5	26	6	7	14	10	5.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days				Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)				
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	988.8	1017.6	14.4	3.3	8.8	3.3	28.9	30+	-12.8	8	0	12	1.7	66	63	- 4	20	11	4	36	25	0.8	12	15.6	SW	30	3	8	20	7.5	65
KANSAS CITY	226	989.8	1017.3	15.0	2.8	8.8	2.5	29.4	29	-14.4	8	0	10	0.6	61	72	9	43	6	1	28	25	0.7	13	14.8	S	24	5	7	19	7.5	47
SAINT JOSEPH	247			16.7	1.1	8.8	4.3	30.0	24	-20.6	8	0	17	0.6	67	29	- 30	12	8	3	5	T	0.4	12	15.6	19	24	5	10	16	7.1	
ST LOUIS	163	998.3	1018.9	14.4	3.9	9.1	3.2	28.9	24	- 8.3	8	0	11	2.8	70	70	- 8	27	7	3	30	25	0.6	15	13.0	NW	16	2	12	17	7.6	50
SPRINGFIELD	386	971.9	1017.5	17.2	3.3	10.2	3.6	28.3	11	-15.0	8	0	11	2.2	63	42	- 30	15	10	3	43	51	1.5	17	13.4	S	30	6	6	19	7.1	54
MONTANA																																
BILLINGS	1087	888.3	1015.1	5.0	- 6.1	- 0.4	-1.3	21.7	23	-17.8	15+	0	27	- 7.8	63	39	13	13	15	0	411	152	1.4	29	20.1	NE	6	4	7	20	7.5	72
GLASGOW	696	931.9		- 0.6	-11.1	- 5.7	-2.7	13.9	28	-26.7	15	0	29			21	7	7	11		376	254						5	5	21	7.5	
GREAT FALLS	1116	885.2	1016.6	3.3	- 8.3	- 2.7	-1.9	17.8	23	-26.7	14	0	27	-12.2	51	55	32	26	11	0	541	178	2.6	25	21.0	SW	8	2	7	22	7.9	69
HAVRE	787	921.4	1016.4	1.1	-10.0	- 4.3	-1.4	17.2	23	-26.7	14	0	30	- 8.3	76	33	17	15	12	0	366	102	1.2	27	17.0	NW	23+	4	3	24	8.2	54
HELENA	1167	877.8	1016.5	4.4	- 7.8	- 1.7	-1.3	16.7	23+	-19.4	15+	0	29	- 8.9	59	36	19	10	11	0	378	203	2.6	27	17.0	N	6	3	4	24	7.9	56
KALISPELL	904	908.2	1015.0	3.9	- 5.0	- 0.7	-0.6	10.0	23	-12.2	12+	0	31	- 6.1	71	28	3	7	14	1	254	51	0.5	4	13.9	1	10	2	8	21	8.2	
MILES CITY	801	920.4	1016.0	4.4	- 7.8	- 1.6	-0.9	17.8	28+	-24.4	15	0	27	- 6.7	71	45	29		11	0	452		1.3	33								
MISSOULA	972	901.5	1015.5	6.1	- 3.9	1.1	0.2	13.3	22	-15.6	7	0	30	- 4.4	72	28	9	6	16	0	226	76	0.3	33	13.0	W	11	0	8	23	8.7	46
NEBRASKA																																
GRAND ISLAND	561	949.5	1016.8	13.9	- 2.2	5.9	3.8	31.1	24	-15.0	7	0	22	- 4.4	54	T	- 32	T	1	1	T	T	0.3	15	16.5	20	30+	3	12	16	7.2	
LINCOLN U	351			13.3	- 0.6	6.4	3.1	30.6	29	-15.0	7	0	19			22	- 22	17	3		T	0			20.1	SW	30	4	11	16	7.1	64
NORFOLK	471			11.7	- 2.8	4.6	3.9	28.9	24	-17.8	7	0	23			2	- 39	1	3		13	T						7	7	17	6.9	
NORTH PLATTE	846	916.4	1015.6	13.3	- 4.4	4.4	2.7	28.9	29	-15.6	7	0	25	- 6.7	53	2	- 23	2	2	1	18	25	0.3	9	15.2	NE	25	2	11	18	7.6	64
OMAHA	298	981.7	1017.6	15.0	0.0	7.5	4.8	31.7	24	-14.4	8	0	15	- 2.2	55	21	- 16	13	6	2	8	T	0.7	12	18.8	S	30	6	9	16	6.7	63
SCOTTSBLUFF	1206	876.7	1014.0	13.9	- 3.3	5.2	3.3	27.8	29	-16.1	7	0	25	- 5.6	55	7	- 14	4	6	0	53	25	0.6	30	19.2	29	30	4	9	18	7.2	
VALENTINE	789			10.6	- 3.9	3.2	3.6	26.7	23	-18.3	15	0	22			18	- 8	14	4		76	51			16.1	W	30	5	9	17	7.1	60
NEVADA																																
ELKO	1539	841.2	1013.8	9.4	- 3.9	2.9	0.9	18.9	23	-12.2	15	0	25	- 3.9	68	45	24	25	11	0	589	356	0.9	22	10.3	21	9	6	8	17	6.6	
ELY	1906	804.9	1012.5	10.0	- 2.8	3.6	2.7	17.8	22	-11.1	30	0	23	- 6.1	55	9	- 12	4	7	1	112	51	3.0	19	17.0	SW	12+	8	8	15	6.2	66
LAS VEGAS	659	936.7	1013.0	22.2	8.3	15.2	2.5	28.9	23	0.6	6	0	0	- 4.4	28	T	- 9	T	0	0	0	0	2.7	20	16.1	SW	3	9	13	9	5.4	88
RENO	1342	862.9	1013.7	12.2	- 2.2	4.8	-0.5	20.0	22+	-10.0	14	0	24	- 4.4	57	49	32	21	9	0	396	203	1.3	24	25.5	W	23	7	8	16	6.4	75
WINNEMUCCA	1310	864.9	1013.9	11.7	- 3.9	3.9	0.6	18.9	22	-13.3	5	0	27	- 6.1	53	34	13	11	7	0	282	152	1.3	22	13.9	SW	11+	6	6	19	7.1	46
NEW HAMPSHIRE																																
CONCORD	104	1007.8	1021.0	3.9	- 8.9	- 2.7	-2.6	17.8	11	-26.7	19	0	29			44	- 38	18	11	1	498	660	1.2	33	13.9	W	1	8	7	16	6.7	55
MT WASHINGTON OBS	1909			- 8.3	-17.2	-12.7	-1.4	5.6	31	-32.2	18	0	31			72	- 74	20	15	0	579	152			43.4Y	NW	1	4	6	21	7.9	37
NEW JERSEY																																
ATLANTIC CITY	20	1019.0	1021.5	8.9	- 1.7	3.7	-1.4	26.1	11	-13.9	19	0	20	- 1.7	72	96	- 3	47	11	2	53	T	0.7	36	12.5	33	16	10	2	19	6.5	50
ATLANTIC CITY U	3			7.2	0.6	3.9	-1.1	22.2	14	-10.6	19	0	12			72	- 30	27	12						18.3	NNW	16					
NEWARK	2	1020.3	1021.4	7.2	- 1.1	3.1	-1.6	21.1	11	-13.3	19	0	16	- 2.8	70	149	45	53	13	1	457	203	1.5	32	13.0	30	1	7	8	16	6.3	
TRENTON U	17			7.8	0.0	3.8	-1.0	21.7	11	-12.8	19	0	14			130	33	57	13		338	76			15.2	NW	16	8	8	15	6.3	48
NEW MEXICO																																
ALBUQUERQUE	1619	837.1	1013.4	19.4	2.8	11.1	3.4	26.7	28	- 6.7	6	0	7	- 9.4	26	6	- 6	3	3	1	28	T	1.4	24	21.0	SW	29	10	11	10	5.5	78
CLAYTON	1515			18.3	- 1.1	8.6	3.6	26.1	29+	-15.0	7	0	17			2	- 14	2	3		28	25						9	7	15	6.0	
RATON	1944			16.7	- 3.3	6.6	3.2	23.9	2	-17.8	8	0	24			2	- 11	1	3		33	T						9	6	16	6.0	
ROSWELL	1102	890.6		25.6	2.2	14.0	4.3	34.4	28	-11.1	8	4	8	- 5.0	31	2	- 11	2	2	1	15	T	1.6	19	17.9	SW	29	10	11	10	5.3	77
SILVER CITY	1638			20.6	2.8	11.4	2.4	26.7	28	- 6.7	6	0	7			1	- 11	1	1		0	0						12	12	7	4.7	
NEW YORK																																
ALBANY	84	1010.5	1021.7	3.9	- 7.2	- 1.7	-2.2	15.6	31	-23.3	19	0	30	- 7.2	67	65	- 4	23	15	0	665	279	0.8	30	15.2	NW	4	8	4	19	6.8	56
BINGHAMTON	485	959.7	1020.7	2.2	- 5.6	- 1.4	-1.1	18.3	31	-21.1	19	0	26	- 6.1	73	71	- 3	15	15	0	668	203	0.4	28	12.5	NW	1	6	8	17	7.4	46
BUFFALO	215	993.9	1020.5	3.9	- 5.0	- 0.6	-0.3	23.3	31	-20.0	18	0	25	- 3.9	78	30	- 52	6	16	0	274	127	0.5	24	13.0	W	17+	3	6	22	8.0	48
NEW YORK U	40	1017.3	1020.5	7.2	- 0.6	3.1	-1.6	22.2	11	-13.3	19	0	16	- 3.9	66	152	50	59	11	1	442	254	1.3	35	13.0	NW	16+					53
J.F. KENNEDY	4	1020.3	1021.3	5.6	- 2.2	1.6	-2.1	17.8	11	-13.9	19	0	20	- 2.8	75	139	34	52	13	0	394	203	1.3	35	15.6	4	17	8	6	17	6.0	
NEW YORK LA GUARDIA	3	1019.6	1021.5	6.7	- 0.6	3.2	-1.7	21.1	11	-12.2	19	0	14	- 3.3	66	147	39	60	12	1	378	229	1.6	35	15.2	NW	1	7	7	17	6.5	
ROCHESTER	167	1000.7	1021.7	4.4	- 3.9	0.3	0.1	25.0	31	-18.9	18	0	24	- 5.0	69	33	- 43	12	11	0	406	229	0.5	27	11.2	NW	17+	5	7	19	7.4	53
SYRACUSE	125	1006.1	1021.4	4.4	- 5.0	- 0.2	-0.6	21.1	31	-20.6	18	0	23	- 6.1	65	34	- 57	9	16	1	264	178	0.8	1	12.1	E	21+	7	7	17	7.0	52
NORTH CAROLINA																																
ASHEVILLE	652	943.4	1020.4	18.3	1.7	9.9	2.9	27.2	15	- 8.3	19+	0	14	2.2	67	73	- 50	45	8	5	T	0	0.6	34	17.9	34	16+	9	14	8	5.3	82
CAPE HATTERAS R	2	1021.0	1021.5	14.4	6.1	10.2	-0.3	22.2	11	- 7.2	2	0	5	5.6	74	25	- 81	10	5	1	0	0	1.7	36	17.4	WSW	17+	11	6	14	5.6	63
CHARLOTTE	224	992.9	1020.7	19.4	5.0	12.2	2.2	30.0	15	- 6.1	18	0	8	3.3	60	63	- 49	32	9	3	0	0	0.8	22	15.6	SW	7	11	9	11	5.2	74

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C		C.				C.	%	Mm.	Mm.	Mm			Mm	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	988.8	1021.0	19.4	3.9	11.7	3.1	30.6	15	- 8.9	18	0	10	3.3	62	31	- 63	13	11	1	0	0	0.8	24	16.1	NW	15	12	9	10	5.3	75
RALEIGH	132	1004.7	1021.0	19.4	4.4	12.1	2.3	30.6	15	- 7.2	19+	0	8	2.8	59	41	- 44	19	7	2	0	0	0.4	24	19.7	32	15	13	8	10	5.1	68
WILMINGTON	9	1020.3	1021.8	21.1	7.8	14.4	2.1	31.1	15	- 2.8	2	0	4	6.7	65	24	- 79	9	6	1	0	0	0.3	23	17.0	NW	16	11	9	11	5.5	72
NORTH DAKOTA																																
BISMARCK	502	955.6	1017.1	4.4	- 8.3	- 2.2	1.1	26.7	29	-22.8	7	0	29	- 8.9	62	7	- 13	3	6	0	104	51	0.9	32	16.1	W	31	4	8	19	7.4	70
FARGO	273	984.1	1017.9	2.8	- 8.3	- 2.9	1.4	25.6	30	-26.1	7	0	28	- 7.8	69	9	- 10	7	7	1	124	127	0.2	26	17.4	SE	29+	6	9	16	7.0	69
WILLISTON	579	945.8	1016.8	1.7	-11.1	- 4.8	-0.6	14.4	28+	-26.1	14	0	30	- 8.3	76	18	0	6	10	0	157	178	1.3	29	23.2	NW	31	5	10	16	7.0	71
OHIO																																
AKRON	368	974.6	1020.1	8.3	- 1.7	3.4	0.7	25.6	26	-16.1	1	0	19	- 1.1	75	78	- 6	21	16	3	351	229	0.6	25	10.3	32	17	4	5	22	7.9	
CINCINNATI OBS	232			13.3	2.8	8.1	2.1	27.2	26	-10.0	1	0	12			94	- 4	28	12		229	229			11.2	NW	17					56
CLEVELAND	237	990.5	1020.5	7.2	- 1.1	2.9	1.2	26.7	26	-12.8	19	0	18	- 1.1	78	53	- 27	14	15	1	185	152	0.5	27	13.0	N	15	3	9	19	7.8	50
COLUMBUS	247	989.8	1020.5	10.0	- 0.6	4.7	0.8	26.1	26	-18.9	1	0	15	0.0	74	112	31	34	13	4	290	178	0.4	29	16.1	N	17	4	8	19	7.7	55
DAYTON	305	983.4	1020.2	9.4	- 0.6	4.6	0.7	23.9	26	-16.1	1	0	18	0.6	78	96	17	32	14	3	198	102	0.5	21	18.3	NW	17	3	7	21	7.9	45
MANSFIELD	395			7.8	- 1.7	3.0	1.2	24.4	26	-16.7	1	0	21	- 1.1	77	82	- 14	28	15	3	284	102	0.9	24				3	7	21	8.0	
TOLEDO	206	994.9	1020.8	6.7	- 3.3	1.6	-0.2	24.4	26	-16.7	1	0	24	- 2.8	73	44	- 14	18	12	2	249	127	0.2	31	13.9	N	16	3	7	21	7.7	44
YOUNGSTOWN	359	976.3	1020.2	6.7	- 2.8	1.7	-0.1	23.9	31+	-17.2	1	0	23	- 2.8	73	85	0	26	14	1	353	152	0.5	29	10.3	35	15+	4	7	20	7.7	
OKLAHOMA																																
OKLAHOMA CITY	392	969.2	1015.8	20.6	6.1	13.6	4.4	33.9	11	-12.8	8	3	4	3.3	56	63	13	18	9	8	10	T	1.6	15	16.5	S	22	5	11	15	6.8	81
TULSA	198	992.2	1016.5	20.0	5.6	12.8	3.9	34.4	11	-15.0	8	4	7	3.3	57	36	- 26	20	7	4	28	25	1.6	18	14.8	SW	2	6	12	13	6.5	67
OREGON																																
ASTORIA	2	1013.2	1014.1	9.4	1.7	5.7	-1.3	13.3	21	- 2.8	3	0	10	2.8	85	213	- 14	30	25	0	18	T	1.6	17	15.6	18	23	4	1	26	8.3	
BURNS U	1265	869.3	1014.1	7.8	- 4.4	1.7	-1.3	15.6	16	-11.1	12+	0	30	- 4.4	67	62	37	23	14		587	229	1.5	26				4	10	17	7.0	
EUGENE	109	1001.4	1015.1	11.7	2.8	7.2	-0.6	21.1	22	- 2.2	4	0	5	2.8	79	74	- 36	23	16	1	T	T	2.0	20	17.9	19	22	3	6	22	7.9	
MEACHAM	1234	872.3	1014.6	3.3	- 4.4	- 0.7	-1.4	12.8	16	-10.0	12+	0	30	- 5.6	74	57	- 44	17	16		648	508	0.8	22				2	5	24	8.5	
MEDFORD	396	967.5	1015.7	12.8	1.1	6.9	0.1	20.0	22	- 5.0	4	0	12	1.1	73	53	8	20	13	1	10	T	0.4	20	14.3	14	15	7	6	18	7.0	
PENDLETON	452	960.0	1014.3	11.7	1.1	6.4	-0.9	20.6	16	- 5.0	4	0	11	- 1.1	62	23	- 8	8	11	0	84	51	2.0	22	14.3	23	23	5	5	21	7.5	
PORTLAND	6	1013.9	1015.0	11.1	2.2	6.7	-1.2	16.1	5	- 3.9	12	0	6	3.3	82	109	12	37	22	2	T	0	2.3	17	18.3	S	23	2	3	26	8.6	48
SALEM	60	1007.5	1014.9	11.1	1.1	6.2	-1.2	19.4	22	- 4.4	5+	0	11	2.2	80	98	- 21	20	20	1	T	T	2.7	19	15.6	18	22	3	4	24	8.0	
SEXTON SUMMIT R	1169	879.8	1014.5	5.0	- 1.7	1.4	-2.2	13.9	6	- 5.6	3	0	23			86	- 2	22	20		635	203			17.4	18	22+	7	2	22	7.2	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.6	28.2	-0.2	32.2	13	23.3	14	1	0			27	- 36	13	8		0	0						11	15	5	4.6	
ENIWETOK	4	1008.5	1009.2	30.0	25.6	27.8	0.4	31.1	18+	23.3	24+	0	0	23.3	78	114	67	37	15		0	0	5.9	7								
TAGUAC GUAM R	110			28.3	20.6	24.4	-1.6	29.4	29+	16.1	4	0	0			287	219	77	27		0	0			11.2	NE	3+					50
JOHNSTON	2	1012.5	1013.0	26.7	22.2	24.6	-0.5	28.9	17	20.0	20	0	0	20.6	80	170	110	82	14	1	0	0	4.4	9	13.4	E	22	9	10	12	5.8	46
KOROR R	29	1005.4	1009.0	30.6	23.9	27.3	0.3	32.2	22	22.2	2+	1	0	23.9	84	183	- 11	52	24	2	0	0	2.5	4	32.6	S	2	0	0	31	9.9	68
KWAJALEIN	2	1008.5	1009.2	30.0	23.9	26.9	-0.1	30.6	27+	22.8	26+	0	0	23.3	82	437	273	55	26	0	0	0	6.5	7	14.3	9	26	0	9	22	8.5	
MAJURO	3	1008.8	1009.1	29.4	24.4	26.8	-0.2	30.6	25	22.2	19	0	0	23.3	82	316	19	47	27	2	0	0	4.6	8	15.2	NE	26	1	7	23	8.4	48
MARCUS ISLAND	6	1013.9	1015.7	24.4	18.9	21.6	-1.0	27.2	22	15.6	14+	0	0	16.7	75	133	92	96	10	0	0	0	5.2	6	15.2	N	25	11	10	10	5.2	67
PAGO PAGO	4	1009.5	1009.6	31.1	23.9	27.6		32.8	22	21.7	26	8	0	23.9	81	126		27	20	1	0	0	2.4	9	13.0	SE	4	1	17	13	7.4	77
PONAPE R	37	1002.7	1008.0	30.6	23.3	26.9	-0.1	32.2	23+	21.1	21	4	0	23.3	85	554	185	181	27	0	0	0	2.5	10	9.8	NE	1	0	4	27	8.7	56
TRUK MOEN ISLAND	2	1007.8	1008.1	29.4	24.4	27.1	-0.1	31.7	18	22.8	24+	0	0	23.9	83	610	413	119	22	4	0	0	3.4	7	12.1	S	16	0	3	28	9.2	75
WAKE	3	1013.2	1013.4	26.7	22.2	24.5	-0.9	28.3	27+	19.4	5	0	0	19.4	75	156	119	59	14	0	0	0	6.2	8	21.5	8	6	10	8	13	6.2	
YAP R	19	1006.8	1008.6	30.0	23.3	26.7	-0.5	31.7	22+	20.6	1	0	0	23.3	83	136	0	31	24	0	0	0	3.4	3	9.4	NE	17+	0	2	29	9.4	55
PENNSYLVANIA																																
ALLENTOWN	118	1007.1	1021.5	6.7	- 3.3	1.7	-1.4	17.8	31+	-18.3	19	0	25	- 5.0	66	170	73	60	13	2	442	102	1.0	34	13.0	33	16	10	6	15	6.2	
ERIE	223	992.9	1020.5	5.6	- 2.8	1.4	0.6	26.1	31	-17.8	18+	0	22	- 4.4	69	42	- 31	13	12	0	224	127	0.3	20	11.6	3	15	4	7	20	7.7	
HARRISBURG	103	1008.1	1021.3	8.9	- 1.1	3.8	-0.8	21.1	10	-12.8	19	0	18	- 2.8	66	134	46	48	13	1	259	76	0.4	36	13.0	NW	17	6	7	18	6.9	55
PHILADELPHIA	2	1020.3	1021.4	8.3	- 1.1	3.6	-1.4	21.7	11	-11.7	19	0	18	- 2.2	68	115	19	57	13	1	163	T	0.8	36	13.4	N	17	7	8	16	6.5	51
PITTSBURGH	347	974.9	1020.0	9.4	- 0.6	4.6	1.9	25.6	26	-15.0	1	0	17	- 0.6	73	155	71	40	13	4	508	305	0.9	30	13.4	24	13	3	7	21	7.9	39
READING U	81			8.3	0.0	4.2	-1.0	21.7	10	-13.9	19	0	14			135	39	55	13		335	152			18.8	E	7	10	9	12	5.5	55
SCRANTON	283	986.1	1021.3	6.1	- 2.8	1.6	-0.7	19.4	31	-20.0	19	0	21	- 4.4	67	99	28	33	13	0	754	330	0.6	30	10.7	W	17+	5	9	17	7.0	57
WILLIAMSPORT	160	1001.4	1021.1	6.1	- 3.9	1.3	-1.7	18.9	31	-18.3	19	0	24	- 3.3	74	136	41	38	15	1	749	330	0.5	1	11.2	26	3	6	8	17	7.0	
RHODE ISLAND																																
BLOCK ISLAND	34			3.3	- 2.2	0.7	-1.9	9.4	30	-13.3	19	0	22			134	31	66	11		490	178						8	7	16	6.4	
PROVIDENCE	16	1018.6	1020.8	5.0	- 3.3	0.7	-2.1	20.6	11	-17.2	19	0	22	- 5.6	65	139	34	62	10	1	632	254	2.1	34	11.6	31	1	9	7	15	6.6	48

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1019.6	1021.3	22.8	8.3	15.6	1.8	31.7	12	- 2.8	2	0	3	7.8	66	71	- 28	38	6	2	0	0	0.7	18	22.8Y	N	16	8	14	9	5.4	76
CHARLESTON U	3			20.0	11.1	15.6	1.4	29.4	15+	0.6	18	0	0			57	- 35	37	4		0	0			15.2	N	16+					
COLUMBIA	73	1013.2	1021.3	21.7	6.7	13.9	1.5	29.4	12	- 6.7	19	0	4	6.1	66	78	- 30	26	6	2	0	0	0.4	25	13.0	36	12	10	13	8	5.4	77
GNVLE SPARTANBURG	292	986.1	1021.0	21.1	6.1	13.6	2.8	31.1	15	- 6.7	18	0	5	2.8	54	50	- 70	14	9	3	0	0	0.9	26	15.2	NW	16+	11	10	10	5.1	69
SOUTH DAKOTA																																
ABERDEEN	395	969.2	1017.2	6.7	- 5.6	0.6	2.7	25.0	29	-20.0	7	0	27	- 6.7	62	2	- 25	2	2	1	30	25	0.5	10	16.1	21	29	5	9	17	7.0	
HURON	391	969.5	1017.0	8.3	- 3.9	2.4	4.2	26.7	29	-19.4	7	0	23	- 4.4	63	5	- 23	3	4	0	53	51	0.4	12	17.0	S	29	4	9	18	7.5	75
RAPID CITY	964	902.1	1015.3	7.8	- 3.9	1.8	2.3	27.2	29	-17.8	7	0	22	- 5.6	64	21	- 5	7	10	0	193	76	0.7	36	17.9	NW	24	4	8	19	7.8	56
SIOUX FALLS	432	964.8	1017.3	9.4	- 3.9	2.8	3.9	28.3	24	-20.6	7	0	24	- 5.0	61	4	- 36	2	4	1	25	25	0.2	12	19.2	27	30	6	9	16	6.7	
TENNESSEE																																
BRISTOL	459	965.8	1020.8	17.8	2.8	10.1	2.3	26.1	27+	- 9.4	18	0	14	2.2	63	77	- 24	28	8	3	T	T	0.9	27	15.6	25	7	11	6	14	5.8	
CHATTANOOGA	203	995.6	1020.5	20.0	4.4	12.2	1.5	28.3	13+	- 5.6	19+	0	9	5.0	67	30	-114	17	5	1	T	T	0.9	21	11.6	NE	15+	6	16	9	5.8	68
KNOXVILLE	299	984.8	1019.9	19.4	6.1	12.6	2.8	27.2	14+	- 6.1	18	0	9	5.0	63	104	- 17	75	8	3	0	0	1.5	26	13.4	SW	5	8	12	11	5.9	66
MEMPHIS	79	1009.5	1019.8	19.4	7.8	13.7	3.1	28.3	13+	- 3.9	7	0	6	6.1	63	118	- 11	67	7	3	8	T	1.9	19	12.5	NW	15	8	8	15	6.3	67
NASHVILLE	180	997.6	1019.6	21.1	6.7	13.9	4.4	30.0	13+	- 6.7	18	0	9	4.4	58	113	- 19	93	6	2	T	T	2.0	21	13.9	NW	6	6	12	13	6.2	67
OAK RIDGE R	276			19.4	3.9	11.6	3.0	28.3	13	- 6.7	18	0	10			155	13	101	8		T	T			16.1Y		15	11	8	12	5.6	
TEXAS																																
ABILENE	537	953.6	1014.8	25.0	10.0	17.5	4.7	35.6	29	- 7.2	8	4	4	6.1	53	26	- 1	16	5	5	T	T	2.9	19	16.5	S	30+	10	7	14	5.7	80
AMARILLO	1098	889.6	1012.8	20.6	2.8	11.9	3.2	30.6	29	-13.9	8	0	9	- 2.8	45	11	- 10	6	4	4	10	T	2.9	22	16.1	SW	11	7	11	13	6.0	79
AUSTIN	182	994.9	1017.0	26.1	12.8	19.6	4.2	35.6	28	0.0	8	5	1	10.6	61	28	- 26	9	6	1	0	0	2.8	18	16.1	NW	6	9	12	10	5.7	64
BROWNSVILLE	6	1015.9	1016.5	26.1	16.7	21.2	1.2	30.6	14	7.2	7	0	0	17.2	83	11	- 15	11	1	0	0	0	4.9	14	19.2	NW	6	7	15	9	5.8	60
CORPUS CHRISTI	12	1015.6	1017.0	25.6	15.6	20.7	2.2	31.1	28+	4.4	7	0	0	15.6	77	2	- 35	2	2	0	0	0	5.2	14	17.0	N	6	7	10	14	6.6	49
DALLAS	147	999.3	1016.6	25.0	11.1	18.1	4.7	32.8	12+	- 4.4	8	2	1	8.9	58	46	- 27	19	5	3	T	0	3.4	16	14.8	S	30	9	9	13	5.9	70
DEL RIO	313	979.0	1014.9	27.8	13.3	20.4	3.2	36.1	28	2.8	8	7	0	8.3	52	15	- 6	14	4	1	0	0	3.4	13	13.9	36	6	8	12	11	5.7	
EL PASO	1194	881.5	1012.7	24.4	6.1	15.3	2.6	31.1	28	- 3.9	1	0	5	- 5.0	26	4	- 5	4	2	2	0	0	2.1	25	19.2	W	29+	10	12	9	5.1	95
FORT WORTH	164	996.3	1016.6	24.4	10.0	17.4	4.1	32.2	12+	- 4.4	8	2	2	8.3	60	53	- 11	21	6	5	T	T	3.0	18	13.4	3	15	9	10	12	6.0	
GALVESTON U	2			21.1	16.1	18.6	2.2	23.9	31+	4.4	7	0	0			39	- 33	27	4		0	0			13.0	NW	6					71
HOUSTON U	12			23.9	15.0	19.6	2.7	28.3	12	3.3	7	0	0			20	- 41	15	4		0	0										
HOUSTON	15	1016.3	1018.4	26.1	13.9	19.8	3.5	31.1	15	0.6	7	0	0	13.3	73	46	- 21	43	6	2	0	0	3.2	15	12.5	32	6+	5	15	11	6.4	65
LUBBOCK	992	902.8	1013.9	22.2	4.4	13.2	3.4	31.7	29	-11.1	8	0	8	- 1.1	45	53	35	24	5	7	T	0	2.5	22	17.9	31	19+	9	9	13	5.8	
MIDLAND	869	915.7	1013.4	24.4	7.2	15.8	2.9	33.3	29	- 7.2	8	1	5	1.1	46	37	28	24	4	2	0	0	2.3	20	17.0	1	7	10	12	9	5.2	
PORT ARTHUR	5			23.9	11.7	17.7	1.6	30.0	15	- 1.1	7	0	1	13.3	80	23	- 64	16	4	2	0	0	2.7	14	17.0	NW	6	8	11	12	5.9	69
SAN ANGELO	580	948.2	1014.4	26.7	10.0	18.2	4.3	36.1	29	- 4.4	8	7	4	5.6	48	20	- 4	19	4	4	0	0	3.0	19	16.5	16	30	10	8	13	5.5	
SAN ANTONIO	240	988.8	1016.9	26.1	12.8	19.4	3.3	33.3	28	- 1.7	7	5	2	10.6	61	55	13	33	5	2	0	0	2.7	15	17.9	N	6	7	10	14	6.2	60
VICTORIA	32	1013.5	1017.8	25.6	13.9	19.9	2.6	30.0	28+	1.7	7	0	0	13.9	74	12	- 46	7	5	2	0	0	3.2	14	19.7Y	N	6	3	12	16	7.2	
WACO	153	999.0	1017.1	25.6	11.7	18.5	4.1	35.6	28	- 2.8	8	5	2	8.9	59	49	- 11	25	6	4	0	0	3.9	16	13.4	32	6	13	7	11	5.1	
WICHITA FALLS	303	978.7	1015.1	26.1	8.3	17.2	5.1	36.7	29	- 8.9	8	8	3	5.0	51	33	- 6	15	6	6	15	T	2.4	17	20.6	1	7	7	8	16	6.6	
UTAH																																
MILFORD	1533	843.6		14.4	- 2.2	5.8	2.2	21.7	22	-14.4	30+	0	22			28	2	15	4		328	178						7	9	15	6.4	
SALT LAKE CITY	1286	868.9	1013.6	13.3	0.6	6.8	2.1	21.1	28	- 7.2	30	0	15	- 3.9	54	49	10	19	8	1	300	152	1.9	16	20.1	S	11	7	7	17	6.7	70
WENDOVER	1291			12.2	0.6	6.4	1.2	20.6	23	- 5.6	8	0	14			22	12	20	4		216	127										
VERMONT																																
BURLINGTON	101	1008.1	1021.3	1.1	- 8.9	- 3.7	-0.8	16.1	31	-23.9	9	0	28	-10.0	62	13	- 41	4	9	0	155	127	0.5	29	15.2	S	13	5	9	17	7.1	67
VIRGINIA																																
LYNCHBURG	279	986.5		15.0	1.1	7.8	0.3	25.0	11	- 9.4	18	0	13	- 0.6	61	66	- 25	24	10	3	T	0	0.8	27	14.8	W	7	11	9	11	5.3	63
NORFOLK	7	1020.3	1021.5	13.9	3.3	8.7	-0.2	28.9	6	- 4.4	2	0	7	1.7	65	34	- 54	17	7	2	T	0	0.4	35	18.8	W	7	9	10	12	5.8	80
RICHMOND	50	1015.2	1021.4	15.6	1.1	8.1	-0.6	26.7	11	- 8.3	19	0	13	1.7	69	59	- 27	17	9	3	T	T	0.1	25	14.8	NW	17+	8	8	15	6.0	63
ROANOKE	350	978.0	1020.4	16.1	2.2	9.2	1.7	27.2	11	- 9.4	18	0	11	- 0.6	56	115	25	65	10	4	20	T	1.0	27	23.2	32	15	9	11	11	5.5	
WALLOPS ISLAND	3	1021.7	1022.1	9.4	0.6	4.9		23.3	11	- 7.8	19	0	14	0.6	80	47		18	8	4	T	0	0.7	33	26.4Y	NW	16	8	6	17	6.5	
WASHINGTON																																
OLYMPIA	59	1006.8	1014.1	9.4	0.6	5.0	-1.8	13.9	16	- 5.0	13	0	16	1.7	81	109	- 28	21	22	0	28	25	2.1	20	13.9	18	23	3	2	26	8.7	
QUILLAYUTE	55	1005.1	1012.6	8.3	1.1	4.7	-1.4	14.4	6	- 3.3	3	0	13	2.8	90	298	17	91	23	0	69	T	1.3	15	14.8	S	16	5	2	24	7.8	28
SEATTLE TACOMA	122	997.3	1014.0	8.9	2.2	5.7	-0.9	12.8	16	- 2.2	13+	0	5	2.2	83	94	- 2	19	20	1	T	0	1.7	19	17.9	20	23	3	2	26	8.5	40
SPOKANE	718	927.9	1013.0	7.2	- 1.7	2.8	-0.6	12.8	17	- 7.2	12	0	22	- 2.8	70	44	6	14	10	0	163	51	2.2	19	15.2	SW	23	3	6	22	7.8	41
STAMPEDE PASS R	1206	873.7		0.6	- 4.4	- 2.1	-1.0	6.1	5	- 9.4	11	0	31			216	- 54	38	24		1715	991						1	6	24	8.6	
WALLA WALLA U	289			12.2	3.3	7.7	-0.1	20.6	16	- 2.2	4	0	8			51	10	21	10		109	25			12.5	W	23	3	6	22	7.8	38

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C	%	Mm.	Mm	Mm.			Mm.	Mm	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	974.6	1013.7	12.2	- 1.1	5.4	-0.2	17.8	6	- 7.2	12	0	21	- 3.3	57	11	- 4	6	7	0	T	0	1.4	24	14.8	25	8	5	9	17	6.9	
WEST INDIES																																
SAN JUAN P.R.	4	1014.6	1017.2	27.8	21.1	24.4	0.3	28.9	31+	18.3	19	0	0	18.3	69	37	- 19	18	15	0	0	0	3.5	7	11.6	NE	20	9	20	2	4.5	75
SWAN ISLAND	9			28.9	23.3	26.2	-0.5	29.4	17+	21.1	30	0	0			15	- 1	7	3		0	0						23	5	3	2.7	
WEST VIRGINIA																																
BECKLEY	763	930.2	1020.4	13.3	1.1	7.1		23.3	26	-13.9	18	0	13	0.0	66	165		56	16	3	160	127	1.9	23	14.8	28	17	7	5	19	6.9	
CHARLESTON	286	985.1	1019.7	15.6	2.8	9.2	2.3	26.7	26+	-10.0	19	0	14	2.8	68	173	62	73	14	3	56	25	1.2	25	11.2	24	17	4	11	16	7.2	
ELKINS	600	947.9	1020.2	12.8	- 1.1	5.8	1.7	25.0	26	-16.1	19	0	18	0.6	73	195	90	57	17	5	178	102	1.7	27	14.8	35	6	2	9	20	7.7	
HUNTINGTON	252	989.5	1020.0	15.6	2.2	8.9	1.8	27.8	13	-10.0	19+	0	13	1.1	63	191	84	87	12	5	76	51	0.8	25	13.0	33	17	3	11	17	7.3	
PARKERSBURG U	187			13.9	2.2	7.9	1.9	27.8	26	-10.0	1	0	15			125	36	53	12		140	76			14.3	W	17					51
WISCONSIN																																
GREEN BAY	208	993.2	1019.7	3.3	- 6.1	- 1.4	0.7	22.8	30	-23.3	1	0	26	- 5.6	74	29	- 5	17	8	0	102	229	0.6	25	11.6	5	31+	8	5	18	6.7	44
LA CROSSE	198	993.9	1019.2	6.1	- 4.4	0.7	1.6	26.7	30	-20.6	8	0	23	- 5.0	68	54	2	28	7	3	155	178	0.3	16	13.0	28	30	7	7	17	7.0	
MADISON	262	986.8	1019.3	6.1	- 4.4	0.7	2.3	25.6	30	-17.8	8	0	24	- 5.0	67	38	- 9	13	7	2	114	76	0.2	21	14.3	S	30	3	7	21	7.9	46
MILWAUKEE	205	993.6	1019.8	4.4	- 3.3	0.7	1.2	25.0	30	-15.6	8	0	24	- 3.3	75	34	- 24	13	12	0	188	76	0.2	25	13.4	NW	16+	4	9	18	7.7	47
WYOMING																																
CASPER	1627	833.1	1012.6	10.0	- 5.0	2.4	2.4	21.1	23	-20.0	7	0	24	- 7.2	55	17	- 9	7	11	0	224	25	4.6	23	19.7	22	29	4	11	16	7.3	
CHEYENNE	1867	808.3	1013.2	11.1	- 3.3	3.9	3.7	22.8	29	-16.7	7+	0	23	- 8.3	47	19	- 11	8	12	1	86	25	2.9	26	18.8	NW	30+	6	7	18	7.2	54
LANDER	1696	824.2	1012.1	8.9	- 3.9	2.6	2.5	18.9	23	-18.9	7	0	24	- 7.2	53	19	- 11	9	8	0	452	178	1.7	25	21.0	S	29	4	11	16	6.8	68
SHERIDAN	1208	875.4	1015.0	7.2	- 6.1	0.4	1.0	21.7	29	-24.4	7	0	28	- 7.8	56	30	- 6	7	11	0	419	152	1.6	30	21.0	SW	29	0	12	19	7.9	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

MARCH 1967

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	249	2708	2434
HUNTSVILLE	255	2890	2913
MOBILE	100	1412	1519
MONTGOMERY	166	2019	2201
ALASKA			
ANCHORAGE	1292	9686	8977
ANNETTE	890	5399	5610
BARROW	2282	15338	15828
BARTER ISLAND	2356	15151	15642
BETHEL	1366	10464	10815
COLD BAY	936	7817	7547
FAIRBANKS	1704	12821	12434
JUNEAU	1261	7819	[illegible]
KING SALMON	1182	9952	9296
KOTZEBUE	1685	13069	[illegible]
MC GRATH	1466	12240	[illegible]
NOME	1487	10987	11354
ST. PAUL ISLAND	980	7881	8439
SHEMYA	984	7220	7269
YAKUTAT	1316	8612	7195
ARIZONA			
FLAGSTAFF	790	5367	5984
PHOENIX	142	1339	1690
TUCSON	115	1719	1719
WINSLOW	485	4054	4335
YUMA	56	812	1188
ARKANSAS			
FORT SMITH	272	3012	3126
LITTLE ROCK	240	2828	3084
TEXARKANA	161	2260	2428
CALIFORNIA			
BAKERSFIELD	271	2086	1998
BISHOP	535	3459	3742
BLUE CANYON	892	4186	4233
EUREKA U	561	3533	3548
FRESNO	322	2255	2286
LONG BEACH	206	1126	1435
LOS ANGELES	171	902	1447
LOS ANGELES U	133	626	1140
MT SHASTA R	839	4612	4621
OAKLAND	360	2070	2345
RED BLUFF	440	2178	2300
SACRAMENTO	435	2428	2449
SANDBERG U	700	3336	3461
SAN DIEGO	183	1035	1196
SAN FRANCISCO	383	2461	2306
SAN FRANCISCO U	372	2303	2303
SANTA CATALINA	390	1285	1506
SANTA MARIA	435	2298	2287
STOCKTON	398	2320	2456
COLORADO			
ALAMOSA	855	6753	7225
COLORADO SPRINGS	679	5009	5438
DENVER	679	4643	5371
GRAND JUNCTION	508	4565	5087
PUEBLO	600	4547	4846
CONNECTICUT			
BRIDGEPORT	963	4848	4872
HARTFORD	976	5164	5476
NEW HAVEN	962	4974	5064
DELAWARE			
WILMINGTON	798	4573	4475
DIST.OF COLUMBIA			
WASH NATL AP	611	3797	3862
FLORIDA			
APALACHICOLA U	103	1236	1275
DAYTONA BEACH	37	705	864
FORT MYERS	2	311	442
JACKSONVILLE	92	1205	1218
KEY WEST	[illegible]	25	108
LAKELAND U	24	545	661
MIAMI	0	137	214
ORLANDO	25	542	760
PENSACOLA	116	1520	1427
TALLAHASSEE	105	1439	1449
TAMPA	23	617	683
WEST PALM BEACH	0	247	253
GEORGIA			
ATHENS	262	2658	2766
ATLANTA	270	2781	2792
AUGUSTA	227	2390	2307
COLUMBUS	172	2002	2287
MACON	182	2133	2073
ROME	319	3089	3115
SAVANNAH	159	1789	1774
IDAHO			
BOISE	707	4596	5045
IDAHO FALLS 46W R	992	6820	7241
LEWISTON	702	3993	4787
POCATELLO	846	5676	6015

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ILLINOIS			
CAIRO U	382	3515	3579
CHICAGO O HARE	878	5682	5773
CHICAGO MIDWAY	814	5344	5416
MOLINE	802	5633	[illegible]
PEORIA	766	5426	5382
ROCKFORD	892	6024	6019
SPRINGFIELD	662	5003	4921
INDIANA			
EVANSVILLE	498	4165	[illegible]
FORT WAYNE	885	5810	5504
INDIANAPOLIS	652	4794	5051
SOUTH BEND	880	5521	5615
IOWA			
BURLINGTON	733	5351	5478
DES MOINES	757	5787	6069
DUBUQUE	924	6382	6492
SIOUX CITY	771	[illegible]	[illegible]
WATERLOO	878	6425	6536
KANSAS			
CONCORDIA	617	4866	[illegible]
DODGE CITY	561	4381	4499
GOODLAND	699	4962	5356
TOPEKA	570	4532	4716
WICHITA	463	3981	4257
KENTUCKY			
COVINGTON	622	4644	4702
LEXINGTON	468	4169	4252
LOUISVILLE	453	4081	[illegible]
LOUISIANA			
ALEXANDRIA	162	2081	1852
BATON ROUGE	97	1504	1527
LAKE CHARLES	86	1305	1420
NEW ORLEANS	129	1431	1346
SHREVEPORT	[illegible]	2054	[illegible]
MAINE			
CARIBOU	1468	8163	8258
PORTLAND	1187	6523	6353
MARYLAND			
BALTIMORE	715	4397	4237
MASSACHUSETTS			
BLUE HILL OBS R	1054	5441	5453
BOSTON	977	4867	4877
NANTUCKET	1001	4992	4757
PITTSFIELD	1157	6480	6487
WORCESTER	1115	5974	5975
MICHIGAN			
ALPENA	1232	7219	7127
DETROIT	928	5469	5449
DETROIT M WAYNE CO	894	5522	5463
DETROIT WILLOW RUN	964	5994	5465
FLINT	1052	6386	5933
GRAND RAPIDS	950	5678	6025
HOUGHTON LAKE	1168	7149	
LANSING	1012	6196	5988
MARQUETTE U	1131	7075	6977
MUSKEGON	970	5792	5714
SAULT STE MARIE	1339	7919	7560
MINNESOTA			
DULUTH	1243	8550	8472
INTERNATIONAL FALLS	1385	9541	9161
MINNEAPOLIS	1086	7463	7392
ROCHESTER	1041	7286	7271
ST CLOUD	1193	8062	7782
MISSISSIPPI			
JACKSON	192	2342	2125
MERIDIAN	[illegible]	2184	2213
MISSOURI			
COLUMBIA	543	4276	4589
KANSAS CITY	548	4021	4308
ST JOSEPH	545	4602	4988
ST LOUIS	530	4281	4452
SPRINGFIELD	462	4110	[illegible]
MONTANA			
BILLINGS	1039	5557	6092
GLASGOW	1335	7809	7863
GREAT FALLS	1166	6218	6538
HAVRE	1253	7424	7543
HELENA	1107	5958	6902
KALISPELL	1059	6416	6948
MILES CITY	1103	6675	6769
MISSOULA	952	5671	6894
NEBRASKA			
GRAND ISLAND	699	5432	5812
LINCOLN U	671	5186	5261
NORFOLK	764	6041	6200
NORTH PLATTE	771	5686	5860
OMAHA	615	5198	5619
SCOTTSBLUFF	729	5298	5761
VALENTINE	843	6016	6474

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
NEVADA			
ELKO	952	5952	6211
ELY	817	5812	6380
LAS VEGAS	169	2103	[illegible]
RENO	75	4707	5276
WINNEMUCCA	[illegible]	5062	5672
NEW HAMPSHIRE			
CONCORD	1164	[illegible]	6374
MT WASHINGTON OBS	1729	11071	11024
NEW JERSEY			
ATLANTIC CITY	813	4469	4244
ATLANTIC CITY U	796	4107	4060
NEWARK	842	4402	[illegible]
TRENTON U	[illegible]	4356	4448
NEW MEXICO			
ALBUQUERQUE	396	[illegible]	[illegible]
CLAYTON	538	4191	[illegible]
RATON	648	4969	5321
ROSWELL	244	[illegible]	3561
SILVER CITY	379	3211	3357
NEW YORK			
ALBANY	1111	6154	[illegible]
BINGHAMTON	1098	[illegible]	[illegible]
BUFFALO	1047	[illegible]	6010
NEW YORK U	843	[illegible]	4336
J.F. KENNEDY	93	4618	4560
NEW YORK LA GUARDIA	839	[illegible]	4267
ROCHESTER	998	5616	5824
SYRACUSE	1030	5792	5893
NORTH CAROLINA			
ASHEVILLE	465	4034	4034
CAPE HATTERAS R	449	2440	2410
CHARLOTTE	343	3096	[illegible]
GREENSBORO	376	3234	3524
RALEIGH	361	3068	3179
WILMINGTON	252	2042	[illegible]
NORTH DAKOTA			
BISMARCK	1138	[illegible]	7760
FARGO	1178	8470	[illegible]
WILLISTON	1255	[illegible]	8064
OHIO			
AKRON	825	5287	5307
CINCINNATI OBS	581	4458	4343
CLEVELAND	858	5298	5473
COLUMBUS	756	[illegible]	[illegible]
DAYTON	763	5003	4996
MANSFIELD	852	5587	[illegible]
TOLEDO	929	5697	5649
YOUNGSTOWN	919	5799	[illegible]
OKLAHOMA			
OKLAHOMA CITY	307	3014	[illegible]
TULSA	362	3312	[illegible]
OREGON			
ASTORIA	697	3936	4112
BURNS U	921	[illegible]	[illegible]
EUGENE	614	3402	3886
MEACHAM	1052	[illegible]	[illegible]
MEDFORD	634	3855	[illegible]
PENDLETON	659	3707	4463
PORTLAND	647	[illegible]	[illegible]
SALEM	669	3615	3920
SEXTON SUMMIT	935	4973	4901
PENNSYLVANIA			
ALLENTOWN	921	5402	5148
ERIE	941	5307	5518
HARRISBURG	806	4830	4719
PHILADELPHIA	817	4602	4584
PITTSBURGH	765	5162	5273
PITTSBURGH U	711	4699	4752
READING U	787	4511	4468
SCRANTON	[illegible]	5402	5528
WILLIAMSPORT	946	5652	5265
RHODE ISLAND			
BLOCK ISLAND	977	4765	4749
PROVIDENCE	976	5157	5133
SOUTH CAROLINA			
CHARLESTON	194	1925	1979
CHARLESTON U	181	1704	1752
COLUMBIA	270	[illegible]	[illegible]
GNVLE-SPARTANBURG	276	2859	2876
SOUTH DAKOTA			
ABERDEEN	982	7439	7482
HURON	884	6941	7248
RAPID CITY	917	5932	6278
SIOUX FALLS	858	6864	6918
TENNESSEE			
BRISTOL	455	3846	3814
CHATTANOOGA	351	3305	3079
KNOXVILLE	[illegible]	3267	3253
MEMPHIS	301	3035	3062
NASHVILLE	300	3214	3349
OAK RIDGE R	378	3563	3523

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
TEXAS			
ABILENE	154	2144	[illegible]
AMARILLO	356	3372	[illegible]
AUSTIN	77	1496	[illegible]
BROWNSVILLE	[illegible]	658	[illegible]
CORPUS CHRISTI	42	908	914
DALLAS	133	1963	2267
DEL RIO	54	1323	1436
EL PASO	173	249	2595
FORT WORTH	146	2051	[illegible]
GALVESTON U	61	1081	1205
HOUSTON U	57	1114	1248
HOUSTON	68	1193	[illegible]
LUBBOCK	[illegible]	2980	3346
MIDLAND	176	2417	2501
PORT ARTHUR	111	1297	[illegible]
SAN ANGELO	113	2073	2199
SAN ANTONIO	80	1560	1507
VICTORIA	[illegible]	[illegible]	[illegible]
WACO	114	1810	1964
WICHITA FALLS	167	[illegible]	[illegible]
UTAH			
MILFORD	688	5379	5612
SALT LAKE CITY	638	4769	5276
WENDOVER	658	4915	[illegible]
VERMONT			
BURLINGTON	1225	[illegible]	[illegible]
VIRGINIA			
LYNCHBURG	563	3870	3821
NORFOLK	533	3195	3168
RICHMOND	560	3778	[illegible]
ROANOKE	[illegible]	3815	3824
WALLOPS ISLAND	740	4049	
WASHINGTON			
OLYMPIA	739	4335	[illegible]
QUILLAYUTE WBAS	755	4432	4532
SEATTLE TACOMA	[illegible]	3921	4217
SPOKANE	859	5110	5701
STAMPEDE PASS R	1134	6932	7291
WALLA WALLA U	587	3373	4241
YAKIMA	716	4161	5217
WEST VIRGINIA			
BECKLEY	[illegible]	4828	
CHARLESTON	517	4041	4071
ELKINS	692	5182	4985
HUNTINGTON	528	4093	4041
PARKERSBURG U	585	4351	4294
WISCONSIN			
GREEN BAY	[illegible]	7085	6941
LA CROSSE	976	6681	6735
MADISON	978	6694	6833
MILWAUKEE	978	6344	6486
WYOMING			
CASPER	878	5960	6243
CHEYENNE	[illegible]	5354	[illegible]
LANDER	869	6131	6682
SHERIDAN	991	6275	[illegible]

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

MARCH 1967

STATE	TORNADOES NUMBER	TORNADOES DAYS	TORNADOES DEATHS	TORNADOES INJURIES	TORNADOES †DAMAGE	HAILSTORMS DEATHS	HAILSTORMS INJURIES	HAILSTORMS †DAMAGE PROP-ERTY	HAILSTORMS †DAMAGE CROPS	WINDSTORMS DEATHS	WINDSTORMS INJURIES	WINDSTORMS †DAMAGE PROP-ERTY	WINDSTORMS †DAMAGE CROPS	LIGHTNING DEATHS	LIGHTNING INJURIES	LIGHTNING †DAMAGE PROP-ERTY	LIGHTNING †DAMAGE CROPS	‡ HEAVY SNOWSTORMS AND BLIZZARDS DEATHS	‡ HEAVY SNOWSTORMS AND BLIZZARDS INJURIES	‡ HEAVY SNOWSTORMS AND BLIZZARDS †DAMAGE PROP-ERTY	‡ HEAVY SNOWSTORMS AND BLIZZARDS †DAMAGE CROPS	# ICE STORMS DEATHS	# ICE STORMS INJURIES	# ICE STORMS †DAMAGE PROP-ERTY	# ICE STORMS †DAMAGE CROPS	ø ALL OTHER DEATHS	ø ALL OTHER INJURIES	ø ALL OTHER †DAMAGE PROP-ERTY	ø ALL OTHER †DAMAGE CROPS
Alabama	7	1	2	31	6					0	0	5	0																
Alaska *																													
Arizona *																													
Arkansas	3	2	0	10	5	0	0	5	0																				
California										0	0	5	0					0	0	4	0								
Colorado *																													
Connecticut																		0	0	5	0	1	S	5	0	0	0	5	0
Delaware																										0	0	4	0
Florida *																													
Georgia	3	2	0	0	4					0	0	4	0																
Hawaii																										0	0	°5	C
Idaho *																													
Illinois	1	1	0	0	4																								
Indiana						0	0	6	0													0	0	4	0				
Iowa	1	1	0	0	0					0	0	5	0	0	0	4	0												
Kansas										0	0	4	5	0	0	0	2												
Kentucky	4	2		5	5			?				?				6				?						?	?	F 7	
Louisiana *																													
Maine																		0	0	4	0								
Maryland																						0	0	4	0	0	0	5	0
Massachusetts														0	0	3	0	0	0	5	0					0	0	RF4	0
Michigan *																													
Minnesota *																													
Mississippi	1	1	0	0	3					0	2		0																
Missouri *																													
Montana																		1	1	0	0								
Nebraska	1	1	0	0	3					0	0	5	0	0	0	5	0												
Nevada										0	0	4	0																
New Hampshire																		0	0	4	0								
New Jersey *																													
New Mexico	1	1	0	0	0	0	0	6	C	0	0	?	?																
New York																4													
North Carolina						0	0	3	0	2	0	6	0	1	0	4	0									0	0	0	6
North Dakota *																													
Ohio	1	1	0	0	4	0	0	3		0	13	5																	
Oklahoma						0	0	4	0	0	0	4	0	0	0	3	0									0	0	3	0
Oregon										0	2-3	4	3																
Pacific Area																										3	50	°7	C
Pennsylvania														0	0	6	0												
Puerto Rico *																													
Rhode Island																		0	0	5	0					0	0	4	0
South Carolina	2	1	0	0	4	0	0	5	1	0	0	4	0	0	0	3	0									0	0	0	7
South Dakota										0	0	4	0									0	0	4	0				
Tennessee	2	2	1	6	5	0	0	4	0	0	1	4	0	0	0	3	0									1	0	0	0
Texas	11	4	0	0	1					2	0	0	0																
Utah						0	0	2	2	0	0	6	3																
Vermont																		0	0	4	0								
U. S. Virgin Is.*																													
Virginia										0	3	6	3	0	0	3	0									0	0	6	3
Washington												5	3																
West Virginia	2	1	0	4	5	0	0	4	[illegible]	0	0	3	0													RF3	0	7	0
Wisconsin	3	1	0	0	5					0	0	5	0													0	0	6	0
Wyoming N																													

C Crop damage
° Includes crop damage
S Several
F Floods
RF Rain, Floods
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

MARCH 1967

Elmer R. Nelson, Office of Hydrology

Severe flooding occurred in portions of the Ohio Basin during March. Several streams in West Virginia reached record to near record high stages. The Red Cross rendered assistance to at least 3,800 families in the State. Almost all primary and secondary roads were closed by high water. The Governor declared West Virginia a disaster area. The second highest flood of record occurred along the Monongahela River in Pennsylvania. Flooding along the Ohio River was mostly light to moderate.

HUDSON BAY DRAINAGE

Red River of the North Basin.--The Red River of the North began overflowing its banks at Fargo, N. Dak., on March 29. It crested early on the morning of April 1 at a stage of 19.5 feet, 2.5 feet above flood stage. It receded within its banks on April 3.

At Grand Forks, N. Dak., the main stem had risen 10 feet during the last 3 days of the month and was within 3.5 feet of flood stage on March 31. The Red Lake River at Crookston, Minn., rose out of its banks on the last day of the month.

ST. LAWRENCE DRAINAGE

Lake Michigan Drainage.--There were two snowmelt rises in the Lake Michigan drainage during March. The first occurred from the 17th to the 19th and the second from the 28th to the 30th. Crests during the first rise were 5 to 8 feet below flood stage.

The rise at the end of the month was due to snowmelt from the Maple River drainage which enters the Grand River above Ionia, Mich. Crests observed were 1-1/2 to 4 feet below flood stage. Some minor flooding occurred in low areas along the Grand River from Ionia downstream to north of Grand Rapids, Mich.

Lake Huron.--The Cass River at Vassar, Mich., and the Chippewa River at Mt. Pleasant, Mich., reached or exceeded flood stage during the period from the 27th to the 30th. Flooding was minor and no flood damage was reported.

Lake Erie.--There were three rises in the Lake Erie drainage during the month. The first rise, due to snowmelt, caused minor overflow along the St. Joseph River at Montpelier, Ohio, and on the St. Marys River at Decatur, Ind., from the 11th to the 17th. The second rise was due to heavy rains of 1 to 2 inches over the south half of the Maumee Basin. Flooding resulted along the Maumee in the vicinity of Ft. Wayne, Ind., and along the St. Marys from the 21st to the 23d. The 3d rise was due to heavy rains in the upper half of the St. Marys Basin which caused minor overflow at Decatur, Ind., from March 28 to April 2. Little or no damage resulted from the flooding as only farm ground or park areas were affected.

ATLANTIC SLOPE DRAINAGE

Moderate precipitation on the 5th and 6th followed by heavy rainfall on the morning of the 7th caused considerable flooding of creeks and streams in New Jersey. There was also extensive flooding of small, flashy streams on the 7th. The Assunpink Creek at Trenton, N. J., reached stages second only to those of 1938. Damage at Trenton was estimated at $498,000. The Raritan River reached levels approaching those of 1938 and 1955, causing heavy damage on its flood plain. A disastrous flood was averted in the Passaic Basin as the precipitation changed to snow during the late stages of the storm.

Minor flooding occurred on small streams in southeastern Pennsylvania on the 7th. A rapid rise occurred on the morning of the 7th following an overnight rain of 2 to 3 inches. Some families were evacuated from their flooded homes along the Perkiomen, Neshaminy, and Brandywine Creeks. Portions of highways bordering the creeks and the Schuylkill River were temporarily closed. Damages are believed to be minor.

The Chemung River at Chemung, N. Y., reached flood stage on the 29th. Slight overflow occurred in lowland areas. No damage was reported.

The highest stages since 1955 occurred at many gaging points in the Potomac Basin during March. These high stages were due to widespread shower activity on the 4-7th. Precipitation was the heaviest on the 6th, ranging from 1.5 to 2.5 inches, with the heavier amounts occurring over the South Branch and upper Shenandoah. Preliminary estimates indicate flood damage around $1/4 million.

There were two rises in the James Basin in Virginia during March. The first was due to heavy rainfall during the night of the 6-7th which averaged 2.5 inches above Lynchburg, Va., and 1.3 inches over the lower James Basin. Much of the significant rainfall occurred in less than 6 hours. Light to moderate flooding resulted throughout the basin from the 7th to the 10th. Communities most seriously affected were Covington on the Jackson and Buchanan on the James. Serious local flash flooding occurred along two small creeks flowing through Buena Vista, Va. Extensive flash flooding occurred in rural areas along the Pedlar River above Holcombs Rock from locally heavy rain. The second major rise was due to heavy rainfall from the 13th to the 15th. Minor flooding occurred in the reach below Scottsville, Va. Operations in the Richmond harbor were curtailed several days during each rise. Many roads, streets, and some primary highways were flooded, between the 7th and 10th, with some damage in Covington, Buchanan, and Buena Vista areas. Many homes in Covington and Buchanan were flooded during the first rise.

The extreme lower portion of the Neuse River in North Carolina was slightly above bankfull in the beginning of the month but receding.

The Lumber River at Lumberton, N. C., continued in flood from February 7 through March 10. There were three crests during that period ranging from 1.7 feet to 2.3 feet above flood stage. Another rise after the 11th brought the stream back up to flood stage on the 14th and 15th. Only inconvenience resulted from the 32 days of continuous flooding.

The Savannah River at Clyo, Ga., exceeded flood stage from the 17th to the 23d, cresting 1.4 feet above bankfull stage on the 20th. Damage is estimated to be slight, if any, as fairly frequent flooding occurs in this area. The Ogeechee River at Dover, Ga., rose to bankfull stage on the 22d. No damage was reported.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--There was practically no snowfall in the Upper Mississippi Basin in Minnesota and Wisconsin during March. This was quite a contrast to January and February when heavy snow occurred. The absence of March snow decreased the flood potential and the magnitude of the flooding when it did occur.

The flooding on the upper Iowa at Dorchester, Iowa, and on the Root and Zumbro Rivers in southeastern Minnesota between the 10th and 14th was light and of no consequence. Temperatures in the upper 70's in many areas on the 9th and 10th caused the ice to break up and move out in some

f the east-west tributaries. Flooding during the latter ,art of the month in Wisconsin and Minnesota was minor. Flood damage was light.

Minor flooding occurred on the Pecatonica River at Freeport, Ill., in northern Illinois on the 28-30th. This flooding was due to the rapid melting of a snow cover ranging in depth from 8 to 11 inches. No flood damage was reported.

Heavy rain on the 5th caused the Kaskaskia River at Carlyle Dam, Ill., to rise 0.4 foot above flood stage on the 9th. It receded below bankfull stage on the 10th. Heavy precipitation on the 19th and 20th produced rapid rises on the Sangamon, Kaskaskia, and Illinois Rivers. The Sangamon River exceeded flood stage at Riverton, Ill., on the 21st to the 28th, and crested on the 23d, 4 feet above bankfull stage. The Kaskaskia River at Vandalia, Ill., was out of its banks up to 2 feet from the 21st to the 24th. It exceeded flood stage at Carlyle Dam, Ill., on the 23d and continued in flood through the end of the month. The Illinois River rose above flood stage at Meredosia, Ill., on the 22d and was still rising on March 31. No appreciable damage was reported from the flooding.

Missouri Basin.--The Yellowstone River at Glendive, Mont., rose to bankfull stage on the 27th due to ice jams. No damage was reported.

The Knife River at Manning, N. Dak., rose to bankfull stage briefly on the 23d. It reached flood stage at Hazen, N. Dak., on the 22d and continued in flood until the 26th. The Knife crested on the 25th nearly 3 feet above flood stage. Ice jams caused the Heart River south of Mandan, N. Dak., to fluctuate 1 to 2 feet above flood stage between the 2d and 5th. The Heart River was below flood level from the 5th to the 9th, rising to bankfull stage on the 10th. It remained within its banks from the 11th to the 23d, rising to 2.4 feet above flood stage on the 24th and receded within its banks again on the 25th. The flooding was minor and no significant damages were reported.

There was 2 to 5 inches of snow on the ground from Huron to Watertown, S. Dak., and in northwestern Iowa and southwestern Minnesota on March 1. Warm thawing weather caused minor rises on most tributary streams in South Dakota and northwestern Iowa during the first week of March. The ice on the Floyd River broke up and moved out from the 1st to the 4th. The Floyd reached bankfull stage to slightly over in the upper reaches above LeMars, Iowa, but remained within its banks in the reach below.

There was no significant ice on the Missouri River below Omaha, Nebr., during March.

Ohio Basin.--There were two rises in the Monongahela Basin in West Virginia and Pennsylvania during March. The first rise was due to snowmelt and rainfall ranging from 2.3 to 5.5 inches. The storm began on the evening of the 4th and lasted about 60 hours. The snow cover, ranging from 2 to 13 inches, contributed to the runoff. All headwater streams began rising rapidly during the afternoon of the 5th. Above freezing temperatures near 40° continued over the basin during the night of the 6th. Serious flooding occurred on the Tygart, the West Fork, and along the main stem of the Monongahela from Fairmont, W. Va., downstream to Braddock, Pa. At Philippi, W. Va., on the Tygart River, flood stage was exceeded by 9 feet and equalled the flood of July 1912. On the 7th the West Fork River at Clarksburg, W. Va., exceeded flood stage by 7.4 feet, which was the highest stage of record. This was the second highest flood of record along the Monongahela from Greensboro, Pa. to Charleroi, Pa., and was exceeded only by the flood of July 1888. Flood damages were excessive. The second rise was due to heavy rains on the 14th and 15th and was minor in comparison to the first rise.

The flood of March 6-9 on the Little Kanawha River in West Virginia was the highest of record. At Glenville, the crest of 34.4 feet was 11.4 feet above flood stage. It exceeded the previous record crest of 33.6 feet recorded on November 16, 1926, by 0.8 foot. The water level reached above the shelf in the well-house on which the recorder was located. The business district was completely flooded with water 4 to 5 feet deep in some places. At Creston, W. Va., 55 miles downstream, the crest of 36.0 feet exceeded flood stage by 16 feet. It exceeded the previous record stage of 33.2 feet recorded in April 1939 by 2.8 feet. The water level rose well above the bridge on which the wire weight gage is located. Preliminary estimates of damage along the Little Kanawha River by the Corps of Engineers was placed at $1,110,000. The Little Kanawha exceeded flood stage again on the 15-16th. The crests ranged from 3 to 6 feet above flood stage and were 8.5 to 10 feet lower than during the first rise.

Only minor flooding occurred along the Hocking River in Ohio on the 6-8th.

The flooding along the Greenbrier River at Buckeye, W. Va., was the highest on record. At Alderson, W. Va., the crest of 19.3 feet on the 8th was the highest since 1918, when it reached a stage of 22 feet. Scores of homes and camps along the river at Alderson were flooded and had to be evacuated. In some cases the water came up to the second floors of riverside homes. At Marlinton, W. Va., the entire business district was inundated forcing evacuation of about 200 persons. The damage at Ronceverte, W. Va., was confined to businesses and homes south of C. & O. Railway tracks and many industrial plants were badly damaged.

Minor flooding occurred along the Elk River at Clay, W. Va., on the 7th. During the second rise there was considerable flooding from Clay to the mouth. Flood stage was exceeded by more than 5 feet on the 15th. There was considerable flooding at Clendenin, a short distance downstream from Queen Shoals, W. Va. The town was completely isolated for a short time.

There was considerable flooding throughout the Coal River basin with record or near record stages. The crest at Tornado, W. Va., was nearly 2 feet higher than in 1963 when the damage was estimated at $821,700. Estimates of flood damage in this flood are not yet available.

Much flooding occurred along the Guyandot River in West Virginia on the 6-9th. At Logan, the crest of 29.0 feet was within 2.8 feet of the record flood of March 12, 1963. Most of the flood damage occurred in the Logan, Stollings, and Chapmanville areas. Considerable damage was also caused by the overflow of small streams in the area. Preliminary estimates of damage along the Guyandot River by the Corps of Engineers was placed at $4,110,000.

The Tug Fork exceeded flood stage 14 to 16 feet from Williamson to Kermit, W. Va., on the 7th and 8th. There was considerable flooding in Matewan, W. Va., area, where the lower portion was completely inundated. Scores of families were evacuated on Pond Creek at Toler, Belfry, Stone, McVeigh, and Goody. Considerable damage occurred at Chattaroy and in the area surrounding Williamson, W. Va. The main part of Williamson was protected by flood wall. The Corps of Engineers estimated the flood damages along the Tug Fork at $318,520.

Considerable flooding occurred in the headwater areas of the Levisa Fork in Buchanan and Dickenson Counties

in Virginia where extensive damage occurred. At Grundy, Va., the crest approached within 3 feet of the 1963 flood. At Elkhorn City, Ky., it crested slightly above flood stage on the 7th. In the reach from Pikeville to Prestonsburg, Ky., the crest ranged from 6 to 10 feet above flood stage. Most of the town of Prestonsburg, Ky., is protected by flood wall. At Paintsville, Ky., the crest on the 8th was nearly 3 feet above flood stage. Flood damages, by the Corps of Engineers, was estimated at $547,100. The Big Sandy at Louisa, Ky., crested 4.3 feet above flood stage on the 9th and was out of its banks from the 8th to the 10th.

There were several rises along the Scioto River in Ohio during March. At LaRue, Ohio, there were four separate overflows with crests ranging from 0.5 foot to 2.1 feet over flood stage. At Circleville and Piketon, Ohio, there were two periods of minor flooding beginning on the 7th and 14th. Moderate rains in combination with snowmelt produced the minor overflows. There was 3 to 5 inches of snow over the basin in the beginning of the month. Nearly 9 inches of additional snow occurred over the lower Scioto. A few secondary roads were closed to traffic temporarily during the flooding below Columbus, Ohio. The lowlands which flooded were not under cultivation at the time and no losses were sustained.

The Licking River at Farmers, Ky., rose briefly to above flood stage on the 7th. The North Fork of the Kentucky River at Hazard, Ky., rose above bankfull stage on the 6th, cresting nearly 10 feet above flood stage on the 7th. It rose above flood stage at Jackson, Ky., on the 7th and crested on the 8th, 5.4 feet above flood stage. The only flooding along the main stem of the Kentucky was at Lock No. 10, Ford, Ky., where flood stage was exceeded by 0.8 foot on the 9th. Flood damages in the Kentucky Basin were estimated at $1.9 million and along the Licking River at around a quarter million.

The Rolling Fork at Boston, Ky., exceeded flood stage by nearly 4 feet on the 9th. It was out of its banks from the 7th to the 10th. Due to the earliness of the season, there was relatively little farm loss.

General rains on the 6th and 7th, ranging up to 4-1/2 to 5 inches, produced up to 10 feet of overflow along the Green River in Kentucky. The flooding began at Woodbury, Ky., on the 6th; and ended at Calhoun, Ky., on the 25th. The high water caused considerable disruption of normal activities.

There were two general rises in the Wabash Basin in Indiana during the month. The first was due to rainfall totalling about 0.75 to 1 inch on the 5th and 6th. The second rise was due to general rains of 1 to 1.5 on the 19th and 20th. The flooding was minor and no damage resulted because of the season of the year.

General heavy rain over the Cumberland Basin during the night of the 5th and the morning of the 6th caused flooding along the main stem and tributary streams below Old Hickory Dam. Flooding began on the 6th along the Harpeth and upper Cumberland Rivers. Overflows developed along the Stones and Red Rivers in Middle Tennessee on the 7th and 8th and along the main stem in the reach from Baxter, Ky., to Williamsburg, Ky. Minor flooding occurred at Clarksville, Tenn., on the 9th. Although flood stage was reached or exceeded at several points, damage was light. The most significant damage was to roads, culverts, and residential property in and around Cumberland, Ky. One death was reported due to flash flooding near Jellico, Tenn.

Minor flooding occurred along the Duck River in Tennessee on the 7th and 8th. The only other flooding reported in the Tennessee Basin was along the main stem at Whitesburg, Ala., and Gilbertsville, Ky., between the 8-30th. No damage was reported from the minor overflows.

Heavy rains over the upper Ohio and its tributaries on March 4-6 produced general flooding along the entire Ohio River except in the reach below Pittsburgh, Pa., to Wheeling, W. Va. The main stem rose 8 feet at Pittsburgh, Pa., in 2 days to slightly above flood stage on the 7th. It was out of its banks as far downstream as Portsmouth, Ohio, on the 8th. By the 12th, the Ohio River was overflowing its banks at all points except at Golconda, Ill., Paducah, Ky., and Cairo, Ill. Flood stage was reached at these points by the 17th. Crests were generally less than 5 feet above flood stage in the reach at and above Hogsett, W. Va., and in the lower portion at and below Golconda, Ill. In the reach between Hogsett and Golconda, crests were generally 5 to 10 feet above flood stage. The biggest overflow occurred at Dam 50, where flood stage was exceeded by 14.9 feet. Considerable flooding occurred at some cities not protected by flood walls. Damages along the main stem were estimated at around $25 million.

White Basin.--Light to moderate flooding occurred on the Cache River at Patterson, Ark., on the 7-25th. The crest reached 2 feet above flood stage on the 12-14th. This overflow was due to rains totalling up to 4.5 inches on the 5-6th. Damage was light.

Arkansas Basin.--Soil moisture in the Arkansas Basin was much below normal. The Cimarron River at Perkins, Okla., had a monthly average stage of 1.7 feet. This was 0.5 foot below the record for March. The normal stage for March is 4.1 feet. The Arkansas River at Van Buren, Ark., reported a monthly average stage of 4.1 feet, 5.0 below the normal March stage of 9.1 feet. This was the third lowest average stage for March.

Lower Mississippi Basin.--The lower Mississippi River at Caruthersville, Mo., rose to within 0.3 foot of flood stage on the 25-26th. This rise was due to heavy flow from the Ohio Basin where general flooding occurred.

Great Basin.--Minor flooding of creeks and canals in the Reno, Nev., area during March was due to low elevation snowmelt. The Truckee River at Vista, Nev., rose to near flood stage late on the 16th. There was some minor overflow in the Vista area.

Snowfall in Reno, Nev., was heavy during March. It totalled 15.6 inches which was the third heaviest since records began in 1877.

PACIFIC SLOPE DRAINAGE

Sacramento Basin.--A minor overflow occurred along the Sacramento River at Tisdale Weir, Calif., on the 17-19th and at Freemont Weir on the 18th-22d. No damages were reported.

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest* Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red Lake: Crookston, Minn.	15	31	Apr. 5		
Red River of the North: Fargo, N. Dak.	17	29	Apr. 3	19.5	Apr. 1
ST. LAWRENCE DRAINAGE					
Lake Huron Drainage					
Cass: Vassar, Mich.	14	27	30	16.3	29
Chippewa Mt. Pleasant, Mich.	13	28	28	13.0	28
Lake Erie Drainage					
St. Marys: Decatur, Ind.	15	11 21 28	16 23 Apr. 2	17.2 16.8 18.6	12 22 29
St. Joseph: Montpelier, Ohio	10	13 23	17 26	11.4 11.2	15 24
Maumee Ft. Wayne, Ind.	15	21	22	15.3	22
ATLANTIC SLOPE DRAINAGE					
Passaic Chatham, N. J.	6	7	11	6.5	7
Little Falls, N. J.	126	11	17	126.35	13,14
Millstone: Blackwells Mills, N.J.	8	7	9	10.1	7
Raritan: Manville, N. J.	12	7	8	18.0	7
Bound Brook, N. J.	8	7	8	12.7	7
Rancocas Creek: Pemberton, N. J.	2.7	8	8	2.7	8
Assunpink Creek: Trenton, N. J.	5	7	8	10.7	7
Perkiomen Creek: Craterford, Pa.	11	7	7	14.5	7
Schuylkill: Philadelphia, Pa.	11	7	7	11.3	7
Brandywine Creek: Chadds Ford,Pa.	9	7	7	9.4	7
Chemung: Chemung, N. Y.	12	29	29	12.0	29
North Branch Potomac: Cumberland, Md.	17	7	7	18.9	7
South Branch: Springfield, W. Va.	15	7	8	22.1	8
Monocacy: Frederick, Md.	14	8	8	#16.2	8
Potomac: Williamsport, Md.	23	8	8	23.7	8
Shepherdstown, Md.	15	8	9	22.5	8
Harpers Ferry, W. Va.	18	8	9	#19.0	8
Point of Rocks, Md.	16	8	9	#22.85	8
Washington (nr), D. C.	10	8	9	11.5	9
Jackson: Covington, Va.	7	(7 (15	8 16	13.4 11.2	7 15
James: Buchanan, Va.	17	(7 (16	8 16	20.7 17.3	8 16
Bremo Bluff, Va.	19	(8 (16	9 17	23.8 21.0	9 17
Palmyra, Va.	15E	7	8	18.25	8
Columbia, Va.	18	7 16	9 18	25.0 21.1	8 17
Richmond (Westham), Va.	12	(8 (17	10 18	15.4 13.5	9 18
Richmond (City Locks), Va.	9	9	10	11.2	9
Holcombs Rock, Va.	22	8	8	22.6	8
Lumber: Lumberton, N. C.	8	Feb. 7 14	10 15	(10.3 (9.7 (9.8 8.0	Feb. 13 Feb. 25 1 14-15
Savannah: Clyo, Ga.	11	17	23	12.4	20
Ogeechee: Dover, Ga.	7	22	22	7.0	22
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Crow Delano, Minn.	8	30	1/	9.7	31
Chippewa: Durand, Wis.	11	31	Apr. 10	17.0	Apr. 2
Zumbro: Zumbro Falls, Minn.	18	24	25	21.4	25
Theilman, Minn.	38	(12 (24	12 28	38.8 42.7	12 25
Upper Iowa Dorchester, Iowa	14	10	11	15.7	11
Black: Galesville, Wis.	12	31	Apr. 5	14.5	31
Root: Houston, Minn.	15	(10 (25 (27	13 25 28	17.0 15.1 16.9	11 25 27

River and station	Flood stage	Above flood stages -dates From–	To–	Crest* Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Root: Hokah, Minn.	47	(11 (24	14 28	50.0 49.7	12 25
Kickapoo: Soldiers Grove, Wis.	723	25	28	724.3	27
Gays Mills, Wis.	698	25	28	699.0	27
Steuben, Wis.	8	24	Apr. 1	9.3	28
Pecatonica: Freeport, Ill.	13	28	30	13.3	29
Sangamon Riverton, Ill.	13	21	28	17.0	23
Kaskaskia Vandalia, Ill.	18	21	24	19.9	22
Carlyle Dam, Ill.	423.5	9 23	10 1/	423.9 426.1	9 27
Illinois: Meredosia, Ill.	428	22	1/		
Missouri Basin					
Yellowstone: Glendive, Mont.	53	27	27	53.0	27
Knife, Hazen, N. Dak.	21	22	26	23.9	25
Heart: Mandan, N. Dak.	17	(2 (3 (4 (10 (24	2 3 5 10 25	19.0 18.0 18.0 17.0 19.4	2 3 4 17 24
Floyd: Alton, Iowa	12	2	3	12.5	2
Ohio Basin					
Tygart: Belington, W. Va.	14	(6 (15	8 16	18.3 15.8	7 15
Philippi, W. Va.	17	(6 (15	8 16	25.9 19.3	7 15
West Fork: Weston, W. Va.	17	6	7	22.5	7
Clarksburg, W. Va.	7	(6 (15	8 16	14.4 7.1	7 15
Cheat: Parsons, W. Va.	11	(6 (15	7 15	15.0 11.7	7 15
Youghiogheny: Confluence, Pa.	12	6	6	12.4	6
Sutersville, Pa.	20	6	6	23.15	6
Monongahela: Lock 15, Hoult, W. Va.	18	7	7	18.1	7
Morgantown L&D (lwr), W. Va.	27	7	7	29.2	7
Pt. Marion L&D (lwr), Pa.	27	6	8	34.5	7
Lock 7, Greensboro, Pa.	23	6	8	29.6	7
Maxwell L&D (lwr), Pa.				44.2	7
Lock 5, Brownsville, Pa.	23	6	8	32.7	7
Lock 4, Charleroi, Pa.	24	6	8	35.6	7
Lock 3, Elizabeth, Pa.	23	6	8	31.3	7
McKeesport, Pa.	12	6	9	20.3	7
Lock 2, Braddock, Pa.	26	(6 (16	9 16	32.9 26.1	7 16
Little Kanawha: Glenville, W.Va.	23	(6 (15	8 16	34.4 25.9	7 15
Creston, W. Va.	20	6 15	9 16	36.0 25.8	8 15
Hocking: Enterprise, Ohio	12	6	7	12.6	7
Athens, Ohio	17	6	8	17.65	8
Greenbrier: Buckeye, W. Va.	15	7	7	18.0	7
Alderson, W. Va.	14	(7 (15	8 16	19.3 15.2	[illegible] 15
Elk: Clay, W. Va.	18	(7 (15	7 15	19.85 23.1	7 15
Queen Shoals, W. Va.	25	15	15	24.75	15
Coal: Tornado, W. Va.	25	7	8	31.8	7
Guyandot: Logan, W. Va.	20	6	7	29.0	7
Branchland, W. Va.	35	7	9	42.3	8
Tug Fork: Williamson, W. Va.	27	7	8	40.7	7
Kermit, W. Va.	38	7	8	44.1	8
Beaver Creek: Martin, Ky.	25	7	7	29.4	7
Levisa Fork: Elkhorn City, Ky.	18	7	7	18.1	7
Pikeville, Ky.	35	7	8	41.1	7
Prestonsburg, Ky.	30	7	[illegible]	40.1	8
Paintsville, Ky.	35	7	9	37.85	8

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest * Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Big Sandy: Louisa, Ky.	45	8	10	49.3	9
Scioto: LaRue, Ohio	11	(6	7	11.5	7
		(11	12	12.8	12
		(21	22	12.7	22
		(29	30	13.1	29
Circleville, Ohio	14	(7	9	17.75	7
		(14	16	14.75	15
Piketon, Ohio	16	(7	12	20.7	7
		(14	17	21.3	16
Licking: Farmers, Ky.	25	7	7	25.1	7
North Fork Kentucky: Whitesburg, Ky.	10	7	7	10.0	7
Hazard, Ky.	20	6	7	#29.5	7
Jackson, Ky.	29	7	8	34.4	8
Red: Clay City, Ky.	19	7	8	20.15	7
Kentucky: Lock No. 10, Ford, Ky.	25	9	9	25.8	9
Rolling Fork: Boston, Ky.	40	7	10	43.65	9
Green: Munfordville, Ky.	28	7	10	37.8	8
Lock 6, Brownsville, Ky.	18	7	11	25.0	9
Lock 4, Woodbury, Ky.	33	6	14	40.1	9
Lock 2, Calhoun, Ky.	23	9	25	28.5	17
Mississinewa: Austin, Ind.	16	(6	17	22.6	7
		(29	29	16.5	29
Embarrass: Ste. Marie, Ill.	18	23	23	18.7	23
White: Anderson, Ind.	10	6	7	10.2	6
Elliston, Ind.	18	(7	8	19.2	8
		(22	24	19.9	22
Edwardsport, Ind.	15	(8	10	16.4	9
		(22	26	17.2	24
Petersburg, Ind.	16	(11	16	16.8	13
		(25	27	16.6	26
Skillet Fork: Wayne City, Ill.	15	(7	7	15.1	7
		(13	14	17.5	14
Little Wabash: Wilcox, Ill.	16	(6	14	19.2	9
		(20	27	19.9	26
Wabash: Bluffton, Ind.	10	31	1/		
Wabash, Ind.	12	20	22	12.8	22
		31	1/		
Lafayette, Ind.	11	12	15	13.8	13
		21	27	16.4	22
		29	1/	13.7	30
Covington, Ind.	16	(13	17	17.15	15
		(22	28	19.6	24
Montezuma, Ind.	14	(13	18	15.3	16
		(14	1/	17.75	26
Terre Haute, Ind.	14	23	1/	15.8	29
Mt. Carmel, Ill.	17	26	28	17.2	27
Stones: J.Percy Priest Dam, Tenn.	40	7	7	44.1	7
Harpeth: Kingston Springs, Tenn.	15	6	8	21.3	7
Red River: Port Royal, Tenn.	30	7	8	32.0	7
Cumberland: Cumberland, Ky.	7	6	7	9.1	7
Baxter, Ky.	16	6	7	23.7	7
Pineville, Ky.	1002	7	7	1004.2	7
Barbourville, Ky.	27	7	9	38.25	8
Williamsburg, Ky.	21	7	11	26.8	8
Clarksville, Tenn.	46	9	9	47.3	9
Duck: Columbia, Tenn.	32	7	8	33.0	8
Tennessee: Whitesburg, Ala.	11	8	12	11.6	9
Gilbertsville, Ky.	34	8	30	41.2	13

River and station	Flood stage	Above flood stages -dates From–	To–	Crest * Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio: Pittsburgh, Pa.	25	7	8	25.1	7
Dam 13, McMechen, W. Va.	37	7	8	37.6	8
Marietta, Ohio	35	7	9	37.8	8
Parkersburg, W. Va.	36	7	9	39.3	8
Dam 17, Reno, Ohio	34	7	9	35.8	8
Dam 18, Belpre, Ohio	36	7	9	39.2	8
Dam 19, Washington, W. Va.	40	7	9	42.5	8
Dam 20, Belleville, W. Va.	40	7	10	44.0	8
Dam 22, Ravenswood, W. Va.	44	8	10	46.1	9
Dam 23, Racine, Ohio	45	7	10	48.9	9
Pomeroy, Ohio	46	7	10	51.2	9
Point Pleasant, W. Va.	40	(7	11	49.6	9
		(15	17	44.0	16
Gallipolis Dam, Hogsett, W. Va.	50	8	10	54.9	9
Huntington, W. Va.	50	(8	11	57.3	9
		(16	17	51.3	17
Ashland, Ky.	52	(8	12	60.4	9
		(16	18	54.45	17
Greenup Lock & Dam, Ky.	54	8	12	61.75	9
		16	18	56.4	17
Portsmouth, Ohio	50	(8	12	58.4	10
		(15	18	53.3	17
Dam No. 33 (nr) Maysville, Ky.	50	(8	13	58.3	10
		(15	19	53.9	17
Meldahl Lock & Dam, Ohio	51	(8	13	57.7	11
		(16	19	53.1	17
Cincinnati, Ohio	52	(8	14	59.8	11
		(15	19	55.1	18
Warsaw-Markland Dam, (nr) Warsaw, Ky.	51	(9	15	56.1	12
		(17	19	51.4	18
Madison, Ind.	46	9	19	52.0	12
McAlpine Dam, Louisville, Ky. Upper Gage	23	9	21	31.5	13
Lower Gage	55	10	21	63.3	13
Dam 43, Evans Landing, Ind.	57	11	22	64.8	14
Dam 44, Leavenworth, Ind.	53	9	23	64.6	13
Dam 45, Addison, Ky.	47	9	23	56.3	13
Dam 46, Owensboro, Ky.	41	11	23	45.2	14
Dam 47, Newburgh, Ind.	38	9	28	46.5	15
Evansville, Ind.	42	12	23	44.1	16
Dam 48, Cypress, Ind.	38	10	28	46.3	16
Mt. Vernon, Ind.	35	10	29	43.8	18
Dam 49, Uniontown, Ky.	37	11	30	45.7	18
Shawneetown, Ill.	33	10	31	45.9	19
Dam 50, Fords Ferry, Ky.	34	10	Apr. 1	48.9	20
Dam 51, Golconda, Ill.	40	14	28	44.9	20,21
Paducah, Ky.	39	17	24	39.8	21
Dam 52, Brookport, Ill.	37	11	28	41.6	21
Dam 53, Grand Chain, Ill.	42	12	28	45.4	20,21
Cairo, Ill.	40	17	28	42.0	24
White Basin					
Cache. Patterson, Ark.	7	7	25	9.0	12-14
PACIFIC SLOPE DRAINAGE					
Sacramento Basin					
Sacramento: Tisdale Weir, Calif.	45	17	19	46.8	18
Fremont Weir, Calif.	33	18	22	35.0	19

* Provisional
\# Highest stage observed
E Estimated
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

MARCH 1967

ALBANY, N. Y. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	86	-4.9	-8.1	35	1.3
1000	31	173	-4.2	-8.8	32	1.0
950	31	580	-4.0	-8.4	32	2.6
900	31	1,005	-5.3	-9.8	30	5.0
850	31	1,453	-6.5	-12.6	30	7.0
800	31	1,926	-7.2	-14.5	30	8.6
750	31	2,428	-8.9	-16.3	29	10.5
700	31	2,961	-10.9	-17.8	29	12.8
650	31	3,527	-13.2	-21.1	29	15.7
600	31	4,135	-16.6	-24.8	29	17.3
550	31	4,781	-20.5	-27.7	28	19.7
500	31	5,484	-25.0	-32.5	28	21.8
450	31	6,240	-29.9	-36.6	28	22.9
400	31	7,073	-35.5	-41.3	28	25.4
350	31	7,991	-41.5	-43.7	28	26.7
300	31	9,022	-47.7		29	29.6
250	31	10,210	-53.5		29	31.0
200	31	11,631	-56.2		29	30.8
175	31	12,483	-54.7		29	29.7
150	31	13,472	-53.9		29	27.1
125	31	14,641	-54.6		29	25.1
100	31	16,067	-55.8		29	19.4
80	31	17,481	-57.1		28	18.1
70	31	18,326	-56.5		28	17.1
60	31	19,305	-56.0		28	15.5
50	31	20,467	-55.0		28	12.1
40	31	21,895	-53.9		28	10.0
30	31	23,744	-53.0		28	9.5
25	30	24,921	-52.1		28	10.0
20	29	26,366	-51.5		28	9.9
15	27	28,236	-49.5		29	9.6
10	25	30,909	-46.1		28	14.8
7	10	33,255	-42.2			
5						

ALBUQUERQUE, N. MEX. 837 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	1,619	5.3	-9.5	20	.5
1000	31	137				
950	31	564				
900	31	1,018				
850	31	1,494				
800	31	1,993	7.7	-10.2	26	4.4
750	31	2,520	4.6	-11.7	26	7.2
700	31	3,080	.6	-14.1	26	10.2
650	31	3,668	-3.6	-17.2	26	12.8
600	31	4,298	-7.7	-21.0	26	15.7
550	31	4,964	-12.1	-24.0	26	17.6
500	31	5,693	-16.8	-27.4	26	19.4
450	31	6,469	-22.5	-32.8	26	21.0
400	31	7,330	-28.7	-39.6	26	22.2
350	31	8,273	-35.7	-44.0	25	25.7
300	31	9,326	-43.8		25	28.9
250	31	10,527	-52.8		25	32.1
200	31	11,946	-57.7		25	33.1
175	31	12,790	-57.1		26	30.6
150	31	13,763	-59.0		25	27.6
125	31	14,899	-61.7		25	24.5
100	30	16,268	-64.6		26	21.8
80	29	17,629	-64.5		26	16.5
70	29	18,445	-64.0		26	12.0
60	29	19,393	-62.5		27	7.2
50	29	20,519	-61.5		28	4.5
40	29	21,912	-58.2		27	2.0
30	29	23,732	-56.2		31	1.7
25	28	24,896	-54.9		36	1.6
20	27	26,326	-53.1		32	.9
15	25	28,189	-49.7		34	1.7
10	12	30,835	-47.6			
7						
5						

AMARILLO, TEXAS 890 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	1,095	5.5	-3.1	22	2.9
1000	31	127				
950	31	554				
900	31	1,014				
850	31	1,475	10.1	-3.4	24	7.5
800	31	1,978	8.9	-5.9	25	9.6
750	31	2,510	6.2	-9.6	26	11.2
700	31	3,071	2.5	-12.6	26	13.1
650	31	3,661	-1.6	-16.5	25	14.1
600	31	4,298	-6.1	-20.3	25	15.3
550	31	4,968	-11.0	-24.1	26	15.7
500	31	5,698	-16.1	-28.7	26	16.8
450	31	6,473	-21.6	-33.6	26	18.8
400	31	7,340	-27.9	-37.7	26	21.0
350	31	8,285	-35.0	-43.5	26	24.0
300	31	9,342	-43.2		26	27.3
250	31	10,546	-52.1		26	30.7
200	30	11,962	-57.7		26	30.[illegible]
175	30	12,803	-58.3		26	30.5
150	30	13,771	-59.4		26	29.3
125	29	14,905	-62.0		26	27.7
100	29	16,275	-64.7		26	23.[illegible]
80	28	17,636	-65.3		27	17.9
70	28	18,447	-65.1		27	13.5
60	27	19,390	-63.3		26	9.2
50	27	20,516	-60.9		28	5.5
40	27	21,911	-58.4		27	3.8
30	27	23,730	-55.9		27	1.7
25	24	24,894	-54.8		29	2.6
20	23	26,328	-52.8		28	3.1
15	19	28,204	-49.5		28	3.3
10	14	30,881	-45.0			
7						
5						

ANCHORAGE, ALASKA 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	45	-6.4	-13.9	34	.4
1000	31	149			01	1.2
950	31	557	-3.8	-13.3	04	2.3
900	31	980	-4.8	-14.9	02	3.1
850	31	1,427	-7.3	-17.0	35	3.6
800	31	1,898	-9.7	-18.9	34	3.1
750	31	2,392	-12.2	-21.7	33	4.2
700	31	2,919	-14.8	-23.8	32	5.9
650	31	3,473	-17.8	-26.4	32	8.5
600	31	4,070	-21.4	-29.6	31	9.8
550	31	4,702	-25.2	-33.4	31	11.8
500	31	5,393	-29.6	-37.5	31	14.0
450	31	6,132	-34.7	-40.9	31	14.8
400	31	6,951	-39.9	-42.4	31	16.2
350	31	7,852	-45.3		31	18.8
300	31	8,866	-51.6		31	20.5
250	31	10,033	-56.8		31	19.9
200	30	11,451	-56.8		31	20.6
175	30	12,301	-54.8		30	19.3
150	30	13,289	-53.7		30	19.5
125	30	14,460	-53.9		29	20.5
100	29	15,884	-54.3		29	20.6
80	29	17,313	-54.6		29	20.4
70	29	18,167	-54.2		29	20.9
60	29	19,157	-53.8		29	20.9
50	29	20,328	-53.8		28	21.9
40	28	21,763	-52.7		28	22.0
30	27	23,611	-52.7		28	23.8
25	26	24,782	-52.4		28	23.5
20	24	26,226	-50.5		28	25.6
15	24	28,112	-49.1		28	25.1
10	17	30,781	-46.6		27	33.7
7	6	33,192	-42.5			
5						

* ANNETTE, ALASKA 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	37	.7	-6.3	05	2.3
1000	31	99			04	2.6
950	31	511	-2.5	-7.7	04	2.9
900	31	936	-5.3	-9.9	08	1.9
850	31	1,382	-7.9	-12.7	09	.5
800	31	1,852	-10.4	-16.3	28	1.5
750	31	2,346	-13.1	-20.4	28	2.4
700	31	2,869	-16.7	-25.0	28	2.3
650	31	3,423	-20.4	-29.2	27	3.0
600	31	4,012	-24.2	-32.7	28	3.3
550	31	4,641	-28.3	-36.7	29	4.0
500	31	5,319	-32.8	-40.5	28	5.4
450	31	6,052	-37.7	-42.4	29	7.1
400	31	6,858	-42.9	-45.1	29	7.2
350	31	7,749	-47.8		29	8.7
300	31	8,758	-50.7		31	11.2
250	31	9,942	-51.7		31	13.6
200	31	11,392	-50.0		31	15.3
175	31	12,265	-49.9		31	15.8
150	31	13,273	-50.2		30	15.4
125	31	14,460	-51.3		30	15.2
100	31	15,906	-52.3		29	15.4
80	31	17,346	-53.1		29	15.1
70	31	18,206	-52.9		29	14.0
60	31	19,202	-52.6		29	13.8
50	31	20,379	-52.8		29	14.2
40	31	21,821	-52.2		29	13.6
30	31	23,682	-52.2		30	13.6
25	31	24,862	-52.2		31	13.0
20	30	26,320	-51.1		31	13.6
15	29	28,192	-48.8		31	13.9
10	27	30,890	-45.8		31	14.3
7	20	33,272	-44.2		31	14.5
5	8	35,656	-39.2			

ATHENS, GEORGIA 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	246	7.6	3.5	34	.8
1000	31	178				
950	31	607	10.8	2.4	26	3.3
900	31	1,055	9.2	.1	27	6.1
850	31	1,528	7.3	-3.5	28	7.2
800	31	2,025	5.1	-5.8	28	8.9
750	31	2,552	2.9	-10.4	28	10.8
700	31	3,107	.4	-14.0	28	11.2
650	31	3,693	-3.1	-16.9	28	12.9
600	31	4,327	-6.8	-20.1	27	15.2
550	31	4,995	-11.4	-24.0	28	17.4
500	31	5,726	-15.9	-28.8	28	19.7
450	31	6,505	-20.9	-33.4	28	21.5
400	31	7,373	-27.3	-37.9	28	24.0
350	31	8,320	-34.7	-43.7	28	26.3
300	31	9,378	-43.2		28	27.6
250	31	10,581	-52.1		29	29.4
200	31	12,003	-57.6		29	31.9
175	31	12,844	-58.4		29	33.4
150	31	13,811	-59.5		28	32.4
125	31	14,944	-62.5		28	29.6
100	30	16,309	-64.6		28	24.0
80	30	17,667	-65.4		28	17.4
70	30	18,480	-64.4		29	14.1
60	30	19,425	-62.9		29	12.1
50	30	20,555	-60.1		29	7.5
40	30	21,957	-57.5		30	5.8
30	29	23,786	-54.7		33	3.4
25	29	24,956	-53.4		30	4.1
20	26	26,394	-51.2		29	4.4
15	21	28,283	-47.9		29	6.8
10						
7						

* BARROW, ALASKA 1021 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	26	8	-22.5	-26.3	11	1.7
1000	26	161	-20.1	-24.7	15	.7
950	26	547	-16.6	-21.6	22	2.2
900	26	952	-15.6	-23.2	24	3.4
850	26	1,383	-16.1	-24.3	26	4.7
800	26	1,838	-17.3	-25.2	27	5.8
750	26	2,320	-19.2	-27.2	27	6.8
700	26	2,832	-21.7	-30.3	27	8.4
650	26	3,372	-24.7	-33.1	27	9.2
600	26	3,955	-28.1	-35.6	27	10.5
550	26	4,572	-31.9	-39.2	28	11.6
500	26	5,243	-36.0	-41.2	28	13.2
450	26	5,967	-40.6	-41.3	29	14.6
400	26	6,764	-45.6		29	15.3
350	26	7,644	-51.1		29	17.6
300	26	8,634	-56.4		29	19.1
250	26	9,779	-60.3		28	21.5
200	26	11,166	-60.5		28	22.7
175	26	11,998	-60.5		28	22.0
150	26	12,958	-60.5		28	23.6
125	26	14,092	-60.7		28	26.4
100	24	15,498	-60.5		27	29.9
80	22	16,917	-59.7		27	33.1
70	22	17,750	-60.0		27	35.4
60	22	18,713	-59.6		27	38.2
50	22	19,854	-59.1		27	42.6
40	20	21,302	-57.6		26	46.1
30	18	23,192	-55.7			
25	17	24,340	-55.6			
20	15	25,843	-53.8			
15	7	27,682	-53.7			
10						
7						

BARTER IS., ALASKA 1022 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	29	15	-26.1	-30.2	19	.9
1000	29	171	-22.5	-25.9	21	.8
950	29	554	-18.5	-21.0	25	1.1
900	29	956	-16.9	-19.8	27	3.8
850	29	1,385	-17.5	-22.0	29	5.9
800	29	1,838	-18.8	-23.8	29	6.9
750	29	2,317	-20.5	-26.8	30	7.5
700	29	2,827	-22.8	-29.7	30	9.2
650	29	3,366	-25.9	-32.7	30	10.[illegible]
600	29	3,943	-29.3	-35.5	31	12.1
550	29	4,555	-33.2	-38.7	31	13.5
500	29	5,225	-37.4	-39.8	31	16.2
450	29	5,946	-41.9	-39.4	31	16.9
400	29	6,736	-46.9		31	16.8
350	29	7,611	-52.0		30	16.4
300	29	8,599	-56.8		30	18.6
250	29	9,745	-59.7		30	20.2
200	29	11,140	-59.4		30	21.5
175	29	11,978	-58.7		30	21.6
150	28	12,949	-58.5		30	23.0
125	28	14,094	-59.1		29	24.8
100	28	15,491	-59.7		29	28.1
80	28	16,886	-59.6		29	30.9
70	26	17,721	-59.3		29	32.3
60	25	18,699	-58.5		29	34.2
50	23	19,852	-58.0		29	35.9
40	21	21,312	-56.0		28	40.4
30	19	23,169	-55.2		28	42.2
25	18	24,346	-54.7		28	45.3
20	15	25,802	-53.0		28	43.4
15	12	27,682	-49.6			
10	6	30,330	-42.0			
7						

BETHEL, ALASKA 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	39	-7.0	-9.0	19	2.0
1000	31	153			21	1.1
950	31	560	-3.6	-10.5	21	3.7
900	31	985	-4.5	-12.6	23	4.5
850	31	1,434	-6.1	-15.3	24	4.9
800	31	1,907	-7.9	-17.3	25	6.2
750	31	2,407	-10.8	-20.6	25	6.6
700	31	2,934	-13.8	-22.4	26	7.7
650	31	3,492	-16.9	-25.2	26	9.1
600	31	4,091	-20.5	-28.0	26	11.1
550	31	4,728	-24.3	-32.0	26	12.8
500	31	5,418	-28.7	-36.1	26	13.7
450	31	6,161	-33.2	-39.4	26	16.7
400	31	6,985	-38.6	-43.8	25	20.0
350	31	7,889	-45.1		26	20.9
300	31	8,904	-51.8		26	21.4
250	31	10,069	-57.4		27	20.9
200	31	11,475	-57.1		27	18.2
175	31	12,324	-55.5		27	20.6
150	31	13,308	-54.5		27	20.4
125	31	14,476	-54.4		27	20.8
100	31	15,906	-54.7		27	21.9
80	31	17,333	-54.8		26	21.5
70	31	18,187	-54.4		27	23.8
60	31	19,176	-53.9		27	22.7
50	31	20,348	-53.7		27	22.9
40	31	21,783	-53.3		27	23.5
30	31	23,637	-52.8		27	26.8
25	31	24,815	-52.4		27	27.1
20	30	26,274	-51.1		27	27.7
15	29	28,141	-50.0		27	33.1
10	24	30,803	-47.5		26	33.4
7	6	33,495	-40.8			

BISMARCK, N. DAK. 955 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	505	-5.6	-9.9	33	.7
1000	31	138				
950	31	541			28	2.2
900	31	969	-3.3	-10.6	28	3.6
850	31	1,422	-3.0	-11.9	29	5.8
800	31	1,901	-4.4	-13.6	28	7.1
750	31	2,407	-6.8	-15.6	28	9.4
700	31	2,943	-10.0	-17.9	28	12.5
650	31	3,511	-13.3	-20.4	28	14.9
600	31	4,116	-17.1	-24.1	27	17.0
550	31	4,758	-21.3	-28.3	27	19.2
500	31	5,460	-26.0	-32.7	27	22.0
450	31	6,210	-31.3	-36.7	27	23.9
400	31	7,039	-37.2	-41.9	27	25.5
350	31	7,950	-43.7	-42.7	27	28.4
300	31	8,971	-50.0		27	32.4
250	31	10,149	-54.4		27	33.1
200	31	11,574	-55.3		27	30.9
175	31	12,429	-53.6		27	29.4
150	31	13,422	-53.0		27	26.5
125	31	14,595	-54.0		27	24.6
100	31	16,021	-55.5		28	22.3
80	31	17,442	-55.6		28	18.4
70	31	18,291	-56.1		28	15.3
60	31	19,272	-55.8		28	13.9
50	29	20,435	-55.4		29	12.9
40	29	21,858	-55.0		29	9.6
30	29	23,702	-54.1		30	9.0
25	28	24,871	-53.2		31	8.0
20	28	26,312	-52.1		31	7.9
15	25	28,182	-50.1		31	9.1
10	22	30,849	-47.3		29	13.4
7	10	33,226	-44.8			

BOISE, IDAHO 913 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	868	2.1	-3.1	14	2.2
1000	31	129				
950	31	547				
900	31	988	4.3	-4.4	13	1.8
850	31	1,452	2.4	-7.7	22	2.3
800	31	1,939	-1.3	-10.3	24	4.3
750	31	2,446	-5.2	-12.8	25	6.6
700	31	2,988	-9.3	-15.7	25	8.6
650	31	3,552	-13.2	-19.4	25	10.7
600	31	4,163	-16.8	-24.8	25	12.4
550	31	4,806	-20.6	-28.7	26	15.3
500	31	5,511	-25.1	-33.1	26	18.3
450	31	6,265	-30.4	-38.3	25	20.9
400	31	7,097	-36.6	-43.1	25	22.2
350	31	[illegible],010	-42.9	-46.2	26	25.2
300	31	9,035	-49.6		26	27.5
250	30	10,213	-54.5		26	27.8
200	29	11,631	-54.2		26	25.1
175	29	12,490	-52.9		26	23.9
150	29	13,484	-53.5		26	21.3
125	29	14,653	-54.9		26	17.8
100	29	16,074	-56.8		26	16.0
80	28	17,488	-56.7		27	10.5
70	28	18,334	-57.1		26	8.4
60	28	19,307	-57.2		27	7.2
50	25	20,460	-56.4		28	5.0
40	25	21,880	-55.2		31	3.4
30	24	23,717	-54.3		34	3.0
25	24	24,888	-53.6		36	3.5
20	23	26,332	-52.2		03	3.6
15	23	28,206	-49.5		01	4.8
10	5	30,853	-46.8			
7						
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* BOOTHVILLE, LA. 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	1	15.0	13.6	08	1.5
1000	31	166	15.9	12.5	11	2.4
950	31	603	13.5	8.0	14	3.1
900	31	1,056	12.8	1.6	18	1.9
850	30	1,536	10.8	-1.6	23	2.6
800	30	2,039	8.6	-4.4	25	3.8
750	30	2,570	6.4	-8.6	25	4.5
700	30	3,134	3.6	-11.4	27	5.2
650	30	3,729	.0	-15.0	28	7.6
600	30	4,369	-3.8	-18.4	27	9.1
550	30	5,044	-8.2	-22.8	28	10.7
500	30	5,783	-13.4	-27.9	27	12.0
450	30	6,569	-18.9	-32.2	28	14.0
400	30	7,444	-25.4	-37.6	28	15.9
350	30	8,399	-32.5	-44.2	28	18.0
300	30	9,467	-40.9	-51.2	28	21.9
250	30	10,682	-50.1		28	25.9
200	30	12,112	-57.2		28	28.8
175	30	12,953	-59.0		28	30.2
150	30	13,913	-62.3		28	27.9
125	30	15,028	-66.2		28	25.4
100	29	16,368	-69.8		28	20.5
80	29	17,692	-70.4		28	14.2
70	29	18,486	-69.3		28	9.5
60	29	19,410	-66.8		28	6.6
50	27	20,519	-62.9		30	4.8
40	27	21,907	-58.8		32	3.3
30	27	23,730	-54.9		34	2.7
25	27	24,901	-52.6		29	3.0
20	26	26,350	-49.6		27	6.5
15	26	28,248	-45.9		27	11.0
10	22	30,968	-40.4		26	14.6
7	17	33,451	-35.6		25	20.8
5	8	35,794	-33.1			

* BROWNSVILLE, TEXAS 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	7	18.0	17.1	15	3.1
1000	31	134	18.1	16.6	15	5.7
950	31	573	16.8	11.2	16	10.0
900	31	1,035	16.2	5.2	17	9.4
850	31	1,520	14.4	1.6	18	7.7
800	31	2,031	12.7	-2.8	20	5.0
750	31	2,570	10.9	-8.2	22	3.5
700	31	3,143	6.9	-10.1	26	3.2
650	31	3,744	2.9	-15.1	28	3.8
600	31	4,391	-1.9	-18.4	28	4.7
550	31	5,074	-6.4	-22.2	27	5.9
500	31	5,817	-11.3	-27.0	27	8.0
450	31	6,612	-17.1	-30.7	27	10.9
400	31	7,492	-23.4	-37.4	27	13.2
350	31	8,454	-30.8	-43.8	26	15.5
300	31	9,529	-39.3	-51.3	26	18.4
250	31	10,753	-48.6		27	21.[illegible]
200	31	12,193	-56.1		27	26.7
175	31	13,036	-59.1		26	26.0
150	31	13,993	-62.8		26	24.6
125	30	15,107	-67.5		26	20.8
100	29	16,432	-72.0		26	16.5
80	29	17,739	-73.6		27	11.0
70	29	18,520	-72.3		27	6.9
60	28	19,434	-68.9		27	4.1
50	28	20,537	-64.7		31	1.0
40	27	21,911	-59.9		35	.8
30	25	23,730	-54.9		32	2.0
25	25	24,900	-52.9		30	2.4
20	25	26,348	-49.9		27	5.3
15	25	28,247	-45.0		27	8.7
10	22	30,994	-39.3		26	17.4
7	21	33,458	-35.8		25	18.5
5	9	35,743	-33.6			

BUFFALO, N. Y. 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	218	-3.0	-5.6	05	.4
1000	31	167				
950	31	574	-2.6	-7.0	26	2.6
900	31	1,003	-3.6	-8.8	26	3.9
850	31	1,454	-4.4	-11.8	28	6.0
800	31	1,930	-6.4	-15.3	28	8.4
750	31	2,436	-8.0	-16.9	29	10.4
700	31	2,968	-10.1	-18.6	29	13.2
650	31	3,537	-13.0	-21.5	29	16.0
600	31	4,143	-16.4	-24.4	29	19.0
550	31	4,791	-20.0	-28.4	29	20.7
500	31	5,493	-24.5	-32.5	29	22.5
450	31	6,247	-29.6	-37.0	29	23.8
400	31	7,084	-35.4	-41.1	28	24.5
350	31	8,002	-41.4	-45.2	28	26.1
300	31	9,033	-48.0		28	27.1
250	31	10,221	-53.4		29	26.8
200	30	11,647	-56.2		29	26.4
175	30	12,497	-54.8		29	27.0
150	29	13,485	-55.1		29	24.8
125	29	14,647	-55.9		29	21.2
100	29	16,064	-56.6		29	18.2
80	29	17,479	-56.8		28	13.6
70	29	18,324	-57.0		28	12.7
60	29	19,299	-56.7		28	12.6
50	29	20,456	-55.9		28	11.6
40	28	21,883	-54.3		28	8.5
30	27	23,731	-53.1		28	7.6
25	27	24,908	-52.4		29	7.9
20	26	26,351	-51.5		28	8.1
15	26	28,228	-49.0		28	9.6
10	21	30,895	-46.1		28	18.5
7	15	33,298	-43.1			
5						

* + CANTON IS. PACIFIC AREA 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	31	4	29.7	23.1	07	5.5
1000	31	78	27.8	20.9	08	6.5
950	31	519	22.8	16.6	08	8.6
900	31	999	19.8	13.1	08	10.7
850	31	1,491	17.9	8.5	08	11.1
800	31	2,009	16.3	3.1	08	9.6
750	31	2,550	13.9	-1.7	08	6.7
700	31	3,134	10.7	-5.1	09	4.2
650	31	3,741	7.0	-7.4	09	2.6
600	31	4,401	3.2	-12.1	09	.6
550	31	5,098	-.8	-17.0	22	.8
500	31	5,857	-5.0	-21.5	25	2.1
450	31	6,675	-9.8	-26.1	25	3.6
400	31	7,578	-15.4	-31.9	26	6.9
350	31	8,573	-22.4	-38.5	26	8.1
300	30	9,686	-31.1	-45.7	26	8.3
250	30	10,951	-41.2	-53.8	25	9.4
200	30	12,428	-53.4		24	11.1
175	30	13,274	-59.9		26	12.3
150	30	14,222	-66.8		27	14.9
125	30	15,303	-74.4		28	16.5
100	30	16,579	-80.7		27	10.6
80	30	17,852	-74.4		25	4.7
70	30	18,638	-69.1		27	3.0
60	29	19,569	-64.5		27	6.3
50	29	20,692	-61.5		27	9.6
40	28	22,084	-58.5		27	11.4
30	28	23,912	-54.6		27	10.8
25	28	25,085	-52.4		27	10.4
20	28	26,538	-49.6		26	2.9
15	26	28,439	-45.9		09	16.5
10	24	31,176	-38.7		09	29.8
7	20	33,650	-32.9		09	33.6
5	10	36,001	-30.5			

NOTE: Beginning with the January 1967 publication the Dew Point temperature replaces Relative Humidity in the above table; wind direction is in tens of degrees and wind speed in meters per second.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Also, see reference notes at end of table.

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C. 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	4	8.5	5.4	34	2.1
1000	31	169	9.4	4.9	32	2.5
950	31	595	8.0	1.5	29	4.5
900	31	1,039	6.0	-1.1	28	7.2
850	31	1,506	4.2	-4.0	29	9.3
800	31	1,998	2.2	-8.0	29	11.0
750	31	2,515	.1	-11.6	28	13.2
700	31	3,068	-2.5	-15.3	28	14.5
650	31	3,646	-5.1	-18.4	28	16.7
600	31	4,277	-8.6	-21.7	28	19.2
550	31	4,939	-12.9	-25.1	28	21.4
500	31	5,666	-17.6	-28.7	28	23.2
450	31	6,440	-22.9	-33.3	28	25.2
400	31	7,300	-29.1	-38.1	28	26.3
350	31	8,241	-36.2	-44.6	28	29.3
300	31	9,293	-44.1		28	31.2
250	31	10,493	-52.5		29	33.0
200	31	11,915	-57.5		29	33.1
175	31	12,760	-57.0		29	32.7
150	31	13,734	-57.6		29	30.7
125	29	14,881	-59.9		29	28.1
100	29	16,265	-62.4		28	24.5
80	29	17,641	-62.9		28	19.5
70	29	18,463	-61.9		28	16.0
60	29	19,419	-60.3		29	12.2
50	28	20,559	-58.3		29	8.1
40	28	21,972	-55.9		30	5.6
30	27	23,816	-54.0		30	3.2
25	26	24,988	-52.6		30	3.5
20	25	26,432	-50.1		30	3.0
15	22	28,327	-46.9		27	4.6
10	17	31,039	-41.6		26	6.6
7	12	33,454	-38.3		26	15.9
5						

* CARIBOU, MAINE 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	191	-12.2	-16.9	34	2.2
1000	31	169			02	1.0
950	31	563	-11.0	-16.6	33	3.3
900	31	978	-11.8	-16.9	33	4.0
850	31	1,415	-12.5	-19.3	30	4.7
800	31	1,877	-13.2	-21.7	29	6.6
750	31	2,366	-14.4	-23.4	29	8.0
700	31	2,890	-16.4	-25.2	29	10.0
650	31	3,444	-19.1	-27.7	29	12.1
600	31	4,038	-21.7	-29.8	28	13.7
550	31	4,668	-24.9	-32.3	28	16.3
500	31	5,362	-29.1	-36.1	28	19.0
450	31	6,102	-34.0	-40.9	28	22.2
400	31	6,924	-39.6	-43.4	28	23.7
350	31	7,825	-45.6	-44.4	28	26.5
300	31	8,839	-51.2		28	30.1
250	31	10,015	-53.6		28	29.0
200	31	11,449	-53.1		28	27.1
175	31	12,311	-52.3		28	25.3
150	31	13,309	-51.8		28	23.6
125	31	14,490	-52.6		27	21.5
100	31	15,929	-52.8		27	21.8
80	31	17,366	-53.9		27	19.6
70	31	18,221	-54.2		27	17.5
60	30	19,211	-54.6		27	17.0
50	30	20,380	-53.7		27	15.4
40	30	21,817	-52.7		27	15.8
30	29	23,672	-52.3		27	12.8
25	29	24,850	-52.2		27	12.7
20	29	26,294	-51.7		27	12.9
15	29	28,164	-50.5		28	13.4
10	27	30,821	-47.9		28	15.8
7	17	33,244	-45.0		29	18.1
5	5	35,534	-40.4			

CHARLESTON, S. C. 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	13	10.0	6.9	33	.4
1000	31	178	12.2	7.7	25	.3
950	31	609	11.9	2.9	27	3.7
900	31	1,060	9.9	-.9	27	6.2
850	31	1,533	8.0	-4.9	27	8.2
800	31	2,031	5.7	-8.8	27	8.7
750	31	2,556	3.0	-11.2	28	9.5
700	31	3,114	.2	-14.8	28	11.2
650	31	3,700	-3.1	-18.8	28	12.3
600	31	4,335	-6.7	-21.7	28	13.6
550	31	5,003	-11.1	-25.2	28	16.0
500	31	5,735	-15.7	-30.0	28	17.6
450	31	6,517	-21.0	-33.7	28	20.5
400	31	7,383	-27.6	-39.5	28	22.6
350	31	8,329	-35.0	-45.4	28	24.3
300	31	9,385	-43.3		28	25.5
250	31	10,588	-52.2		29	29.4
200	31	12,006	-58.3		29	32.4
175	31	12,846	-58.3		28	31.8
150	31	13,812	-60.2		28	30.8
125	31	14,941	-63.1		28	28.8
100	30	16,304	-66.0		28	24.1
80	30	17,654	-66.3		28	17.2
70	30	18,464	-65.5		28	15.6
60	29	19,403	-63.8		29	11.8
50	29	20,528	-61.0		30	7.7
40	29	21,924	-58.1		30	5.4
30	29	23,748	-54.8		31	3.5
25	28	24,920	-53.6		29	3.8
20	28	26,363	-51.0		29	4.6
15	28	28,247	-47.6		28	5.8
10	25	30,961	-41.7		27	13.4
7	11	33,310	-41.1			
5						

CHIHUAHUA, MEXICO 857 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,428	10.3	-4.5	24	1.6
1000	30	117				
950	30	549				
900	30	1,014				
850	30	1,494	11.8	-3.3	23	1.9
800	30	2,003	12.4	-4.4	24	4.6
750	30	2,534	9.4	-6.5	24	6.0
700	30	3,109	5.7	-9.8	24	7.3
650	30	3,702	1.6	-14.2	24	8.6
600	30	4,351	-2.6	-18.8	24	9.9
550	30	5,029	-7.5	-23.1	25	10.5
500	30	5,770	-12.4	-27.5	25	12.4
450	30	6,556	-17.9	-32.6	25	15.1
400	30	7,437	-24.5	-37.9	25	16.8
350	30	8,394	-32.1	-42.0	25	18.2
300	30	9,462	-40.6	-48.1	25	20.0
250	30	10,679	-49.5		25	23.5
200	30	12,110	-57.5		26	26.8
175	30	12,951	-58.7		26	23.9
150	30	13,914	-60.9		26	23.4
125	30	15,037	-64.9		26	21.3
100	28	16,383	-68.2		26	16.4
80	26	17,718	-69.1		26	12.1
70	22	18,514	-69.0		26	8.5
60	20	19,441	-66.8		27	4.8
50	19	20,554	-62.6		29	1.8
40	19	21,942	-59.2		28	2.1
30	19	23,765	-54.9		28	2.0
25	19	24,933	-53.8		26	3.3
20	18	26,372	-51.8		27	4.0
15	16	28,246	-49.0		26	4.1
10	7	30,947	-44.6			
7						
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* COLD BAY, ALASKA 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	30	.1	-1.6	20	3.9
1000	31	159	.5	-3.6	20	2.8
950	31	571	1.0	-7.9	21	3.5
900	31	1,006	.5	-9.3	25	3.2
850	31	1,463	-1.3	-11.9	26	3.7
800	31	1,944	-3.8	-13.8	25	5.1
750	31	2,450	-6.3	-17.4	25	6.8
700	31	2,989	-9.1	-19.4	24	8.4
650	31	3,555	-12.5	-21.9	25	10.1
600	31	4,166	-16.1	-25.7	25	12.5
550	31	4,809	-19.9	-29.2	24	12.7
500	31	5,517	-24.5	-33.5	24	15.0
450	31	6,269	-29.9	-38.2	24	14.7
400	31	7,104	-36.0	-42.3	25	15.4
350	31	8,019	-42.7	-45.3	25	15.1
300	31	9,045	-49.6		26	16.5
250	31	10,219	-56.4		25	18.2
200	31	11,630	-57.5		26	19.5
175	31	12,479	-55.0		26	16.1
150	31	13,467	-54.0		26	16.5
125	29	14,642	-54.5		26	15.8
100	29	16,070	-54.7		26	13.1
80	29	17,498	-54.6		26	12.4
70	28	18,349	-54.1		26	11.4
60	28	19,337	-53.8		27	11.5
50	27	20,505	-53.3		26	13.0
40	26	21,937	-53.0		26	10.1
30	25	23,804	-52.2		26	10.8
25	24	24,982	-51.8		26	10.4
20	24	26,430	-51.1		26	10.3
15	23	28,315	-49.4		24	11.1
10	18	30,998	-47.3		23	9.6
7	13	33,431	-44.8		21	13.5
5	8	35,817	-42.6			

COLUMBIA, MO. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	238	4.9	.7	12	1.3
1000	31	146				
950	31	565	5.0	-1.0	20	2.6
900	31	1,007	5.7	-3.5	24	6.5
850	31	1,474	5.1	-6.7	26	9.2
800	31	1,969	3.8	-9.6	27	10.8
750	31	2,490	1.2	-12.5	27	11.4
700	31	3,043	-2.0	-14.8	27	12.8
650	31	3,625	-5.6	-17.3	27	13.8
600	31	4,252	-9.5	-20.7	27	16.1
550	31	4,916	-13.6	-24.8	27	18.9
500	31	5,639	-18.1	-31.0	27	22.0
450	31	6,415	-23.4	-35.5	27	24.5
400	31	7,270	-29.6	-40.2	27	26.5
350	31	8,206	-37.0	-44.7	27	30.1
300	31	9,256	-45.1		28	32.0
250	31	10,450	-53.9		28	35.0
200	31	11,861	-59.5		28	36.5
175	31	12,700	-57.9		28	34.7
150	31	13,672	-58.0		28	32.8
125	31	14,817	-59.9		28	28.6
100	31	16,203	-62.1		28	23.5
80	30	17,582	-62.1		28	18.4
70	27	18,403	-61.7		28	14.2
60	26	19,359	-60.5		28	11.8
50	26	20,499	-58.7		28	8.3
40	26	21,908	-56.3		29	6.8
30	22	23,736	-54.8		30	5.2
25	22	24,904	-53.6		30	5.1
20	21	26,349	-51.8		29	4.7
15	20	28,225	-49.5		29	5.8
10	17	30,908	-44.8		28	9.6
7	9	33,331	-41.3			

DAYTON, OHIO 984 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	297	1.8	-.8	28	.2
1000	31	164				
950	31	578	2.9	-1.6	24	3.4
900	31	1,017	2.6	-3.6	27	7.9
850	31	1,479	1.4	-6.3	28	10.5
800	31	1,966	-.3	-9.9	28	12.2
750	31	2,478	-2.6	-13.8	28	14.0
700	31	3,026	-5.6	-16.5	28	15.0
650	31	3,598	-8.9	-19.6	28	16.7
600	31	4,221	-12.2	-22.6	28	19.8
550	31	4,877	-16.1	-26.3	28	22.2
500	31	5,593	-21.0	-30.3	28	23.9
450	31	6,357	-26.4	-35.8	28	25.4
400	31	7,205	-32.7	-40.3	28	28.8
350	31	8,132	-39.5	-43.4	28	31.6
300	31	9,171	-46.7		28	33.9
250	31	10,361	-53.8		28	36.4
200	31	11,779	-57.7		28	36.3
175	31	12,623	-56.5		28	34.9
150	31	13,601	-57.2		28	33.2
125	31	14,748	-59.0		28	28.3
100	31	16,143	-60.3		28	22.7
80	31	17,532	-60.7		28	17.4
70	31	18,363	-60.1		28	14.4
60	31	19,327	-58.7		28	11.3
50	30	20,478	-57.7		29	9.0
40	29	21,890	-55.9		30	8.0
30	28	23,729	-54.1		30	4.9
25	26	24,903	-52.8		30	3.8
20	26	26,347	-51.6		29	5.1
15	25	28,223	-49.5		29	6.4
10	21	30,907	-45.2		28	10.1
7	5	33,255	-42.3			

DEL RIO, TEXAS 979 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	314	15.0	9.0	11	3.7
1000	31	132				
950	31	568	15.2	9.7	14	6.7
900	31	1,027	15.1	7.4	17	7.7
850	31	1,511	14.0	1.7	19	7.1
800	31	2,021	12.5	-2.8	21	6.3
750	31	2,557	9.7	-5.9	24	6.6
700	31	3,130	6.3	-10.7	25	7.3
650	31	3,727	1.6	-13.7	25	8.4
600	31	4,372	-3.1	-18.6	25	9.8
550	31	5,047	-7.6	-22.8	26	10.7
500	31	5,792	-12.5	-28.3	26	12.9
450	31	6,580	-17.9	-33.0	26	14.7
400	31	7,461	-24.4	-37.6	26	18.0
350	31	8,420	-31.8	-43.9	26	19.8
300	31	9,491	-40.3	-50.3	26	23.5
250	31	10,709	-49.9		26	25.4
200	31	12,140	-57.3		26	29.9
175	31	12,980	-58.9		26	29.8
150	31	13,942	-61.5		26	29.0
125	31	15,062	-65.4		26	25.2
100	31	16,406	-69.2		26	20.7
80	31	17,733	-70.2		26	13.5
70	31	18,527	-69.7		26	9.5
60	31	19,448	-67.5		27	6.6
50	31	20,558	-62.9		27	3.6
40	31	21,941	-59.5		28	1.4
30	30	23,758	-55.4		33	1.7
25	28	24,920	-53.5		31	2.1
20	28	26,362	-51.1		28	4.1
15	28	28,244	-48.0		27	8.1
10	21	30,953	-41.7		27	11.9
7	7	33,417	-35.9			

DENVER, COLO. 834 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,611	.6	-6.8	19	1.6
1000	31	128				
950	31	551				
900	31	995				
850	31	1,458				
800	31	1,948	3.4	-8.6	24	3.1
750	31	2,468	1.4	-11.6	26	5.7
700	31	3,023	-1.9	-15.0	27	8.6
650	31	3,605	-5.7	-18.4	27	11.4
600	31	4,232	-9.3	-21.2	27	14.8
550	31	4,896	-13.7	-25.2	27	16.6
500	31	5,616	-19.0	-30.1	27	17.3
450	31	6,386	-24.7	-35.1	26	19.9
400	31	7,238	-31.0	-41.3	26	22.8
350	31	8,171	-38.2	-46.1	26	25.2
300	31	9,214	-46.1		26	27.9
250	31	10,405	-54.1		26	30.8
200	30	11,823	-58.5		26	32.1
175	30	12,665	-57.3		26	30.6
150	29	13,640	-57.1		26	28.6
125	29	14,788	-59.0		26	26.0
100	29	16,186	-59.8		27	20.1
80	27	17,576	-61.3		27	13.8
70	27	18,405	-60.4		27	10.3
60	25	19,370	-59.7		27	8.7
50	25	20,513	-58.3		29	6.5
40	25	21,922	-56.7		30	3.4
30	25	23,751	-55.3		32	2.6
25	24	24,909	-54.0		32	3.5
20	23	26,345	-52.5		31	2.6
15	14	28,201	-49.9		29	5.3
10	9	30,863	-46.3			
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DODGE CITY, KANS. 923 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	791	1.4	-5.2	14	.5
1000	31	138				
950	31	557				
900	31	995	5.5	-3.8	22	1.8
850	31	1,465	7.8	-5.4	24	5.3
800	31	1,965	7.0	-8.0	25	8.3
750	31	2,493	4.4	-11.6	26	9.7
700	31	3,050	.7	-14.2	26	11.1
650	31	3,639	-3.0	-17.3	26	12.4
600	31	4,270	-7.6	-20.8	26	13.9
550	31	4,935	-12.3	-25.0	26	15.6
500	31	5,663	-17.6	-29.5	26	18.4
450	31	6,435	-23.2	-34.2	26	20.8
400	31	7,295	-29.5	-39.2	26	23.4
350	31	8,235	-36.7	-45.4	26	26.2
300	31	9,286	-44.6		26	29.9
250	31	10,483	-53.3		26	32.1
200	31	11,897	-58.5		26	33.7
175	31	12,738	-57.9		26	33.9
150	31	13,710	-58.4		26	31.2
125	31	14,850	-60.9		27	26.4
100	29	16,227	-62.9		27	21.5
80	29	17,599	-63.1		27	15.9
70	28	18,422	-62.7		27	12.4
60	28	19,373	-61.4		27	8.4
50	27	20,507	-59.6		27	5.4
40	27	21,907	-57.7		29	3.5
30	27	23,731	-55.6		32	3.1
25	26	24,896	-54.3		30	2.9
20	24	26,331	-52.4		30	3.0
15	23	28,201	-49.7		28	3.0
10	22	30,882	-44.8		28	8.7
7	7	33,245	-41.5			

EL PASO, TEXAS 882 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,193	8.9	-6.6	25	1.8
1000	31	128				
950	31	561				
900	31	1,019				
850	31	1,497	13.6	-4.5	27	3.5
800	31	2,005	10.9	-6.9	27	6.8
750	31	2,536	7.3	-9.2	26	8.8
700	31	3,104	3.2	-12.5	25	9.9
650	31	3,698	-.8	-16.2	25	11.2
600	31	4,335	-5.0	-20.6	25	12.8
550	31	5,008	-9.3	-23.8	25	14.4
500	31	5,745	-14.4	-27.4	25	16.3
450	31	6,528	-20.2	-32.5	25	18.9
400	31	7,399	-26.5	-38.2	25	20.5
350	31	8,350	-33.7	-43.2	25	22.9
300	31	9,414	-41.8	-47.7	26	26.9
250	31	10,625	-51.0		26	30.2
200	31	12,050	-58.1		26	34.8
175	30	12,894	-58.6		26	32.2
150	30	13,860	-60.4		26	30.8
125	30	14,988	-63.5		26	26.9
100	30	16,349	-65.9		26	20.6
80	30	17,698	-67.6		26	16.4
70	30	18,501	-66.9		26	13.4
60	30	19,436	-64.6		26	7.3
50	30	20,552	-63.4		28	4.5
40	30	21,937	-59.2		29	1.9
30	30	23,754	-56.1		31	2.0
25	28	24,918	-54.5		31	2.7
20	28	26,353	-52.4		31	2.6
15	25	28,226	-49.2		26	4.6
10	10	30,908	-44.3			
7						
5						

ELY, NEV. 805 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,908	-.2	-5.4	20	3.5
1000	31	134				
950	31	559				
900	31	1,004				
850	31	1,466				
800	31	1,955			19	3.0
750	31	2,475	-.8	-10.9	20	4.7
700	31	3,021	-4.8	-13.7	23	7.0
650	31	3,602	-8.2	-18.4	24	10.4
600	31	4,219	-12.1	-21.6	25	12.4
550	31	4,878	-16.5	-27.2	25	15.7
500	31	5,590	-21.2	-31.7	25	17.5
450	31	6,357	-26.8	-37.3	25	19.5
400	31	7,201	-32.7	-42.4	25	22.5
350	31	8,127	-39.8	-44.6	25	26.3
300	31	9,162	-47.7		25	27.5
250	30	10,350	-54.9		25	30.2
200	30	11,765	-57.0		25	29.9
175	30	12,611	-55.8		25	26.2
150	30	13,592	-56.3		26	25.1
125	30	14,743	-58.4		25	22.5
100	29	16,139	-59.9		26	16.4
80	28	17,527	-60.7		26	13.0
70	28	18,357	-60.4		26	9.5
60	28	19,318	-60.0		26	7.4
50	28	20,458	-59.0		27	4.8
40	28	21,861	-57.6		29	3.3
30	25	23,681	-56.0		35	2.0
25	25	24,841	-55.2		03	2.6
20	25	26,270	-53.7		05	4.1
15	24	28,132	-51.2		03	4.2
10	22	30,795	-47.0		02	5.5
7	14	33,162	-43.4			
5	9	35,408	-40.3			

EMPALME, MEXICO 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	12	14.4	4.4	31	1.5
1000	31	126	17.9	4.9	32	2.0
950	31	565	19.3	.7	01	2.0
900	31	1,030	17.3	-1.4	29	.6
850	31	1,515	14.5	-3.5	21	2.2
800	31	2,024	11.7	-7.1	21	4.4
750	31	2,561	8.7	-10.3	22	5.4
700	31	3,128	5.3	-13.5	24	5.8
650	31	3,728	1.5	-16.7	24	7.6
600	31	4,369	-2.8	-20.4	24	9.6
550	31	5,047	-7.7	-23.1	25	10.2
500	31	5,786	-13.0	-27.2	24	12.8
450	31	6,577	-18.5	-31.7	25	15.1
400	31	7,450	-24.8	-35.9	25	18.0
350	31	8,407	-32.2	-42.1	25	19.7
300	31	9,475	-40.8	-46.8	25	23.6
250	31	10,691	-49.8		25	27.4
200	31	12,121	-57.8		25	31.1
175	30	12,962	-58.9		25	29.8
150	30	13,923	-61.4		25	28.9
125	30	15,044	-64.7		25	24.4
100	28	16,398	-67.8		25	19.5
80	27	17,735	-68.7		25	13.2
70	27	18,533	-68.6		26	9.6
60	27	19,460	-66.9		27	5.8
50	26	20,572	-62.9		34	3.0
40	25	21,962	-58.9		01	1.2
30	25	23,781	-55.0		32	1.6
25	25	24,950	-53.3		30	2.3
20	24	26,392	-51.4		28	5.3
15	21	28,269	-48.7		27	6.6
10	9	30,932	-43.6			
7						
5						

* FAIRBANKS, ALASKA 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	135	-14.6	-19.5	01	1.0
1000	31	165			02	.9
950	31	565	-9.4	-15.5	10	.9
900	31	978	-10.3	-16.4	25	2.1
850	31	1,417	-12.0	-17.7	27	2.8
800	31	1,879	-14.0	-19.6	29	4.4
750	31	2,365	-16.1	-22.7	30	5.7
700	31	2,883	-18.7	-25.2	31	7.2
650	31	3,432	-21.9	-28.4	31	9.1
600	31	4,018	-25.2	-32.3	31	10.4
550	31	4,642	-28.8	-36.3	31	11.3
500	31	5,322	-33.0	-40.9	31	12.8
450	31	6,056	-37.6	-41.7	31	14.5
400	31	6,862	-42.7	-41.8	31	18.0
350	31	7,752	-48.6		31	19.9
300	31	8,753	-54.2		31	22.6
250	31	9,911	-58.0		31	24.6
200	31	11,318	-57.3		30	23.4
175	31	12,166	-55.7		30	23.4
150	31	13,149	-55.1		30	24.8
125	30	14,309	-55.1		30	26.5
100	29	15,728	-55.4		29	28.5
80	28	17,162	-55.3		29	30.2
70	28	18,014	-55.1		29	31.8
60	28	18,999	-54.8		29	32.1
50	27	20,154	-54.6		29	35.9
40	27	21,583	-54.3		28	35.6
30	27	23,429	-53.5		28	36.7
25	24	24,636	-53.2		28	34.4
20	21	26,175	-50.2		28	35.8
15	18	28,105	-47.2		28	30.0
10	14	30,884	-41.8		27	34.4
7						
5						

FLINT, MICH. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	234	-2.9	-7.0	16	.6
1000	31	163				
950	31	573	-2.2	-7.0	26	1.6
900	31	1,000	-2.4	-8.6	28	4.0
850	31	1,454	-3.5	-11.7	28	5.9
800	31	1,933	-4.2	-14.0	28	9.4
750	31	2,443	-5.9	-15.2	28	12.2
700	31	2,979	-8.6	-16.6	29	14.7
650	31	3,549	-11.5	-19.4	29	16.5
600	31	4,161	-15.1	-23.2	29	18.3
550	31	4,812	-19.0	-27.6	29	20.5
500	31	5,518	-23.6	-32.4	28	22.7
450	31	6,277	-28.9	-36.8	28	25.2
400	31	7,113	-34.9	-41.9	28	29.2
350	31	8,032	-41.5	-45.6	28	31.4
300	31	9,063	-47.9		28	33.8
250	31	10,249	-53.5		28	36.9
200	31	11,674	-55.8		28	37.8
175	31	12,525	-54.9		28	34.0
150	31	13,511	-54.7		28	31.9
125	31	14,674	-55.7		28	28.1
100	31	16,089	-56.9		28	24.9
80	31	17,503	-56.8		28	18.2
70	31	18,347	-57.0		28	15.7
60	31	19,325	-56.5		29	14.5
50	30	20,483	-55.5		29	11.9
40	30	21,909	-54.2		29	9.4
30	30	23,757	-53.1		30	7.4
25	30	24,934	-52.1		30	6.5
20	29	26,386	-51.0		30	5.4
15	29	28,266	-49.1		29	6.1
10	26	30,940	-45.9		28	10.9
7	8	33,346	-43.6			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MARCH 1967

FORT WORTH, TEXAS — 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	180	11.9	8.0	19	1.8
1000	31	144			04	2.1
950	31	578	12.9	6.0	20	7.6
900	31	1,031	13.6	2.4	22	8.4
850	31	1,512	12.6	-2.0	23	7.9
800	31	2,019	10.0	-5.9	25	7.4
750	31	2,554	6.7	-8.8	26	7.5
700	31	3,116	3.0	-12.2	26	8.6
650	31	3,711	-.8	-15.5	26	10.9
600	31	4,347	-4.9	-19.1	26	12.5
550	31	5,021	-9.7	-22.4	26	13.7
500	31	5,756	-14.7	-27.5	26	15.6
450	31	6,539	-20.2	-33.1	26	16.5
400	31	7,408	-26.8	-37.9	26	18.4
350	31	8,358	-33.8	-43.4	26	21.7
300	31	9,420	-42.0	-49.7	27	25.0
250	30	10,632	-51.5		27	28.3
200	30	12,053	-58.4		27	30.9
175	30	12,891	-59.2		27	30.4
150	30	13,853	-61.1		27	29.5
125	30	14,978	-64.1		27	25.4
100	30	16,334	-66.9		27	20.7
80	29	17,677	-68.2		27	15.1
70	27	18,477	-66.6		27	11.9
60	26	19,411	-65.0		27	8.0
50	26	20,531	-61.5		28	4.5
40	25	21,925	-58.2		29	2.8
30	25	23,747	-55.2		30	2.4
25	25	24,915	-53.4		29	4.0
20	24	26,355	-51.5		29	4.2
15	20	28,251	-48.0		28	5.6
10	18	30,939	-43.3		28	8.7
7	7	33,372	-38.1			
5						

GLASGLOW, MONT. — 931 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	696	-7.0	-10.7	36	1.2
1000	30	135				
950	30	541				
900	30	962	-4.0	-9.6	30	3.7
850	30	1,413	-4.7	-12.1	30	6.5
800	30	1,889	-6.3	-13.2	29	8.4
750	30	2,392	-9.1	-14.8	29	9.6
700	30	2,922	-12.1	-18.3	28	11.2
650	30	3,485	-15.6	-22.0	28	13.1
600	30	4,084	-19.2	-25.9	28	15.5
550	30	4,726	-23.5	-29.6	27	16.4
500	30	5,416	-28.3	-34.5	27	18.7
450	30	6,157	-33.5	-38.0	27	21.9
400	30	6,980	-39.3	-43.0	27	23.9
350	30	7,882	-45.5		27	27.6
300	30	8,895	-51.4		27	31.4
250	30	10,067	-55.0		27	32.8
200	30	11,492	-54.1		27	29.1
175	30	12,352	-52.9		27	27.3
150	30	13,346	-52.7		27	23.4
125	30	14,522	-53.3		27	23.3
100	29	15,958	-54.9		27	19.7
80	29	17,381	-55.2		28	18.1
70	29	18,233	-55.1		28	16.1
60	27	19,215	-55.3		28	13.4
50	27	20,378	-55.3		29	11.8
40	27	21,801	-54.9		29	10.7
30	27	23,640	-54.5		29	9.7
25	27	24,808	-53.7		30	9.4
20	26	26,245	-52.6		30	10.0
15	26	28,107	-51.7		31	10.4
10	22	30,743	-47.7		31	14.9
7	18	33,119	-44.0		31	16.9
5	11	35,431	-40.4			

* GRAND JUNCTION, COLO. — 849 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,474	5.3	-7.2	14	2.6
1000	31	118				
950	31	545				
900	31	995				
850	31	1,467			13	3.4
800	31	1,965	5.7	-9.0	16	4.9
750	31	2,487	1.9	-11.4	22	5.1
700	31	3,042	-2.4	-13.9	24	9.4
650	31	3,620	-6.9	-16.8	25	11.0
600	31	4,246	-11.1	-20.5	25	13.4
550	31	4,904	-15.5	-24.6	25	16.2
500	31	5,622	-20.3	-28.1	26	18.0
450	31	6,387	-25.7	-33.8	26	20.7
400	31	7,238	-31.9	-39.5	26	22.8
350	31	8,168	-38.8	-42.5	26	25.9
300	31	9,209	-46.3		26	29.0
250	30	10,397	-53.8		26	32.4
200	30	11,816	-56.6		26	30.6
175	30	12,665	-55.4		26	27.6
150	30	13,648	-56.0		26	24.9
125	30	14,803	-57.9		26	21.1
100	30	16,198	-60.8		26	17.2
80	30	17,577	-62.6		26	13.5
70	30	18,403	-60.9		27	10.3
60	28	19,362	-60.4		28	7.5
50	27	20,500	-59.0		28	5.8
40	25	21,909	-57.6		30	4.1
30	23	23,730	-55.6		33	2.6
25	23	24,893	-54.7		34	1.9
20	20	26,329	-53.3		01	2.8
15	16	28,189	-50.6		04	3.9
10	10	30,869	-46.0			

* GREAT FALLS, MONT. — 884 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,123	-5.5	-13.6	24	2.9
1000	31	142				
950	31	557				
900	31	983				
850	31	1,429	-4.4	-11.9	25	6.3
800	31	1,905	-6.4	-12.8	26	8.0
750	31	2,412	-8.1	-14.1	27	9.4
700	31	2,942	-11.2	-17.8	27	10.8
650	31	3,506	-15.0	-21.8	27	11.8
600	31	4,106	-18.6	-25.7	27	14.4
550	31	4,751	-22.9	-29.9	27	15.2
500	31	5,444	-27.4	-35.0	27	17.4
450	31	6,192	-32.6	-38.9	27	18.9
400	31	7,016	-38.3	-43.2	27	21.9
350	31	7,922	-44.5		27	24.3
300	31	8,940	-50.9		27	27.3
250	31	10,114	-54.8		27	28.5
200	31	11,545	-52.9		27	25.3
175	31	12,409	-51.9		27	25.2
150	31	13,406	-52.9		26	23.1
125	31	14,581	-52.6		27	21.4
100	31	16,017	-54.4		27	17.5
80	30	17,448	-55.1		26	14.6
70	30	18,300	-54.9		27	13.2
60	28	19,280	-54.9		28	11.8
50	28	20,446	-54.8		29	9.0
40	28	21,873	-54.5		29	7.7
30	26	23,724	-53.9		32	6.5
25	26	24,897	-53.2		31	6.4
20	25	26,339	-52.2		32	7.3
15	22	28,218	-50.6		34	6.8
10	19	30,877	-46.1		35	11.9
7	13	33,269	-42.0		32	15.1

GREEN BAY, WIS. — 994 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	210	-4.5	-7.3	31	.6
1000	31	157				
950	31	561	-3.9	-7.8	30	1.5
900	31	989	-4.0	-9.6	29	3.6
850	31	1,441	-4.2	-11.5	28	5.7
800	31	1,918	-5.2	-13.4	28	8.8
750	31	2,420	-6.7	-15.7	28	11.5
700	31	2,960	-9.2	-18.1	28	13.5
650	31	3,526	-12.4	-21.2	28	16.3
600	31	4,137	-16.0	-24.2	28	17.8
550	31	4,785	-20.1	-27.6	28	20.0
500	31	5,488	-24.4	-32.5	28	22.7
450	31	6,240	-29.8	-37.0	28	24.6
400	31	7,076	-35.6	-42.0	28	26.9
350	31	7,993	-42.3	-46.5	28	31.7
300	31	9,021	-49.0		28	34.7
250	31	10,201	-54.7		28	35.4
200	31	11,621	-56.0		28	34.0
175	31	12,474	-54.4		28	32.4
150	31	13,461	-54.8		28	30.3
125	31	14,625	-55.7		28	27.7
100	31	16,042	-56.7		28	24.3
80	31	17,456	-56.9		28	20.4
70	31	18,301	-56.5		28	17.5
60	31	19,281	-56.4		28	15.7
50	31	20,439	-55.7		29	14.3
40	31	21,863	-54.8		29	10.6
30	31	23,709	-53.5		30	8.3
25	31	24,884	-52.8		30	8.3
20	30	26,329	-51.6		31	6.5
15	27	28,197	-50.1		30	6.9
10	26	30,866	-46.5		31	7.0
7	10	33,269	-43.5			

GREENSBORO, N. C. — 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	273	5.6	2.3	29	.9
1000	31	179				
950	31	602	7.2	-.4	26	3.2
900	31	1,045	6.0	-2.8	27	7.8
850	31	1,513	4.8	-6.0	29	10.5
800	31	2,006	2.9	-8.9	29	11.7
750	31	2,525	.5	-12.2	29	12.6
700	31	3,078	-2.2	-16.0	29	14.3
650	31	3,661	-5.3	-20.2	29	16.9
600	31	4,288	-9.0	-23.3	28	19.0
550	31	4,954	-13.1	-25.4	28	21.4
500	31	5,677	-17.9	-29.4	28	24.0
450	31	6,452	-23.3	-34.8	29	24.6
400	31	7,309	-29.5	-39.9	29	26.0
350	31	8,248	-36.4	-45.3	29	29.5
300	31	9,299	-44.6		29	31.5
250	31	10,496	-53.3		29	33.2
200	31	11,914	-57.7		30	29.6
175	31	12,756	-57.6		30	29.1
150	31	13,728	-58.3		29	28.9
125	31	14,872	-60.1		29	25.7
100	31	16,255	-62.5		29	20.5
80	31	17,628	-63.0		29	15.5
70	31	18,450	-62.0		29	13.0
60	30	19,404	-60.9		30	10.3
50	30	20,542	-58.7		30	8.0
40	30	21,951	-56.5		31	4.6
30	30	23,783	-54.3		31	3.1
25	29	24,955	-52.5		30	4.4
20	27	26,398	-50.6		29	4.3
15	26	28,281	-47.9		28	7.2
10	18	30,990	-42.8		29	15.1
7	9	33,368	-41.4			

GUAM, MARIANA IS. — 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	111	24.3	22.2	07	3.7
1000	31	92				
950	31	543	21.8	19.8	07	9.7
900	31	1,010	19.2	16.8	08	9.4
850	31	1,501	16.7	12.6	08	7.7
800	31	2,016	14.5	7.6	08	6.7
750	31	2,563	12.4	.5	08	5.5
700	31	3,136	9.8	-6.7	08	5.3
650	31	3,751	7.3	-11.4	07	4.6
600	31	4,403	3.7	-14.7	06	4.8
550	31	5,099	-.5	-18.2	06	4.8
500	31	5,860	-4.7	-23.0	06	4.3
450	31	6,680	-9.6	-27.5	06	3.8
400	31	7,581	-15.5	-33.2	05	2.8
350	31	8,576	-22.4	-38.3	07	1.9
300	31	9,688	-31.1	-45.1	11	1.5
250	31	10,952	-41.5		16	2.3
200	30	12,428	-53.5		18	3.3
175	30	13,272	-60.5		17	4.4
150	30	14,215	-67.9		15	5.6
125	29	15,287	-76.0		12	7.5
100	26	16,552	-82.1		10	8.0
80	24	17,804	-79.1		09	5.4
70	23	18,573	-74.8		09	2.6
60	23	19,484	-68.8		26	1.3
50	23	20,587	-64.4		25	3.6
40	23	21,969	-59.1		25	4.3
30	23	23,794	-54.4		07	.3
25	23	24,970	-51.5		10	2.6
20	23	26,428	-48.5		08	5.4
15	22	28,332	-45.0		07	11.9
10	16	31,056	-41.9		08	20.6
7	9	33,476	-39.9			

HILO, HAWAII — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	11	20.0	18.3	23	2.2
1000	31	136	20.3	17.7	22	1.7
950	31	580	17.4	15.6	12	2.2
900	31	1,039	14.5	13.3	12	2.7
850	31	1,521	12.4	9.1	15	2.4
800	31	2,029	10.1	5.4	19	2.0
750	31	2,567	7.8	-1.0	24	1.7
700	31	3,131	5.0	-4.3	24	2.9
650	31	3,730	1.8	-8.1	25	4.6
600	31	4,375	-1.8	-13.1	25	5.3
550	31	5,056	-5.8	-15.5	25	7.5
500	31	5,805	-10.1	-20.0	26	10.5
450	31	6,603	-15.3	-24.7	26	12.6
400	31	7,491	-21.2	-31.2	26	14.0
350	31	8,463	-28.3	-38.9	27	15.8
300	31	9,550	-36.6	-47.2	27	19.3
250	31	10,788	-46.0		28	25.2
200	31	12,239	-56.4		28	28.9
175	31	13,076	-61.8		28	29.6
150	31	14,019	-66.7		28	27.8
125	31	15,109	-71.0		28	21.9
100	28	16,419	-74.3		28	16.0
80	27	17,726	-72.1		28	6.4
70	27	18,518	-68.7		27	2.4
60	27	19,450	-64.8		23	1.0
50	27	20,569	-62.3		18	.3
40	27	21,958	-59.0		31	.3
30	27	23,784	-54.0		04	.9
25	26	24,958	-51.9		02	1.4
20	23	26,408	-49.6		34	1.4
15	20	28,312	-45.7		29	.8
10	14	31,027	-43.7		20	2.3
7	6	33,459	-40.6			

HUNTINGTON W. VA. — 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	246	4.6	.1	13	.3
1000	31	168				
950	31	590	6.2	-.4	23	4.4
900	31	1,031	4.7	-2.3	26	8.8
850	31	1,496	2.7	-4.7	28	10.9
800	31	1,985	.5	-8.3	28	12.3
750	31	2,501	-1.9	-10.6	28	13.5
700	31	3,048	-4.7	-13.8	28	14.6
650	31	3,626	-7.7	-17.5	28	16.7
600	31	4,247	-11.3	-21.5	28	19.2
550	31	4,908	-15.3	-25.5	28	21.2
500	31	5,624	-20.1	-29.4	28	23.0
450	31	6,392	-25.3	-35.6	29	25.2
400	31	7,243	-31.3	-40.8	28	27.8
350	31	8,176	-37.9	-44.5	28	31.4
300	31	9,221	-45.3		28	33.6
250	31	10,416	-53.1		28	35.7
200	31	11,835	-57.3		28	35.8
175	31	12,680	-56.4		28	34.2
150	31	13,657	-57.1		28	31.5
125	31	14,805	-59.5		28	27.1
100	31	16,195	-61.0		26	24.5
80	31	17,578	-61.5		28	18.6
70	31	18,406	-61.0		29	15.2
60	31	19,369	-59.5		29	12.1
50	31	20,513	-58.0		29	8.4
40	31	21,925	-56.2		29	5.9
30	30	23,765	-54.3		30	4.5
25	29	24,934	-53.2		30	4.3
20	28	26,380	-51.3		31	4.4
15	22	28,270	-47.9		29	5.6
10	18	30,976	-43.6		27	14.6
7	8	33,415	-40.5			

* INTERNATIONAL FALLS, MINN. — 974 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	360	-9.7	-15.5	21	1.1
1000	31	153				
950	31	551	-8.1	-13.0	20	1.7
900	31	971	-8.0	-13.8	25	4.0
850	31	1,415	-8.5	-14.5	26	7.2
800	31	1,885	-9.4	-17.5	27	8.8
750	31	2,376	-11.4	-19.5	28	10.3
700	31	2,909	-14.0	-21.9	28	12.3
650	31	3,464	-16.8	-24.6	28	14.2
600	31	4,067	-20.0	-28.4	28	16.8
550	31	4,702	-23.9	-31.2	28	19.3
500	31	5,397	-28.8	-34.5	28	21.1
450	31	6,136	-33.8	-38.5	28	24.0
400	31	6,961	-39.5	-42.3	28	27.8
350	31	7,863	-45.6		28	31.4
300	31	8,878	-50.7		28	34.6
250	31	10,055	-54.1		28	34.8
200	31	11,482	-54.7		28	31.4
175	31	12,339	-53.2		28	28.6
150	31	13,333	-53.4		28	29.7
125	31	14,505	-53.7		28	27.4
100	31	15,935	-54.7		28	24.2
80	31	17,359	-55.3		28	22.0
70	31	18,209	-55.2		28	20.9
60	31	19,195	-54.9		29	19.2
50	31	20,361	-54.5		29	16.0
40	30	21,787	-54.3		29	14.6
30	29	23,634	-53.3		30	13.3
25	29	24,809	-52.7		30	12.9
20	27	26,248	-52.3		29	11.9
15	24	28,123	-50.9		29	12.2
10	24	30,780	-47.6		29	14.7
7	17	33,139	-44.5		29	18.6

JACKSON, MISS. — 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	94	11.4	8.7	16	1.2
1000	31	166	12.5	7.8	15	2.0
950	31	599	12.7	5.2	21	5.1
900	31	1,051	11.5	1.4	24	5.2
850	31	1,528	9.7	-.9	25	6.1
800	31	2,030	7.9	-5.6	26	7.0
750	31	2,555	5.1	-9.3	27	7.2
700	31	3,120	2.2	-12.8	27	8.3
650	31	3,711	-1.1	-15.4	27	10.6
600	31	4,350	-4.8	-19.7	28	11.9
550	31	5,023	-9.4	-22.9	28	13.6
500	31	5,759	-14.3	-27.6	28	15.5
450	31	6,543	-19.9	-32.3	28	18.0
400	31	7,414	-26.4	-37.3	28	19.6
350	31	8,365	-33.7	-44.3	28	21.9
300	31	9,428	-42.1	-49.1	28	26.4
250	31	10,636	-51.4		28	31.4
200	31	12,058	-58.4		28	34.2
175	31	12,897	-58.9		28	35.0
150	31	13,860	-60.8		28	32.9
125	31	14,984	-64.5		28	29.7
100	31	16,337	-67.4		28	23.2
80	31	17,679	-67.8		28	16.8
70	31	18,482	-67.2		28	13.2
60	31	19,415	-65.0		29	9.1
50	31	20,535	-61.6		29	5.0
40	31	21,928	-58.2		31	4.4
30	31	23,749	-55.3		33	3.1
25	31	24,917	-53.1		31	2.8
20	29	26,357	-51.2		29	3.5
15	29	28,241	-47.7		27	5.6
10	27	30,949	-42.5		27	9.9
7	12	33,358	-39.8			

* JACKSONVILLE, FLA. — 1023 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	13.2	11.0	32	.9
1000	31	193	15.2	10.3	31	.7
950	31	626	14.4	6.9	25	.6
900	31	1,083	12.1	3.8	23	1.8
850	31	1,561	9.9	-1.9	25	3.5
800	31	2,063	7.3	-6.0	27	4.6
750	31	2,590	5.3	-9.9	28	5.8
700	31	3,153	2.2	-13.4	28	7.2
650	31	3,742	-1.2	-17.6	28	8.9
600	31	4,381	-5.1	-20.2	28	9.7
550	31	5,048	-9.5	-23.7	28	11.7
500	31	5,789	-13.9	-28.9	28	14.2
450	31	6,574	-19.4	-33.4	28	16.4
400	31	7,446	-25.9	-39.9	28	18.2
350	31	8,399	-33.1	-45.6	28	21.4
300	31	9,464	-41.5	-51.3	28	24.2
250	31	10,676	-50.7		29	26.0
200	31	12,104	-56.7		28	31.0
175	31	12,949	-57.7		28	32.6
150	30	13,913	-60.1		28	31.6
125	30	15,041	-63.8		28	29.0
100	30	16,397	-67.1		28	24.9
80	30	17,737	-68.2		28	17.5
70	30	18,539	-67.4		29	12.4
60	30	19,474	-64.5		29	8.8
50	29	20,598	-61.4		30	6.4
40	28	21,989	-57.8		31	5.4
30	28	23,816	-54.2		31	2.6
25	28	24,991	-52.2		29	3.3
20	26	26,443	-49.6		29	5.8
15	24	28,334	-46.1		27	9.6
10	20	31,069	-40.2		26	14.5
7	17	33,523	-36.2		26	18.7

JOHN F. KENNEDY INT. AP NY — 1021 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	.1	-4.6	35	2.1
1000	31	173	-.2	-5.5	34	2.9
950	31	587	-1.1	-6.6	35	3.9
900	31	1,014	-1.6	-8.4	33	3.6
850	31	1,469	-2.6	-10.0	30	6.6
800	31	1,949	-4.0	-11.0	29	9.4
750	31	2,458	-5.9	-13.1	28	11.9
700	31	2,995	-8.3	-15.6	29	14.1
650	31	3,567	-11.0	-18.5	29	16.1
600	31	4,179	-14.6	-21.3	28	18.1
550	31	4,831	-18.5	-25.9	28	20.9
500	31	5,539	-22.8	-29.6	28	23.8
450	31	6,303	-28.0	-34.3	28	25.3
400	31	7,140	-33.8	-39.4	28	27.7
350	31	8,064	-40.2	-44.5	28	31.8
300	31	9,101	-46.7		28	34.3
250	31	10,291	-53.6		28	37.4
200	31	11,710	-57.1		29	36.3
175	31	12,559	-55.2		29	32.4
150	31	13,544	-54.9		28	29.1
125	29	14,703	-56.2		28	26.9
100	29	16,114	-58.0		28	21.9
80	29	17,520	-58.3		28	17.6
70	29	18,359	-58.1		28	15.7
60	29	19,332	-57.5		28	12.1
50	29	20,486	-56.5		28	10.1
40	28	21,906	-55.0		28	8.1
30	25	23,751	-53.5		29	6.4
25	24	24,925	-52.6		28	6.0
20	24	26,370	-51.5		27	4.6
15	21	28,233	-49.7		27	7.3
10	18	30,928	-45.3		27	8.8
7	5	33,368	-40.4			

JOHNSTON IS., PACIFIC AREA — 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	3	23.9	20.8	08	4.5
1000	31	118	22.9	20.2	08	5.3
950	31	569	19.5	17.2	08	6.0
900	31	1,029	16.9	12.8	09	4.2
850	31	1,515	14.5	9.2	10	2.9
800	31	2,026	11.8	4.9	13	1.7
750	31	2,568	9.0	1.1	20	1.8
700	31	3,133	5.7	-4.2	24	3.0
650	31	3,731	2.2	-10.6	25	4.0
600	31	4,379	-1.1	-15.9	26	5.1
550	31	5,065	-4.7	-19.9	26	6.0
500	31	5,814	-8.7	-24.5	27	8.1
450	31	6,619	-14.2	-28.6	27	11.2
400	31	7,507	-20.4	-33.1	27	13.4
350	31	8,482	-27.3	-39.4	27	16.2
300	31	9,574	-35.2	-47.1	27	19.3
250	31	10,821	-43.8		27	24.0
200	31	12,285	-54.6		28	25.9
175	31	13,127	-60.2		28	26.3
150	31	14,073	-66.6		28	23.2
125	31	15,159	-72.7		29	19.0
100	29	16,455	-76.9		29	14.7
80	29	17,739	-75.3		30	5.5
70	28	18,519	-71.9		29	2.7
60	28	19,438	-67.0		25	.7
50	28	20,550	-62.9		22	.7
40	28	21,938	-58.6		25	1.0
30	27	23,763	-54.5		29	.9
25	25	24,939	-51.7		03	1.4
20	25	26,395	-48.9		07	4.0
15	24	28,299	-45.4		08	7.0
10	23	31,024	-41.9		09	9.8
7	13	33,415	-39.6			

KEY WEST, FLA. — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	3	21.6	16.6	09	3.0
1000	27	167	20.6	16.4	10	3.9
950	27	605	17.8	13.1	10	5.2
900	27	1,070	15.0	9.9	11	4.0
850	27	1,553	12.5	5.7	08	2.3
800	27	2,060	10.0	1.5	08	1.4
750	27	2,593	7.5	-1.7	35	.5
700	27	3,160	5.0	-4.8	33	1.7
650	27	3,755	2.0	-6.4	31	3.4
600	27	4,404	-1.5	-12.2	30	4.4
550	27	5,085	-5.9	-16.2	29	5.5
500	27	5,831	-10.9	-21.2	29	7.6
450	27	6,626	-16.6	-26.4	29	9.8
400	27	7,507	-22.9	-32.5	29	12.4
350	27	8,472	-30.4	-38.9	29	14.5
300	27	9,549	-38.8	-45.5	29	17.5
250	27	10,776	-47.9		29	19.9
200	27	12,224	-54.6		29	24.9
175	27	13,071	-58.2		28	26.3
150	27	14,033	-61.9		28	24.6
125	27	15,150	-66.4		28	21.0
100	27	16,485	-71.2		28	16.2
80	27	17,798	-72.9		29	8.8
70	27	18,583	-71.2		29	6.1
60	27	19,500	-68.0		30	3.3
50	26	20,610	-63.1		31	3.2
40	26	22,002	-57.7		02	3.2
30	25	23,840	-53.1		03	2.6
25	23	25,023	-51.0		35	1.1
20	23	26,485	-47.9		28	3.3
15	22	28,397	-44.0		26	5.7
10	18	31,162	-39.7		26	9.6
7	7	33,625	-36.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MARCH 1967

KING SALMON, ALASKA — 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	15	-4.6	-8.6	29	.4
1000	30	156	-3.2	-9.5	34	2.0
950	30	563	-2.7	-10.6	36	3.3
900	30	992	-3.2	-12.5	34	3.5
850	30	1,443	-4.8	-15.4	32	4.9
800	30	1,919	-6.8	-17.6	31	5.7
750	30	2,419	-9.4	-20.2	31	6.9
700	30	2,951	-12.2	-22.6	30	7.5
650	30	3,512	-15.4	-24.6	29	8.6
600	30	4,116	-18.8	-27.8	29	9.8
550	30	4,754	-22.8	-32.4	29	11.4
500	30	5,452	-27.1	-36.9	29	13.5
450	30	6,199	-32.3	-41.0	30	15.3
400	30	7,026	-38.0	-45.1	30	17.5
350	30	7,933	-44.3		30	19.6
300	30	8,951	-51.0		30	20.3
250	30	10,121	-56.6		30	18.4
200	30	11,529	-57.5		29	18.0
175	30	12,377	-55.2		29	17.2
150	30	13,363	-54.5		29	17.9
125	30	14,532	-54.0		29	18.4
100	29	15,961	-54.3		29	17.4
80	29	17,390	-54.6		29	17.0
70	29	18,245	-54.2		28	16.3
60	29	19,234	-54.1		28	18.0
50	28	20,419	-53.1		28	18.0
40	28	21,857	-53.4		28	15.2
30	28	23,714	-52.4		28	17.3
25	28	24,893	-52.3		28	20.5
20	28	26,341	-50.9		27	19.2
15	24	28,258	-48.7		27	23.1
10	14	30,982	-47.4			
7	5	33,497	-42.8			
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* KOROR, CAROLINE IS. — 1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	30	27.4	24.0	04	2.8
1000	31	89	26.8	23.4	04	3.5
950	31	537	23.1	20.0	06	6.3
900	31	1,012	20.2	15.9	06	6.6
850	31	1,505	17.6	12.1	07	6.2
800	31	2,022	15.5	8.1	07	5.4
750	31	2,566	12.9	2.2	07	4.6
700	31	3,146	9.9	-2.3	07	4.5
650	31	3,757	6.6	-7.2	08	4.7
600	31	4,411	3.0	-11.8	07	6.1
550	31	5,107	-.7	-16.9	08	6.6
500	31	5,868	-5.0	-21.4	09	6.9
450	31	6,684	-10.2	-25.8	08	7.9
400	31	7,588	-16.1	-31.2	09	8.9
350	31	8,580	-22.8	-37.1	10	9.1
300	31	9,691	-31.4	-44.3	10	8.7
250	31	10,954	-41.8		11	10.7
200	31	12,426	-54.0		11	15.6
175	31	13,269	-61.1		11	16.4
150	31	14,210	-68.6		11	17.9
125	31	15,280	-76.1		11	20.2
100	31	16,554	-80.0		10	10.7
80	31	17,821	-76.4		01	1.4
70	31	18,602	-70.5		29	3.7
60	31	19,525	-66.5		28	7.2
50	31	20,639	-62.3		27	9.3
40	31	22,029	-58.4		27	9.2
30	31	23,857	-54.3		28	6.2
25	31	25,029	-52.5		75	1.5
20	31	26,482	-49.0		11	4.8
15	28	28,379	-47.2		10	14.6
10	22	31,094	-40.9		09	26.1
7	7	33,496	-38.9			
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KOTZEBUE, ALASKA — 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	5	-12.1	-15.2	12	3.7
1000	29	139	-10.3	-14.6	12	3.0
950	29	537	-9.1	-14.6	16	3.4
900	29	954	-9.6	-16.0	19	2.9
850	29	1,394	-10.9	-17.4	22	3.6
800	29	1,859	-12.4	-19.4	24	4.4
750	29	2,348	-14.7	-22.6	25	5.3
700	29	2,871	-17.2	-24.8	26	6.4
650	29	3,420	-20.2	-27.7	26	8.1
600	29	4,012	-23.8	-31.4	26	8.7
550	29	4,639	-27.9	-35.5	27	9.7
500	29	5,321	-32.5	-40.6	27	10.9
450	29	6,052	-37.3	-43.7	28	10.6
400	29	6,861	-42.6	-44.7	27	11.2
350	29	7,751	-48.4		28	14.3
300	29	8,752	-54.4		28	17.5
250	29	9,907	-58.6		28	20.2
200	29	11,303	-59.2		28	21.4
175	29	12,144	-57.6		28	22.4
150	27	13,127	-56.6		28	22.9
125	26	14,285	-56.3		28	24.2
100	26	15,701	-56.3		27	30.2
80	25	17,122	-56.6		27	29.4
70	25	17,969	-56.2		27	31.0
60	25	18,950	-55.7		27	34.2
50	22	20,114	-55.2		28	37.5
40	20	21,556	-54.5		28	38.7
30	20	23,399	-54.4		28	38.3
25	18	24,591	-52.7		27	39.7
20	14	26,132	-50.1		27	36.8
15	11	27,988	-48.1			
10	[illegible]	30,835	-43.6			
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KWAJALEIN, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	4	26.2	23.5	08	6.4
1000	31	90	25.6	22.9	08	7.0
950	31	541	22.7	20.4	08	8.0
900	31	1,011	19.8	17.4	09	7.7
850	31	1,503	17.2	14.8	09	6.7
800	31	2,019	14.8	11.0	10	6.0
750	31	2,564	12.3	6.1	09	4.9
700	31	3,142	9.3	1.8	10	3.7
650	31	3,751	5.9	-1.5	09	2.9
600	31	4,402	2.1	-6.9	07	1.8
550	31	5,100	-1.4	-11.9	06	1.1
500	31	5,859	-5.5	-14.2	08	2.6
450	31	6,673	-10.3	-19.6	09	2.5
400	31	7,577	-15.8	-28.1	06	1.7
350	31	8,565	-22.6	-35.5	34	2.0
300	31	9,683	-31.0	-43.0	29	2.9
250	31	10,948	-41.3		28	4.2
200	31	12,423	-53.5		29	4.9
175	31	13,262	-60.2		30	4.5
150	31	14,213	-67.9		32	3.0
125	31	15,280	-75.9		01	3.6
100	29	16,553	-82.4		05	5.3
80	22	17,806	-78.0		08	1.1
70	21	18,579	-72.7		27	3.5
60	21	19,492	-68.4		27	8.6
50	21	20,603	-64.2		26	10.5
40	21	21,978	-59.9		27	8.9
30	21	23,799	-55.1		27	5.1
25	21	24,970	-52.7		31	.5
20	20	26,414	-50.7		08	7.5
15	19	28,313	-46.6		09	17.2
10	18	31,035	-41.3		09	27.0
7	17	33,473	-36.5		09	27.1
5	7	35,797	-34.6			

LAKE CHARLES, LA. — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	14.1	12.4	14	1.1
1000	31	162	15.3	11.5	15	2.9
950	31	601	13.7	6.2	18	5.9
900	31	1,052	12.5	1.6	20	6.1
850	31	1,530	10.7	-3.1	22	6.0
800	31	2,034	9.2	-7.5	24	5.7
750	31	2,572	7.0	-11.8	25	5.2
700	31	3,132	4.2	-14.3	26	5.6
650	31	3,731	.6	-16.1	27	7.1
600	31	4,369	-3.5	-20.3	27	8.5
550	31	5,047	-7.9	-24.5	27	10.4
500	31	5,787	-12.8	-28.8	27	12.0
450	31	6,578	-18.5	-34.1	27	14.4
400	31	7,452	-25.1	-39.7	27	17.1
350	31	8,408	-32.4	-45.3	27	19.9
300	31	9,476	-40.8	-51.1	27	22.7
250	31	10,691	-50.2		27	26.1
200	31	12,121	-57.3		27	29.7
175	31	12,962	-58.9		27	30.7
150	31	13,923	-61.4		27	29.5
125	31	15,044	-65.3		27	25.2
100	31	16,389	-69.0		27	21.3
80	31	17,720	-69.3		27	14.3
70	31	18,517	-68.6		27	11.1
60	31	19,446	-65.9		28	7.2
50	31	20,563	-62.2		30	3.4
40	31	21,955	-58.3		30	2.7
30	31	23,780	-54.8		31	2.8
25	31	24,951	-52.8		29	3.9
20	30	26,397	-50.1		28	6.0
15	29	28,290	-46.6		27	9.1
10	28	31,014	-41.0		27	13.8
7	11	33,417	-38.0			
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LANDER, WYO. — 824 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,696	-.5	-8.1	23	2.7
1000	31	120				
950	31	536				
900	31	979				
850	31	1,445				
800	31	1,933	.9	-10.7	24	3.4
750	31	2,445	-2.2	-13.3	25	6.2
700	31	2,993	-6.0	-15.9	26	8.8
650	31	3,562	-9.6	-18.3	26	12.9
600	31	4,184	-13.2	-23.1	27	17.2
550	31	4,834	-17.6	-27.7	26	19.0
500	31	5,549	-22.9	-32.4	26	21.7
450	31	6,307	-28.4	-38.0	26	24.6
400	31	7,149	-34.6	-42.6	26	26.2
350	31	8,068	-41.3	-47.0	26	27.3
300	31	9,099	-48.4		27	29.3
250	31	10,281	-54.9		27	32.2
200	31	11,698	-56.3		26	31.0
175	30	12,556	-54.8		26	30.4
150	30	13,543	-54.9		26	27.1
125	30	14,704	-56.6		26	24.0
100	30	16,115	-57.8		26	18.6
80	30	17,517	-59.1		27	12.5
70	29	18,354	-58.4		27	9.4
60	29	19,325	-58.0		28	7.3
50	29	20,476	-57.0		30	4.4
40	29	21,892	-56.0		36	2.7
30	29	23,726	-55.1		03	4.3
25	27	24,898	-53.9		04	5.4
20	26	26,338	-52.6		05	6.8
15	23	28,208	-49.1		04	6.8
10	11	30,885	-45.6		04	8.6
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* LIHUE KAUAI, HAWAII — 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	36	20.4	17.7	06	1.9
1000	31	137	20.7	17.8	07	2.7
950	31	576	17.6	15.7	08	4.2
900	31	1,040	14.6	12.9	08	3.3
850	31	1,522	11.9	8.7	10	1.8
800	31	2,029	10.1	2.0	16	1.4
750	31	2,564	7.6	-2.2	22	2.1
700	31	3,130	4.5	-5.7	24	4.4
650	31	3,723	.9	-10.2	24	5.7
600	31	4,370	-2.8	-15.2	25	6.3
550	31	5,047	-6.8	-19.5	26	7.7
500	31	5,794	-11.2	-22.3	26	10.3
450	31	6,588	-16.3	-26.6	26	13.7
400	31	7,472	-22.4	-33.1	26	16.9
350	31	8,439	-29.5	-40.0	26	19.8
300	31	9,521	-37.7	-47.8	26	22.3
250	31	10,753	-47.1		27	26.7
200	31	12,196	-57.2		27	30.7
175	31	13,031	-61.3		27	29.9
150	30	13,980	-65.6		27	28.9
125	29	15,075	-69.2		28	21.9
100	28	16,393	-73.1		28	16.8
80	21	17,706	-71.2		27	8.8
70	20	18,498	-68.8		27	4.6
60	19	19,426	-64.8		27	.6
50	18	20,549	-62.8		18	.9
40	18	21,933	-59.4		10	1.3
30	17	23,759	-54.6		10	1.9
25	16	24,925	-53.1		11	.7
20	16	26,374	-49.8		30	3.1
15	16	28,267	-46.9		31	3.2
10	16	30,978	-42.3		25	5.1
7	13	33,425	-37.8		26	7.0
5	9	35,753	-33.9			

LITTLE ROCK, ARK. — 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	79	10.2	6.2	20	1.2
1000	31	156	10.8	5.8	21	1.9
950	31	583	11.3	5.1	23	7.1
900	31	1,037	10.8	1.3	24	8.5
850	31	1,513	9.1	-.9	25	8.3
800	31	2,013	6.8	-5.0	26	8.4
750	31	2,538	4.0	-8.8	27	9.0
700	31	3,100	1.2	-12.8	27	10.3
650	31	3,689	-2.1	-15.9	27	11.9
600	31	4,324	-6.1	-19.6	27	13.9
550	31	4,995	-10.6	-23.1	27	16.0
500	31	5,728	-15.3	-28.4	27	17.7
450	31	6,507	-20.7	-33.9	27	19.8
400	31	7,376	-27.2	-39.8	28	21.3
350	31	8,325	-34.4	-44.5	28	23.6
300	31	9,384	-42.8		28	27.6
250	31	10,590	-52.0		28	30.2
200	31	12,009	-59.1		28	34.3
175	31	12,846	-59.0		28	34.4
150	31	13,813	-59.7		28	31.9
125	31	14,946	-62.6		28	29.2
100	31	16,313	-65.3		28	22.5
80	30	17,665	-65.6		28	16.9
70	29	18,473	-64.6		28	13.9
60	29	19,421	-62.8		28	10.0
50	29	20,550	-60.6		29	6.8
40	29	21,948	-57.7		30	5.4
30	29	23,775	-55.2		30	3.9
25	29	24,942	-53.7		31	3.1
20	29	26,385	-51.3		29	4.2
15	28	28,272	-48.5		28	6.3
10	22	30,972	-43.2		28	9.0
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MCGRATH, ALASKA — 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	103	-10.4	-14.8	22	.9
1000	31	161			27	1.2
950	31	562	-6.7	-12.6	19	1.3
900	31	985	-7.1	-13.0	22	2.1
850	31	1,430	-8.0	-14.7	26	3.9
800	31	1,900	-9.9	-17.7	28	4.8
750	31	2,391	-12.6	-20.0	28	6.3
700	31	2,919	-15.3	-21.6	28	7.5
650	31	3,474	-18.3	-24.5	28	8.5
600	31	4,070	-21.8	-28.2	28	9.7
550	31	4,700	-25.5	-31.8	28	11.2
500	31	5,392	-29.9	-36.1	28	14.0
450	31	6,122	-34.9	-40.4	28	15.7
400	30	6,942	-40.0	-42.9	29	17.5
350	30	7,842	-46.0		29	18.4
300	30	8,853	-51.9		30	19.4
250	30	10,020	-57.0		30	19.5
200	30	11,426	-57.8		29	19.9
175	30	12,273	-55.6		28	22.8
150	30	13,258	-54.7		29	22.0
125	29	14,421	-54.6		28	23.2
100	29	15,849	-54.7		28	25.2
80	29	17,278	-54.6		28	25.1
70	29	18,131	-54.7		28	25.8
60	29	19,119	-54.4		28	27.3
50	29	20,288	-54.0		28	28.6
40	29	21,720	-53.8		28	29.6
30	28	23,582	-52.9		28	29.7
25	23	24,811	-51.3		27	25.9
20	20	26,279	-50.1		27	28.5
15	14	28,321	-46.0		26	26.2
10	6	31,122	-40.4			
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* MAJURO, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	3	27.7	23.6	08	4.4
1000	31	91	26.6	22.1	08	5.3
950	31	537	22.8	18.4	08	8.1
900	31	1,013	20.1	15.2	09	8.5
850	31	1,505	17.4	12.1	09	7.8
800	31	2,022	14.9	8.5	09	6.5
750	31	2,566	12.4	4.6	10	5.0
700	31	3,143	9.4	1.1	09	4.1
650	31	3,753	6.2	-2.5	09	3.6
600	31	4,408	2.4	-6.9	08	2.1
550	31	5,103	-1.3	-11.2	09	1.4
500	31	5,863	-5.3	-16.3	08	1.5
450	31	6,685	-9.7	-22.1	07	1.2
400	31	7,587	-14.8	-28.9	36	1.0
350	31	8,585	-21.6	-36.7	30	2.8
300	31	9,703	-30.0	-44.4	28	4.1
250	31	10,974	-40.3	-52.4	27	5.6
200	31	12,457	-52.7		27	6.8
175	31	13,306	-59.6		28	6.5
150	30	14,254	-66.9		29	5.7
125	30	15,333	-74.8		32	3.9
100	30	16,607	-80.9		02	4.7
80	30	17,872	-76.0		30	3.2
70	30	18,655	-69.9		27	8.1
60	30	19,585	-64.7		27	11.6
50	30	20,710	-60.7		27	12.0
40	30	22,110	-57.1		27	10.2
30	30	23,945	-53.8		27	6.9
25	29	25,123	-51.5		27	3.5
20	28	26,582	-49.7		09	4.1
15	26	28,477	-46.1		10	13.3
10	21	31,194	-40.5		09	25.4
7	[illegible]	33,667	-34.7			
5	5	35,998	-31.1			

* MARCUS IS., N. PACIFIC — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	9	22.2	17.5	06	5.9
1000	31	138	20.1	14.8	06	6.3
950	31	578	16.1	11.6	07	5.6
900	31	1,037	13.3	7.7	09	3.4
850	31	1,516	10.7	3.6	11	1.0
800	31	2,021	9.2	-3.0	26	1.5
750	31	2,553	7.8	-9.2	26	3.7
700	31	3,121	5.7	-12.3	26	5.5
650	31	3,723	3.1	-15.1	27	6.8
600	31	4,368	-.5	-18.5	28	8.8
550	31	5,054	-4.8	-23.2	28	12.8
500	31	5,802	-9.1	-27.8	28	15.6
450	31	6,606	-13.7	-31.7	27	19.3
400	31	7,497	-19.7	-36.3	27	22.3
350	31	8,476	-25.6	-41.9	27	25.7
300	31	9,578	-33.0	-48.0	28	30.6
250	31	10,837	-41.5		28	34.9
200	31	12,316	-52.4		27	36.3
175	31	13,167	-58.6		27	34.9
150	31	14,121	-64.8		27	31.5
125	31	15,213	-72.0		27	27.4
100	31	16,510	-76.6		27	19.0
80	31	17,795	-75.4		27	11.6
70	31	18,574	-72.0		27	6.1
60	31	19,492	-67.2		29	3.1
50	31	20,605	-61.9		08	1.3
40	31	22,006	-56.0		08	1.3
30	31	23,853	-52.3		09	3.2
25	30	25,037	-50.5		14	3.0
20	29	26,502	-47.5		23	4.5
15	28	28,420	-43.7		25	7.4
10	25	31,169	-38.6		26	13.5
7	16	33,629	-36.7			
5	7	35,941	-35.1			

* MEDFORD, OREG. — 968 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	401	2.9	.8	07	.2
1000	31	137				
950	31	557	3.7	-.5	10	.4
900	31	993	2.0	-3.5	19	2.7
850	31	1,453	-.7	-7.0	20	5.0
800	31	1,935	-3.6	-9.7	22	6.1
750	31	2,442	-6.4	-12.9	23	7.6
700	31	2,980	-9.4	-17.1	25	9.7
650	31	3,550	-12.5	-22.3	26	10.6
600	31	4,157	-16.5	-25.9	26	11.4
550	31	4,802	-21.1	-31.9	26	12.7
500	31	5,503	-25.5	-35.8	26	14.4
450	31	6,255	-30.7	-39.7	26	17.0
400	30	7,087	-36.4	-43.4	26	18.9
350	30	8,000	-42.7	-46.6	26	20.4
300	30	9,027	-48.5		27	23.0
250	30	10,212	-53.2		27	22.7
200	29	11,650	-53.9		27	19.5
175	29	12,511	-52.8		26	17.9
150	29	13,504	-52.9		27	17.5
125	29	14,676	-54.4		27	15.4
100	29	16,097	-56.7		27	13.5
80	29	17,512	-56.4		27	11.1
70	29	18,358	-56.8		27	7.6
60	29	19,334	-56.9		28	5.8
50	29	20,489	-56.2		29	5.2
40	29	21,909	-55.5		31	3.2
30	29	23,747	-54.5		36	2.5
25	28	24,916	-53.4		03	2.9
20	26	26,361	-51.8		04	5.9
15	25	28,238	-49.2		05	6.5
10	24	30,934	-44.7		05	8.6
7	19	33,305	-40.7		36	7.5
5	9	35,565	-40.5			

MERIDA, MEXICO — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	11	18.1	17.2	09	2.5
1000	31	157	21.2	18.7	10	5.4
950	31	597	19.4	13.5	12	7.8
900	31	1,065	17.5	7.2	11	5.9
850	31	1,552	15.2	3.1	10	3.5
800	31	2,063	12.2	.1	11	1.6
750	31	2,596	9.8	-7.3	10	1.0
700	31	3,172	7.1	-10.5	05	.9
650	31	3,772	3.5	-14.5	35	.7
600	31	4,424	.2	-20.2	33	1.6
550	31	5,106	-3.9	-24.1	34	2.1
500	31	5,862	-8.9	-28.6	32	2.9
450	31	6,662	-14.5	-33.3	29	4.1
400	31	7,552	-21.1	-38.3	28	5.3
350	31	8,524	-28.6	-44.5	27	7.3
300	31	9,610	-36.9	-51.3	27	11.7
250	31	10,848	-45.7		28	17.0
200	31	12,304	-54.4		27	20.2
175	30	13,151	-59.0		27	19.0
150	29	14,106	-63.4		27	16.7
125	28	15,215	-68.1		27	14.1
100	28	16,538	-73.3		28	9.4
80	26	17,839	-75.0		28	5.5
70	26	18,615	-73.6		31	2.9
60	26	19,524	-69.2		02	2.0
50	26	20,630	-63.2		35	2.4
40	26	22,023	-56.7		06	3.5
30	24	23,864	-51.3		07	4.6
25	24	25,053	-49.5		07	4.1
20	24	26,524	-46.2		07	2.5
15	23	28,452	-42.3		25	1.1
10	13	31,220	-38.2			
7						
5						

* MIAMI, FLA. — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	4	19.7	16.7	08	1.2
1000	31	167	20.2	16.0	08	3.0
950	31	606	17.1	13.1	10	4.0
900	31	1,069	14.3	8.4	10	3.2
850	31	1,550	11.4	3.2	11	1.8
800	31	2,055	9.1	-2.7	10	.6
750	31	2,592	6.9	-8.8	33	.8
700	31	3,152	3.9	-13.6	32	2.5
650	31	3,750	.9	-16.9	30	4.1
600	31	4,391	-2.7	-19.7	29	6.1
550	31	5,070	-6.9	-22.5	29	7.5
500	31	5,814	-11.7	-28.1	28	9.4
450	31	6,608	-17.6	-33.1	28	11.3
400	31	7,485	-24.2	-38.5	26	12.9
350	31	8,445	-31.5	-43.9	29	16.8
300	31	9,518	-39.9	-49.6	29	18.6
250	31	10,739	-49.2		28	21.2
200	31	12,179	-55.3		28	28.1
175	31	13,027	-57.7		28	27.3
150	30	13,993	-62.0		28	24.7
125	30	15,109	-66.8		28	22.3
100	28	16,430	-71.0		28	18.0
80	28	17,751	-72.7		29	11.7
70	26	18,537	-71.3		29	7.9
60	25	19,455	-67.6		30	5.1
50	26	20,565	-63.2		31	4.8
40	25	21,956	-57.6		34	3.2
30	25	23,788	-53.4		31	2.0
25	23	24,963	-51.1		27	2.9
20	23	26,423	-47.9		28	6.4
15	21	28,331	-43.9		26	7.9
10	21	31,079	-39.1		26	17.6
7	11	33,562	-36.0			
5						

* MIDLAND, TEXAS — 915 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	874	9.4	2.1	18	2.1
1000	31	130				
950	31	563				
900	31	1,014	12.8	2.5	19	3.3
850	31	1,495	13.3	-.5	22	6.0
800	31	2,003	11.3	-4.9	24	6.3
750	31	2,538	8.4	-8.6	25	7.5
700	31	3,106	4.4	-11.7	25	8.8
650	31	3,702	.0	-15.3	25	10.3
600	31	4,340	-4.7	-19.4	25	12.5
550	31	5,015	-9.2	-24.1	25	14.8
500	31	5,749	-14.3	-27.9	25	16.2
450	31	6,536	-19.8	-33.5	26	17.8
400	31	7,405	-26.0	-38.7	26	20.6
350	31	8,358	-33.0	-44.6	26	22.3
300	31	9,423	-41.4	-49.3	26	24.1
250	31	10,634	-50.9		26	27.4
200	31	12,059	-58.4		26	31.7
175	31	12,897	-59.0		26	30.2
150	31	13,861	-60.7		26	30.7
125	30	14,984	-64.0		26	27.1
100	30	16,340	-66.9		26	21.8
80	29	17,684	-68.0		27	13.6
70	28	18,485	-68.0		26	11.0
60	27	19,418	-64.9		26	8.3
50	27	20,537	-61.9		28	3.7
40	27	21,928	-58.9		30	1.5
30	27	23,748	-55.6		31	1.1
25	27	24,913	-54.2		29	1.9
20	27	26,348	-52.5		29	2.6
15	26	28,222	-48.6		27	5.5
10	25	30,921	-42.6		27	9.9
7	23	33,355	-37.9		27	9.4
5	7	35,543	-38.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MONTERREY, MEXICO — 967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	423	14.7	12.9	36	.7
1000	30	135				
950	30	573	15.6	13.3	09	1.2
900	30	1,031	15.5	10.0	12	2.2
850	30	1,516	15.3	3.5	14	2.6
800	30	2,030	14.1	.0	19	2.1
750	30	2,566	10.7	-4.4	25	2.9
700	30	3,142	6.5	-7.7	26	3.5
650	30	3,743	2.4	-11.0	27	3.3
600	30	4,388	-2.3	-15.1	26	5.0
550	30	5,071	-6.7	-19.5	26	6.4
500	30	5,811	-11.6	-24.4	26	7.6
450	30	6,605	-17.3	-29.5	25	8.8
400	30	7,483	-23.7	-35.9	25	11.5
350	30	8,445	-31.1	-43.5	26	14.1
300	30	9,519	-39.6	-50.2	26	16.1
250	30	10,741	-49.2		26	21.0
200	30	12,177	-56.7		26	25.6
175	30	13,019	-59.2		25	26.6
150	30	13,977	-62.9		25	24.1
125	30	15,089	-66.9		25	18.7
100	30	16,421	-71.6		25	15.6
80	30	17,734	-72.9		25	9.8
70	29	18,522	-71.5		25	6.6
60	29	19,440	-68.3		27	4.0
50	29	20,548	-63.8		35	.7
40	28	21,933	-58.6		26	.2
30	28	23,765	-54.3		31	2.4
25	27	24,943	-52.1		30	3.0
20	26	26,403	-49.2		26	6.7
15	22	28,309	-45.7		26	10.0
10	15	31,063	-40.5		27	16.4
7						
5						

MONTGOMERY, ALA. — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	61	11.0	7.6	08	.2
1000	31	180	12.6	6.8	13	.8
950	31	612	11.9	4.5	22	2.4
900	31	1,063	10.7	1.2	25	3.5
850	31	1,539	9.2	-3.0	27	5.4
800	31	2,040	7.0	-4.5	26	5.8
750	31	2,569	4.8	-8.5	27	7.7
700	31	3,128	2.1	-13.0	27	8.4
650	31	3,719	-.9	-15.7	27	10.0
600	31	4,358	-5.2	-19.5	27	10.9
550	31	5,029	-9.5	-24.0	28	13.8
500	31	5,767	-14.2	-27.8	28	14.7
450	31	6,553	-19.8	-32.5	28	16.0
400	31	7,422	-26.2	-37.9	28	17.8
350	31	8,373	-33.8	-43.4	28	19.7
300	31	9,434	-42.3		28	22.1
250	31	10,642	-51.4		28	25.8
200	31	12,065	-57.5		28	30.3
175	31	12,907	-58.1		28	30.5
150	31	13,874	-60.0		28	29.0
125	30	15,001	-63.7		28	26.2
100	30	16,360	-66.3		28	22.1
80	30	17,707	-67.2		28	16.7
70	30	18,514	-66.0		28	12.8
60	30	19,452	-64.5		28	9.8
50	28	20,573	-60.9		29	7.5
40	28	21,972	-57.6		29	4.9
30	27	23,800	-54.2		30	4.0
25	26	24,972	-52.4		29	3.7
20	25	26,420	-50.4		29	3.6
15	24	28,310	-46.9		27	6.1
10	24	31,026	-41.6		27	8.7
7	23	33,468	-37.7		27	14.5
5	14	35,785	-35.0			

* NANTUCKET, MASS. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	14	-1.0	-3.4	35	2.4
1000	31	158	-.6	-5.2	33	2.4
950	31	562	-2.1	-8.0	34	4.4
900	31	996	-2.8	-10.4	32	4.4
850	31	1,449	-3.7	-12.4	30	5.8
800	31	1,927	-4.9	-13.5	29	8.7
750	31	2,431	-6.9	-15.9	28	11.5
700	31	2,969	-9.2	-17.8	28	13.6
650	31	3,533	-12.2	-20.3	28	14.9
600	31	4,147	-15.4	-23.1	28	17.0
550	31	4,793	-19.2	-27.1	28	18.8
500	31	5,503	-23.8	-31.5	28	21.4
450	31	6,257	-29.0	-36.9	28	23.5
400	31	7,097	-34.6	-41.8	28	25.7
350	31	8,018	-40.8	-45.8	28	29.2
300	31	9,054	-47.1		28	32.9
250	31	10,244	-53.1		28	34.9
200	31	11,670	-55.6		28	32.6
175	31	12,523	-54.3		28	31.1
150	31	13,513	-53.9		28	28.8
125	30	14,687	-55.2		28	26.4
100	30	16,107	-56.1		28	22.8
80	30	17,520	-57.4		28	17.9
70	30	18,363	-57.2		28	15.1
60	30	19,338	-56.5		28	13.3
50	30	20,496	-55.5		26	11.4
40	29	21,919	-54.8		27	8.9
30	27	23,773	-53.1		28	5.4
25	27	24,950	-52.1		28	4.6
20	27	26,394	-51.3		27	4.6
15	25	28,272	-48.8		28	6.0
10	24	30,961	-45.1		28	9.8
7	14	33,363	-41.0			
5	6	35,567	-38.0			

* NASHVILLE, TENN. — 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	180	8.3	4.2	22	.3
1000	31	170			04	1.1
950	31	596	9.3	2.2	23	6.4
900	31	1,043	8.0	-.7	25	9.4
850	31	1,513	5.6	-3.0	27	9.7
800	31	2,007	3.3	-5.5	27	10.4
750	31	2,528	.9	-10.4	27	11.1
700	31	3,081	-1.5	-13.5	27	12.6
650	31	3,666	-4.5	-17.2	27	14.1
600	31	4,295	-8.3	-19.6	27	15.8
550	31	4,963	-12.6	-23.7	27	17.4
500	31	5,686	-17.3	-28.3	28	20.0
450	31	6,467	-22.5	-33.3	28	23.1
400	31	7,323	-28.8	-39.3	28	25.3
350	31	8,264	-35.9	-45.2	28	27.4
300	31	9,317	-43.9		28	29.3
250	31	10,517	-52.6		29	31.0
200	31	11,936	-58.4		28	33.2
175	31	12,778	-57.9		28	32.4
150	31	13,749	-58.5		29	30.1
125	31	14,889	-60.7		28	27.1
100	31	16,269	-63.0		28	21.9
80	31	17,639	-63.2		28	16.7
70	31	18,461	-62.4		28	12.7
60	31	19,414	-61.2		29	9.7
50	30	20,550	-59.1		29	6.8
40	30	21,957	-56.5		30	5.7
30	30	23,793	-54.2		32	3.7
25	30	24,964	-53.1		31	2.6
20	28	26,406	-51.0		32	2.7
15	25	28,301	-47.2		29	2.7
10	25	31,013	-42.0		27	8.3
7	23	33,453	-37.4		28	15.6
5	9	35,824	-33.7			

NOME, ALASKA — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	27	5	-8.7	-11.1	10	1.4
1000	27	151	-7.1	-10.2	17	1.3
950	27	549	-6.9	-11.1	19	4.0
900	27	973	-7.1	-13.5	23	5.4
850	27	1,418	-8.5	-15.1	23	6.2
800	27	1,886	-10.5	-18.1	24	6.8
750	27	2,380	-12.9	-20.0	24	8.3
700	27	2,905	-16.0	-22.7	25	9.0
650	27	3,456	-19.4	-26.7	25	8.7
600	27	4,051	-23.1	-31.1	25	9.1
550	27	4,676	-27.1	-34.9	26	9.2
500	27	5,364	-31.4	-38.4	26	10.2
450	27	6,097	-36.0	-41.5	27	11.3
400	27	6,913	-41.2	-44.5	26	12.1
350	27	7,808	-47.1		27	15.2
300	27	8,817	-52.4		26	15.4
250	27	9,982	-57.3		26	17.0
200	27	11,386	-58.1		27	20.0
175	27	12,230	-56.2		27	22.0
150	27	13,211	-55.6		27	21.0
125	27	14,372	-55.3		27	22.4
100	27	15,796	-55.5		27	24.6
80	27	17,216	-55.8		27	25.4
70	27	18,065	-55.6		27	28.0
60	27	19,049	-55.1		27	29.0
50	27	20,215	-54.5		27	29.7
40	27	21,645	-54.1		27	29.4
30	27	23,489	-53.9		27	29.7
25	25	24,672	-53.3		27	32.8
20	21	26,130	-51.6		26	32.6
15	15	28,096	-48.5			
10	8	31,002	-40.9			
7						
5						

* NORTH PLATTE, NEBR. — 916 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	848	-1.9	-7.9	07	.7
1000	31	143				
950	31	555				
900	31	989	-.5	-7.1	01	.3
850	31	1,450	2.8	-7.5	25	4.1
800	31	1,941	2.1	-9.3	28	5.7
750	31	2,460	-.1	-11.8	28	7.2
700	31	3,010	-3.3	-14.3	27	9.3
650	31	3,592	-6.8	-17.9	27	12.8
600	31	4,214	-10.7	-20.9	27	14.7
550	31	4,873	-15.3	-25.7	26	17.0
500	31	5,591	-20.3	-30.3	27	19.4
450	31	6,355	-25.8	-34.9	26	22.9
400	31	7,206	-32.2	-41.1	26	26.0
350	31	8,135	-39.4	-46.5	26	29.2
300	31	9,174	-47.0		26	32.8
250	31	10,361	-54.6		27	35.5
200	31	11,774	-58.1		27	33.4
175	31	12,618	-56.8		27	31.5
150	31	13,597	-56.6		27	29.7
125	31	14,749	-58.2		27	26.5
100	31	16,148	-60.1		27	20.8
80	30	17,537	-60.6		27	15.3
70	30	18,369	-60.2		27	12.0
60	28	19,332	-59.3		28	9.2
50	27	20,476	-58.4		28	7.3
40	27	21,885	-56.8		30	4.8
30	27	23,715	-55.4		32	3.4
25	27	24,881	-54.4		34	2.6
20	26	26,317	-52.1		35	2.8
15	26	28,191	-49.5		35	3.1
10	23	30,881	-45.2		34	5.2
7	18	33,301	-40.5		33	7.1
5	6	35,564	-38.9			

* OAKLAND, CALIF. — 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	6	9.0	6.6	22	.8
1000	31	145	8.5	5.7	23	1.6
950	31	565	6.6	1.4	24	3.4
900	31	1,010	5.1	-4.1	25	4.4
850	31	1,475	2.8	-7.8	25	5.3
800	31	1,963	.3	-11.6	25	6.4
750	31	2,476	-2.1	-15.2	25	7.3
700	31	3,024	-5.1	-18.8	25	8.2
650	31	3,597	-8.5	-21.2	25	10.5
600	31	4,219	-12.4	-25.2	25	12.6
550	31	4,875	-16.8	-29.2	26	14.9
500	31	5,588	-21.6	-34.0	26	16.3
450	31	6,350	-26.8	-38.3	26	18.4
400	31	7,196	-33.0	-42.8	26	20.2
350	31	8,123	-39.8	-46.0	26	22.7
300	31	9,160	-46.9		26	23.9
250	31	10,349	-53.6		27	26.3
200	31	11,774	-55.6		27	25.9
175	29	12,621	-55.1		27	23.3
150	29	13,605	-55.6		26	21.3
125	29	14,761	-57.5		26	19.4
100	28	16,163	-59.3		26	14.4
80	28	17,557	-60.0		26	11.4
70	28	18,392	-59.4		26	9.2
60	27	19,358	-59.1		28	6.4
50	26	20,502	-58.9		29	3.1
40	26	21,907	-57.0		33	2.1
30	26	23,736	-55.3		36	2.2
25	26	24,902	-53.8		04	2.4
20	24	26,339	-51.9		05	2.5
15	22	28,213	-48.9		05	5.2
10	16	30,896	-44.0		36	3.1
7	13	33,305	-40.7		29	6.1
5						

OKLAHOMA CITY, OKLA. — 969 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	392	8.6	2.9	16	1.4
1000	31	129				
950	31	555	10.2	1.7	19	4.2
900	31	1,006	11.0	-.6	23	8.9
850	31	1,484	11.0	-3.9	24	9.7
800	31	1,987	8.7	-6.7	24	9.9
750	31	2,514	5.5	-9.8	25	10.3
700	31	3,079	1.8	-12.7	26	12.5
650	31	3,668	-2.2	-16.5	26	13.5
600	31	4,303	-6.9	-19.4	26	14.2
550	31	4,973	-10.9	-24.4	26	17.1
500	31	5,703	-15.8	-28.5	26	18.5
450	31	6,481	-21.3	-34.0	26	20.9
400	31	7,347	-27.9	-39.1	26	22.5
350	31	8,292	-35.1	-44.1	26	25.0
300	31	9,348	-43.4		26	28.1
250	31	10,549	-52.5		26	32.9
200	31	11,965	-58.9		27	34.8
175	31	12,802	-59.1		27	34.3
150	31	13,767	-59.5		27	32.2
125	30	14,904	-62.4		27	28.5
100	30	16,270	-65.0		27	24.0
80	29	17,625	-65.9		27	16.1
70	29	18,437	-64.5		27	12.2
60	28	19,382	-63.2		28	8.8
50	27	20,509	-60.9		29	4.1
40	27	21,907	-57.8		28	4.0
30	26	23,733	-55.6		33	2.7
25	25	24,899	-53.8		32	3.1
20	24	26,342	-51.8		31	1.7
15	23	28,217	-49.0		29	3.6
10	22	30,905	-44.0		29	5.2
7	8	33,286	-41.7			
5						

OMAHA, NEBR. — 969 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	403	.3	-3.1	10	.8
1000	31	148				
950	31	561	.9	-4.0	11	.6
900	31	997	2.6	-8.2	22	2.0
850	31	1,459	2.5	-10.4	26	5.0
800	31	1,949	1.7	-11.8	27	7.1
750	31	2,462	-.7	-12.4	27	8.7
700	31	3,015	-3.9	-14.8	27	11.0
650	31	3,590	-7.4	-18.3	27	14.0
600	31	4,215	-11.2	-21.4	27	16.2
550	31	4,871	-15.6	-25.6	27	17.8
500	31	5,590	-20.5	-30.8	27	20.3
450	31	6,354	-25.9	-35.5	27	22.9
400	31	7,205	-32.0	-40.8	27	26.0
350	31	8,134	-38.9	-45.1	27	29.6
300	31	9,174	-46.6		27	33.1
250	31	10,362	-54.7		27	36.3
200	31	11,771	-58.2		27	36.6
175	31	12,616	-56.3		27	33.9
150	31	13,595	-56.3		27	32.5
125	31	14,748	-58.3		27	27.6
100	30	16,145	-60.0		27	22.5
80	30	17,538	-60.1		28	16.2
70	30	18,371	-59.7		28	13.6
60	29	19,337	-59.0		28	11.0
50	28	20,484	-57.4		29	7.2
40	28	21,898	-55.8		29	6.6
30	25	23,735	-54.0		30	5.2
25	25	24,906	-53.4		30	4.9
20	24	26,346	-51.9		30	4.4
15	23	28,221	-49.8		30	5.1
10	21	30,886	-45.6		29	7.9
7	10	33,264	-44.0			
5						

+ PAGO PAGO, AMERICAN SAMOA — 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	30.3	24.3	09	3.9
1000	31	93	28.3	22.0	09	4.0
950	31	545	23.9	18.2	07	4.0
900	31	1,018	20.6	14.7	07	4.2
850	31	1,511	17.8	10.9	07	4.6
800	31	2,028	15.4	7.0	07	4.3
750	31	2,573	12.8	2.4	07	3.5
700	31	3,151	9.6	-1.5	07	3.4
650	31	3,761	6.1	-6.1	07	3.7
600	31	4,415	2.4	-10.0	07	3.8
550	31	5,108	-1.2	-15.1	06	3.5
500	31	5,869	-5.7	-20.3	06	2.5
450	31	6,684	-10.6	-25.8	08	2.4
400	31	7,585	-16.3	-30.6	10	1.9
350	31	8,577	-23.1	-37.1	14	2.1
300	31	9,687	-31.4	-45.0	14	2.5
250	31	10,951	-41.5		16	3.4
200	31	12,424	-53.9		17	5.5
175	31	13,266	-60.7		17	6.2
150	31	14,212	-67.3		16	7.0
125	31	15,294	-73.1		18	6.6
100	31	16,588	-76.1		15	4.7
80	31	17,892	-70.9		10	4.9
70	31	18,686	-68.8		09	5.6
60	31	19,616	-66.1		09	7.5
50	31	20,733	-61.5		09	7.4
40	31	22,129	-57.9		08	8.5
30	30	23,964	-52.7		09	10.3
25	30	25,149	-49.8		09	12.9
20	29	26,621	-46.5		09	15.5
15	25	28,551	-42.6		09	22.2
10	20	31,315	-36.2			
7						
5						

* PEORIA, ILL. — 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	200	1.2	-1.3	09	.6
1000	31	156				
950	31	571	2.3	-3.3	24	2.1
900	31	1,007	2.1	-7.2	27	4.6
850	31	1,468	1.7	-9.3	27	7.5
800	31	1,956	.2	-11.2	28	9.1
750	31	2,471	-1.5	-13.3	28	10.9
700	31	3,019	-4.3	-16.1	28	13.1
650	31	3,595	-7.8	-18.3	28	15.1
600	31	4,218	-11.8	-22.5	28	17.4
550	31	4,873	-16.1	-27.2	28	20.3
500	31	5,590	-20.9	-30.8	28	23.5
450	31	6,356	-26.1	-35.0	28	24.5
400	31	7,203	-31.9	-41.1	28	27.7
350	31	8,133	-39.2	-45.0	28	31.7
300	31	9,173	-46.9		28	35.3
250	31	10,359	-54.8		28	39.9
200	31	11,770	-58.0		28	38.6
175	31	12,612	-57.3		28	36.0
150	31	13,588	-57.5		28	32.2
125	31	14,737	-58.5		28	28.0
100	31	16,132	-60.8		28	22.6
80	31	17,519	-60.8		28	17.1
70	31	18,350	-60.0		28	14.8
60	31	19,314	-59.0		28	11.9
50	31	20,461	-57.7		29	8.3
40	31	21,873	-56.1		30	6.9
30	31	23,709	-54.4		31	5.3
25	31	24,880	-53.4		30	4.7
20	31	26,320	-52.1		31	4.7
15	30	28,192	-49.9		31	3.2
10	29	30,868	-45.3		29	7.8
7	25	33,266	-41.5		28	13.3
5	10	35,557	-37.4			
4						

* PITTSBURGH, PA. — 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	359	.7	-2.1	22	.8
1000	31	163				
950	31	577	1.6	-2.6	25	3.1
900	31	1,012	1.0	-4.9	28	7.2
850	31	1,470	-.5	-7.2	28	9.3
800	31	1,954	-2.4	-9.8	29	11.3
750	31	2,464	-4.6	-12.8	29	13.0
700	31	3,005	-7.3	-16.2	29	15.6
650	31	3,579	-10.2	-20.3	29	17.6
600	31	4,192	-13.5	-22.9	29	19.4
550	31	4,849	-17.6	-26.0	29	21.0
500	31	5,557	-22.1	-31.0	29	23.1
450	31	6,322	-27.4	-36.0	29	24.5
400	31	7,161	-33.3	-40.3	28	26.6
350	31	8,086	-39.8	-44.8	28	29.1
300	31	9,125	-46.4		28	32.2
250	31	10,317	-52.9		28	35.9
200	31	11,741	-56.4		28	32.9
175	31	12,590	-55.3		28	32.3
150	31	13,573	-55.9		28	31.3
125	31	14,728	-57.6		28	27.5
100	31	16,131	-58.6		29	22.4
80	31	17,532	-58.8		28	16.2
70	31	18,370	-58.2		29	13.5
60	31	19,339	-58.0		28	10.1
50	31	20,491	-56.7		29	9.1
40	31	21,912	-54.9		30	7.2
30	31	23,755	-53.6		29	5.7
25	31	24,931	-52.5		30	5.1
20	31	26,376	-51.5		31	4.7
15	29	28,253	-49.3		29	4.9
10	26	30,945	-44.4		29	8.7
7	21	33,350	-40.1		29	11.9
5	13	35,722	-36.1			
4	7	37,306	-32.7			

+ PONAPE, CAROLINE IS. — 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	39	28.2	24.3	08	3.6
1000	31	74	27.7	23.3	08	4.3
950	31	520	23.8	19.1	09	7.4
900	31	999	20.6	15.4	09	8.0
850	31	1,493	18.3	11.3	09	7.9
800	31	2,011	15.9	7.7	09	6.0
750	31	2,554	13.2	4.6	10	4.6
700	31	3,136	9.9	1.4	10	4.2
650	31	3,747	6.6	-3.5	10	3.7
600	31	4,403	3.1	-7.8	10	3.6
550	31	5,100	-.9	-12.5	11	3.6
500	31	5,860	-4.7	-18.4	11	4.9
450	31	6,683	-9.1	-24.5	09	6.5
400	31	7,587	-14.4	-30.2	07	6.7
350	31	8,586	-21.1	-36.6	07	6.0
300	31	9,706	-29.5	-44.6	08	3.9
250	31	10,981	-39.8	-53.0	08	2.7
200	31	12,465	-52.4		10	2.4
175	31	13,314	-59.5		10	2.2
150	31	14,262	-67.0		09	3.5
125	31	15,342	-74.8		07	6.7
100	31	16,615	-81.4		08	9.9
80	31	17,879	-75.7		02	.3
70	31	18,661	-69.8		26	6.0
60	30	19,588	-65.2		27	10.7
50	30	20,710	-60.7		27	12.3
40	30	22,111	-56.8		27	9.5
30	30	23,944	-53.9		27	6.7
25	30	25,120	-51.5		28	2.2
20	30	26,577	-48.6		11	3.6
15	30	28,476	-46.4		09	14.3
10	30	31,203	-40.3		09	27.4
7	14	33,635	-37.1			
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4						

PORTLAND, MAINE — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	20	-5.5	-10.9	35	1.8
1000	31	168	-4.4	-11.6	35	3.2
950	31	571	-5.3	-11.9	35	4.0
900	31	996	-6.7	-12.6	34	4.3
850	31	1,441	-7.7	-14.5	32	5.5
800	31	1,912	-8.4	-16.6	30	7.1
750	31	2,410	-10.0	-18.1	29	9.3
700	31	2,943	-12.0	-19.3	29	11.1
650	31	3,505	-15.0	-21.3	28	13.6
600	31	4,110	-18.1	-24.7	28	16.8
550	31	4,749	-21.6	-27.8	28	18.3
500	31	5,452	-26.3	-32.1	28	20.5
450	31	6,199	-31.5	-37.7	28	23.5
400	31	7,031	-36.9	-42.5	28	23.3
350	31	7,944	-42.9	-43.8	28	25.6
300	31	8,970	-48.9		28	29.3
250	31	10,154	-53.6		28	30.7
200	30	11,578	-54.4		28	28.0
175	30	12,436	-53.4		29	25.5
150	30	13,430	-52.7		28	23.4
125	30	14,605	-53.8		28	21.2
100	30	16,035	-55.1		28	18.6
80	30	17,456	-55.9		28	18.1
70	30	18,304	-55.9		28	15.5
60	30	19,286	-55.4		28	13.5
50	30	20,448	-55.2		27	12.1
40	30	21,874	-54.3		27	10.5
30	28	23,716	-53.2		27	9.1
25	26	24,893	-52.8		27	8.4
20	25	26,334	-52.1		27	8.1
15	25	28,202	-50.0		27	10.5
10	20	30,866	-46.9		28	12.3
7	16	33,257	-42.7		27	19.5
5	14	35,568	-38.8			
4						

* QUILLAYUTE, WASH. — 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	58	2.6	2.0	13	1.8
1000	31	99			11	1.8
950	31	515	1.8	-.6	16	5.9
900	31	949	-.4	-4.1	18	7.2
850	31	1,404	-3.2	-7.5	20	7.6
800	31	1,882	-5.9	-10.5	21	7.2
750	30	2,390	-8.9	-14.1	23	7.5
700	30	2,920	-12.3	-19.5	23	8.3
650	30	3,483	-16.0	-23.3	23	9.1
600	30	4,081	-20.3	-28.8	24	9.8
550	30	4,718	-24.7	-33.1	25	10.7
500	30	5,407	-29.6	-38.1	25	12.3
450	30	6,145	-34.9	-40.9	25	14.6
400	30	6,962	-40.5	-44.1	25	16.4
350	30	7,862	-45.7		26	17.0
300	30	8,878	-50.3		26	17.8
250	30	10,059	-52.6		26	18.0
200	30	11,503	-51.4		27	12.6
175	30	12,372	-50.6		27	12.7
150	29	13,375	-51.0		27	13.4
125	29	14,558	-52.1		27	11.9
100	29	15,999	-53.6		28	10.4
80	29	17,431	-54.5		28	9.3
70	29	18,284	-54.7		28	8.7
60	29	19,269	-54.5		28	8.9
50	29	20,439	-53.6		28	7.5
40	28	21,876	-53.7		31	5.4
30	25	23,744	-53.0		35	4.2
25	25	24,922	-52.3		01	4.4
20	24	26,377	-50.9		02	5.6
15	21	28,270	-49.1		02	8.9
10	18	30,942	-45.8		06	15.5
7	8	33,547	-42.9			
5						
4						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MARCH 1967

RAPID CITY, S. DAK. — 901 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	966	-1.4	-6.2	33	.8
1000	31	130				
950	31	540				
900	31	977			35	1.1
850	31	1,436	1.1	-8.2	27	3.7
800	31	1,923	-.3	-10.3	28	6.1
750	31	2,433	-2.8	-12.6	27	8.8
700	31	2,981	-6.2	-15.6	27	11.0
650	31	3,551	-10.3	-18.9	27	12.5
600	31	4,167	-14.4	-23.1	26	14.6
550	31	4,816	-18.6	-27.5	27	17.5
500	31	5,525	-23.4	-31.4	27	21.2
450	31	6,279	-28.8	-37.0	26	24.5
400	31	7,120	-34.9	-42.2	26	27.5
350	31	8,039	-41.8	-45.7	27	30.5
300	31	9,067	-48.8		27	33.8
250	31	10,248	-55.0		27	33.6
200	31	11,667	-56.1		27	32.3
175	31	12,517	-55.1		27	30.1
150	31	13,503	-55.1		27	26.9
125	31	14,663	-56.5		27	24.6
100	31	16,077	-57.7		27	20.4
80	30	17,482	-57.7		27	16.8
70	30	18,322	-58.2		28	12.6
60	29	19,292	-58.0		28	9.7
50	28	20,445	-57.0		29	8.1
40	27	21,862	-56.0		29	6.6
30	27	23,698	-54.5		31	5.4
25	25	24,870	-54.2		30	4.6
20	24	26,306	-52.3		30	4.4
15	20	28,164	-51.1		30	5.4
10	14	30,836	-47.4			
7	8	33,191	-44.0			
5						

ST CLOUD, MINN. — 980 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	316	-5.9	-9.6	09	.2
1000	31	151				
950	31	556	-4.9	-8.8	24	.2
900	31	981	-3.6	-11.4	25	3.3
850	31	1,433	-3.6	-12.7	27	5.9
800	31	1,911	-4.5	-14.2	28	8.6
750	31	2,415	-6.2	-17.1	28	11.7
700	31	2,956	-9.0	-18.8	28	14.0
650	31	3,520	-12.6	-21.8	28	15.8
600	31	4,133	-16.4	-24.7	28	18.2
550	31	4,778	-20.6	-28.1	28	20.8
500	31	5,481	-25.0	-32.6	28	24.6
450	31	6,233	-30.2	-37.3	28	27.6
400	31	7,067	-36.0	-41.7	28	30.5
350	31	7,980	-42.8	-45.1	28	32.3
300	31	9,005	-49.4		28	34.4
250	31	10,184	-54.8		28	37.2
200	31	11,602	-56.1		28	34.5
175	31	12,453	-54.8		28	33.0
150	31	13,440	-54.4		28	29.1
125	31	14,607	-55.1		28	25.7
100	31	16,026	-56.2		28	22.9
80	31	17,440	-56.6		28	19.3
70	31	18,285	-56.6		29	15.8
60	31	19,263	-56.4		29	13.9
50	31	20,420	-56.0		29	13.1
40	31	21,843	-54.7		30	10.6
30	31	23,687	-53.6		30	8.4
25	31	24,861	-52.8		31	7.9
20	30	26,305	-51.7		30	7.4
15	30	28,174	-50.6		30	8.7
10	30	30,834	-47.2		30	11.5
7	13	33,198	-45.0			
5						

ST PAUL IS., ALASKA — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	10	.6	-1.8	19	4.4
1000	30	125			16	5.6
950	30	534	-.8	-6.1	19	7.8
900	30	967	-2.4	-8.1	19	8.9
850	30	1,419	-4.2	-11.3	20	9.7
800	30	1,896	-6.3	-14.9	20	10.4
750	30	2,397	-9.0	-17.7	20	10.7
700	30	2,930	-11.8	-21.0	21	11.4
650	30	3,490	-15.1	-24.9	21	11.4
600	30	4,095	-18.7	-28.6	21	11.9
550	30	4,732	-22.8	-32.2	21	12.5
500	30	5,433	-27.2	-36.0	21	15.2
450	30	6,181	-32.3	-39.4	21	16.2
400	29	7,021	-37.7	-45.1	21	17.9
350	28	7,943	-43.7		21	18.2
300	28	8,964	-50.2		22	19.0
250	28	10,138	-56.0		23	18.0
200	28	11,550	-56.6		22	17.9
175	27	12,401	-54.0		22	16.6
150	26	13,396	-53.3		23	16.0
125	25	14,572	-53.2		23	14.7
100	25	16,008	-53.4		23	14.5
80	25	17,444	-53.3		24	13.8
70	25	18,303	-52.8		24	13.6
60	25	19,298	-52.4		24	14.0
50	25	20,478	-51.8		24	13.3
40	25	21,925	-51.4		24	13.5
30	24	23,791	-51.4		24	14.1
25	24	24,976	-50.9		24	14.3
20	22	26,421	-50.2		24	14.6
15	21	28,296	-49.1		24	15.2
10	18	31,020	-45.7		24	17.3
7	13	33,323	-45.6			
5	6	35,650	-42.9			

SALEM, OREG. — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	61	3.2	1.3	18	3.1
1000	31	121			18	2.6
950	31	539	2.8	-.5	20	6.4
900	31	974	.2	-3.0	21	8.1
850	31	1,430	-2.4	-6.5	22	9.1
800	31	1,909	-5.1	-9.7	23	9.8
750	31	2,410	-8.2	-13.7	24	10.3
700	31	2,946	-11.3	-18.7	24	10.5
650	31	3,503	-14.7	-21.7	25	11.3
600	31	4,112	-18.7	-25.5	25	12.4
550	31	4,750	-22.9	-29.9	26	13.5
500	31	5,447	-27.4	-35.1	26	15.2
450	31	6,192	-32.6	-39.9	26	16.1
400	31	7,017	-38.3	-42.4	26	18.4
350	31	7,924	-44.2	-46.4	26	19.6
300	31	8,944	-49.7		26	20.0
250	31	10,127	-52.9		27	18.4
200	31	11,565	-52.8		27	17.5
175	31	12,428	-51.9		27	17.2
150	31	13,426	-52.2		27	15.2
125	31	14,602	-53.5		27	14.6
100	31	16,035	-54.0		27	12.5
80	31	17,461	-55.9		27	9.4
70	31	18,309	-55.8		28	8.3
60	30	19,288	-55.5		28	7.1
50	30	20,449	-55.4		29	5.2
40	30	21,875	-54.3		32	3.0
30	30	23,721	-54.1		35	3.6
25	30	24,892	-53.2		01	3.9
20	29	26,338	-51.9		03	6.5
15	25	28,219	-49.3		03	5.2
10	20	30,881	-45.7		01	8.5
7	7	33,281	-42.3			
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SALT LAKE CITY, UTAH — 869 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,288	3.4	-3.9	16	3.9
1000	31	129				
950	31	552				
900	31	999				
850	31	1,464	4.6	-6.4	17	5.7
800	31	1,956	2.2	-8.7	19	6.9
750	31	2,475	-1.4	-11.1	22	6.8
700	31	3,021	-5.4	-14.6	25	8.6
650	31	3,597	-9.4	-19.1	25	11.1
600	31	4,212	-13.6	-22.7	26	12.8
550	31	4,865	-17.8	-27.3	26	15.5
500	31	5,576	-22.5	-32.3	26	18.0
450	31	6,336	-27.8	-36.8	26	20.8
400	31	7,179	-33.4	-41.8	26	23.4
350	30	8,107	-40.0	-44.7	26	25.2
300	30	9,142	-48.0		26	29.2
250	30	10,322	-55.5		26	32.3
200	30	11,735	-56.6		26	31.6
175	30	12,585	-55.0		26	28.0
150	30	13,570	-55.5		26	25.1
125	29	14,720	-57.5		26	21.4
100	28	16,121	-59.9		26	18.7
80	28	17,515	-59.6		26	13.2
70	28	18,348	-60.3		26	10.6
60	28	19,313	-59.3		27	8.4
50	28	20,456	-58.5		27	6.3
40	28	21,863	-57.1		29	4.5
30	27	23,690	-55.5		34	2.7
25	26	24,855	-54.6		02	2.5
20	21	26,287	-52.7		02	3.3
15	18	28,150	-50.0		02	6.1
10	10	30,837	-45.6			
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SAN DIEGO, CALIF. — 1002 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	124	10.8	8.8	11	.5
1000	31	139			10	.7
950	31	570	10.5	5.2	28	1.6
900	31	1,018	9.5	-.7	28	2.4
850	31	1,491	7.5	-4.2	27	4.0
800	31	1,989	5.4	-7.2	26	5.7
750	31	2,514	3.3	-12.7	26	8.1
700	31	3,071	1.0	-15.3	26	9.9
650	31	3,658	-2.4	-18.4	26	12.1
600	31	4,294	-6.5	-21.6	25	13.3
550	31	4,963	-11.4	-24.2	25	15.5
500	31	5,693	-16.2	-28.2	25	17.2
450	31	6,471	-21.8	-32.1	25	19.0
400	31	7,335	-28.1	-37.7	25	20.3
350	30	8,283	-35.1	-44.0	26	22.7
300	30	9,341	-43.1		26	25.8
250	30	10,545	-52.3		26	28.9
200	30	11,964	-58.2		25	30.6
175	30	12,804	-58.0		26	29.9
150	30	13,773	-59.4		25	29.1
125	30	14,911	-60.7		26	23.6
100	30	16,291	-63.1		26	20.1
80	30	17,660	-63.5		26	13.9
70	30	18,480	-62.4		26	10.2
60	30	19,430	-62.7		26	7.2
50	30	20,557	-61.1		28	4.7
40	30	21,951	-58.5		30	1.8
30	30	23,770	-55.9		01	.8
25	29	24,934	-54.4		04	1.0
20	29	26,372	-51.7		02	1.0
15	26	28,250	-48.6		35	1.0
10	25	30,940	-43.9		30	1.8
7	21	33,353	-40.4		29	3.9
5	17	35,666	-37.3			

*** SAN JUAN, P. R. — 1016 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	6	22.1	18.2	10	1.8
1000	31	147	21.9	17.2	09	4.5
950	31	590	18.5	14.7	07	6.6
900	31	1,053	15.0	11.1	07	6.2
850	31	1,536	12.0	7.1	07	6.0
800	31	2,042	9.7	.5	07	4.8
750	31	2,574	8.6	-7.9	06	4.5
700	31	3,145	6.6	-13.0	04	3.0
650	31	3,744	4.0	-16.3	03	2.0
600	31	4,397	.4	-20.9	35	1.8
550	31	5,079	-3.9	-24.3	31	3.1
500	31	5,834	-8.8	-28.5	29	5.1
450	31	6,638	-14.2	-33.0	29	7.9
400	31	7,526	-20.6	-38.3	28	10.3
350	31	8,499	-27.7	-44.0	28	14.5
300	31	9,591	-34.6	-49.7	27	20.3
250	31	10,843	-43.1		26	26.9
200	31	12,311	-54.0		26	27.1
175	31	13,157	-59.8		26	24.7
150	29	14,112	-64.4		27	18.9
125	29	15,213	-69.6		28	15.6
100	28	16,528	-74.1		28	11.1
80	24	17,817	-75.3		29	7.3
70	23	18,596	-72.6		30	5.2
60	23	19,510	-67.3		30	4.5
50	23	20,627	-60.6		31	3.1
40	22	22,029	-57.1		36	2.1
30	21	23,872	-51.6		05	3.3
25	21	25,061	-48.8		07	3.6
20	19	26,533	-46.1		09	6.0
15	17	28,461	-42.7		11	6.9
10	14	31,218	-38.8		10	7.8
7	11	33,686	-33.2		09	8.0
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SAN NICOLAS, CALIF. — 996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	174	10.5	7.9	30	4.5
1000	31	142				
950	31	572	11.3	.3	30	5.2
900	31	1,022	9.6	-5.8	29	4.6
850	31	1,494	7.3	-8.5	27	4.7
800	31	1,991	4.8	-11.2	27	6.0
750	31	2,514	2.2	-15.9	27	8.0
700	31	3,069	.0	-19.2	27	9.7
650	31	3,659	-3.4	-22.0	26	11.5
600	31	4,287	-7.6	-24.2	26	13.3
550	31	4,958	-12.4	-27.4	26	15.0
500	31	5,679	-17.3	-31.5	26	17.3
450	31	6,460	-22.9	-36.6	26	19.2
400	31	7,313	-29.1	-42.1	26	21.4
350	31	8,254	-36.4	-47.0	26	24.3
300	31	9,305	-44.5	-53.9	26	28.9
250	31	10,502	-53.2	-62.1	26	30.6
200	31	11,920	-57.5	-67.1	26	29.9
175	31	12,763	-57.3	-68.3	26	28.8
150	31	13,736	-58.6	-69.7	25	25.2
125	30	14,877	-60.6		26	22.8
100	30	16,257	-62.9		26	15.6
80	28	17,628	-62.9		26	13.5
70	26	18,452	-62.4		26	8.4
60	28	19,405	-61.8		26	6.3
50	28	20,537	-60.6		26	4.9
40	27	21,933	-58.4		30	.9
30	26	23,760	-55.5		04	2.0
25	25	24,925	-53.9		07	1.5
20	25	26,366	-51.7		05	1.3
15	23	28,246	-48.7		28	4.1
10	15	30,932	-44.4		34	4.2
7	5	33,335	-39.6			
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*** SAULT STE MARIE, MICH. — 992 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	221	-9.0	-12.6	08	1.0
1000	31	159				
950	31	558	-6.2	-9.9	23	1.5
900	31	981	-7.0	-12.5	27	4.7
850	31	1,427	-7.9	-14.1	28	7.5
800	31	1,898	-8.8	-15.6	28	10.3
750	31	2,395	-10.5	-17.5	28	11.6
700	31	2,925	-12.9	-20.2	28	14.1
650	31	3,486	-15.6	-23.3	28	15.4
600	31	4,088	-18.6	-27.2	28	17.7
550	31	4,727	-22.4	-30.6	28	20.5
500	31	5,425	-27.0	-34.5	28	23.3
450	31	6,170	-32.0	-38.4	28	26.5
400	31	6,999	-37.6	-43.0	28	29.1
350	31	7,907	-44.3	-45.4	28	31.7
300	31	8,925	-50.4		28	33.4
250	31	10,102	-54.2		28	35.2
200	31	11,526	-55.2		28	34.0
175	31	12,382	-53.7		28	32.0
150	31	13,374	-53.2		28	30.6
125	31	14,547	-53.8		28	27.7
100	31	15,974	-55.1		28	24.9
80	31	17,400	-54.9		28	21.2
70	31	18,252	-54.9		28	20.1
60	31	19,239	-54.2		28	18.2
50	31	20,409	-53.9		29	14.7
40	31	21,842	-53.3		29	13.3
30	30	23,696	-52.5		29	10.8
25	30	24,874	-52.2		29	11.1
20	29	26,321	-51.3		30	10.3
15	26	28,196	-49.3		30	10.8
10	25	30,867	-46.6		30	12.1
7	23	33,259	-42.5		29	12.4
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SHEMYA, ALASKA — 1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	38	.4	-1.6	21	4.5
1000	29	36			18	5.9
950	29	447	-2.3	-4.1	20	6.9
900	29	874	-4.7	-6.9	21	6.2
850	29	1,323	-6.7	-10.1	21	6.9
800	29	1,795	-9.3	-14.1	21	8.0
750	29	2,292	-11.7	-18.5	22	10.1
700	29	2,818	-14.3	-22.4	21	10.4
650	29	3,376	-17.3	-25.3	21	11.9
600	29	3,974	-20.7	-28.6	21	12.6
550	29	4,611	-24.7	-31.6	21	13.7
500	29	5,301	-29.1	-35.6	20	14.1
450	29	6,042	-34.0	-37.3	19	16.5
400	29	6,864	-39.5	-42.1	18	19.2
350	29	7,767	-45.1		19	16.9
300	29	8,786	-49.9		20	16.0
250	29	9,968	-53.3		21	18.5
200	29	11,408	-52.1		21	15.8
175	28	12,280	-51.0		20	16.2
150	28	13,284	-50.8		21	16.1
125	28	14,471	-50.6		21	15.7
100	28	15,923	-51.5		21	14.6
80	28	17,368	-52.1		22	14.1
70	28	18,232	-51.9		22	13.6
60	28	19,232	-51.8		22	11.4
50	28	20,413	-51.9		22	12.1
40	28	21,859	-51.7		22	13.0
30	26	23,711	-52.5		22	12.2
25	26	24,887	-52.8		23	11.6
20	25	26,331	-52.7		23	10.0
15	18	28,197	-51.5		24	8.8
10	10	30,798	-49.5			
7	7	33,180	-48.1			
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*** SHREVEPORT, LA. — 1009 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	79	11.7	9.2	16	1.7
1000	31	153	13.0	8.0	17	3.4
950	31	590	13.1	4.5	20	7.1
900	31	1,040	12.5	1.1	22	7.9
850	30	1,518	10.9	-3.2	24	7.5
800	30	2,022	8.8	-6.9	25	7.4
750	30	2,551	6.2	-10.5	26	7.4
700	30	3,116	2.7	-13.0	27	7.8
650	30	3,711	-.4	-16.2	26	9.7
600	30	4,347	-4.8	-19.5	27	11.1
550	29	5,022	-9.3	-22.8	27	12.4
500	29	5,757	-14.2	-28.2	27	14.4
450	29	6,543	-19.8	-34.6	27	16.5
400	29	7,413	-26.1	-40.4	27	18.5
350	29	8,365	-33.3	-45.3	27	22.2
300	29	9,429	-41.7	-50.6	27	26.0
250	29	10,639	-51.1		27	30.0
200	29	12,062	-58.3		28	31.2
175	29	12,901	-58.9		27	31.8
150	29	13,863	-61.0		27	30.3
125	29	14,987	-64.6		27	28.1
100	29	16,339	-67.3		27	22.2
80	28	17,684	-67.7		27	16.4
70	28	18,488	-66.8		27	15.0
60	28	19,424	-64.5		28	9.1
50	28	20,545	-61.3		30	4.0
40	28	21,941	-57.8		30	2.7
30	27	23,763	-55.2		32	3.1
25	26	24,930	-53.5		29	2.1
20	25	26,373	-51.1		30	3.5
15	23	28,254	-47.5		29	5.2
10	20	30,950	-42.2		27	8.6
7	18	33,392	-36.6		27	14.8
5	9	35,681	-33.8			

SPOKANE, WASH. — 928 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	717	.0	-3.2	18	2.7
1000	31	114				
950	31	528				
900	31	964	.4	-5.3	20	5.0
850	31	1,422	-1.5	-8.6	23	6.6
800	31	1,903	-4.8	-11.1	24	7.3
750	31	2,407	-8.3	-14.0	24	8.0
700	31	2,940	-12.1	-17.4	24	9.3
650	31	3,498	-15.5	-22.2	25	10.4
600	31	4,103	-19.4	-25.9	25	12.0
550	31	4,743	-23.3	-30.5	25	13.7
500	31	5,436	-28.0	-35.2	26	15.7
450	31	6,180	-33.3	-39.8	26	17.6
400	31	7,003	-39.3	-44.1	26	20.4
350	31	7,904	-46.0		26	21.0
300	31	8,919	-50.9		26	23.6
250	31	10,095	-54.4		26	24.0
200	31	11,530	-52.1		26	22.6
175	31	12,398	-50.7		27	20.9
150	31	13,401	-51.4		27	18.3
125	31	14,583	-52.3		27	17.0
100	31	16,020	-54.0		27	14.5
80	30	17,454	-54.1		27	12.9
70	30	18,309	-54.4		27	11.2
60	30	19,294	-54.6		28	10.3
50	30	20,462	-54.3		29	8.2
40	30	21,894	-53.6		30	6.0
30	30	23,745	-53.1		32	6.1
25	30	24,922	-52.3		32	5.9
20	30	26,367	-51.7		33	6.4
15	28	28,234	-49.9		34	7.0
10	23	30,909	-46.9		33	8.3
7	14	33,305	-44.3		32	11.1
5	11	35,473	-44.7			

SWAN ISLAND, W. I. — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	10	24.2	20.3	07	3.6
1000	31	132	23.3	19.8	07	5.1
950	31	580	19.7	17.5	08	6.5
900	31	1,043	17.2	11.7	09	6.9
850	31	1,529	14.1	7.6	09	6.2
800	31	2,038	10.8	4.0	09	5.3
750	31	2,578	9.0	-4.7	08	4.7
700	31	3,144	6.8	-9.8	08	4.7
650	31	3,751	4.4	-14.5	07	4.1
600	31	4,399	1.5	-18.4	06	3.2
550	31	5,090	-2.6	-22.7	05	1.7
500	31	5,844	-7.6	-27.5	34	1.0
450	31	6,651	-13.5	-32.2	30	2.1
400	31	7,541	-20.3	-37.4	28	3.5
350	31	8,516	-27.5	-43.0	29	6.5
300	31	9,607	-35.7	-49.8	28	10.7
250	31	10,841	-44.9		28	15.1
200	31	12,309	-54.6		27	15.9
175	31	13,154	-59.4		28	17.2
150	31	14,108	-64.4		27	13.9
125	31	15,208	-70.2		27	10.1
100	31	16,516	-75.3		28	4.2
80	30	17,806	-76.0		01	2.0
70	30	18,578	-74.3		03	1.6
60	28	19,484	-69.5		34	1.5
50	27	20,587	-62.8		32	2.3
40	26	21,980	-57.3		36	2.4
30	26	23,820	-52.1		06	3.8
25	24	25,006	-49.3		08	5.1
20	24	26,479	-46.7		09	5.5
15	18	28,415	-42.9		10	9.0
10	9	31,179	-40.5			
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TAMPA, FLA. — 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	8	15.8	14.1	08	2.0
1000	31	174	17.0	13.9	09	3.4
950	31	612	16.1	9.9	13	3.5
900	31	1,071	13.9	6.7	17	1.8
850	31	1,552	11.4	2.1	23	1.4
800	31	2,057	9.1	-3.3	27	1.6
750	31	2,592	6.7	-6.5	28	2.3
700	30	3,153	3.5	-10.7	29	3.8
650	30	3,747	.1	-14.4	29	5.2
600	30	4,389	-3.3	-18.4	28	6.8
550	30	5,066	-7.4	-22.8	29	8.4
500	30	5,810	-12.1	-27.4	29	10.5
450	30	6,603	-17.9	-31.8	29	12.5
400	30	7,478	-24.4	-37.8	29	14.4
350	30	8,436	-31.8	-43.9	29	16.5
300	30	9,508	-39.9	-51.1	29	20.5
250	30	10,729	-48.9		29	23.6
200	29	12,164	-55.3		29	28.5
175	29	13,014	-57.4		29	29.3
150	29	13,979	-60.7		28	28.7
125	29	15,102	-64.6		28	25.0
100	29	16,450	-68.6		28	20.3
80	29	17,780	-70.2		29	13.6
70	29	18,573	-69.4		29	10.4
60	29	19,499	-66.7		29	6.8
50	29	20,611	-62.8		31	4.5
40	29	22,002	-57.9		32	4.7
30	29	23,834	-53.7		31	2.5
25	28	25,010	-51.3		29	4.0
20	27	26,469	-48.4		28	6.1
15	26	28,370	-45.2		27	10.6
10	23	31,122	-38.7		27	17.7
7	5	33,586	-35.9			
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TOPEKA, KANS. — 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	269	3.8	-1.7	08	1.2
1000	31	145				
950	31	563	4.7	-1.6	16	1.2
900	31	1,005	5.4	-4.4	22	2.5
850	31	1,473	6.0	-8.1	25	6.0
800	31	1,969	4.3	-9.2	26	7.3
750	31	2,490	1.8	-11.1	27	9.0
700	31	3,046	-1.4	-12.9	27	11.1
650	31	3,625	-5.0	-16.8	27	12.6
600	31	4,257	-8.9	-21.5	27	15.0
550	31	4,919	-13.3	-25.5	27	17.4
500	31	5,645	-18.3	-30.1	27	19.7
450	31	6,415	-23.8	-33.6	27	23.0
400	31	7,274	-30.1	-38.6	27	25.3
350	31	8,212	-37.2	-44.6	27	28.8
300	31	9,259	-45.3		27	32.4
250	31	10,452	-54.0		27	36.6
200	31	11,862	-59.6		27	35.8
175	31	12,700	-58.3		27	34.6
150	31	13,673	-58.0		27	31.1
125	30	14,812	-60.2		28	26.8
100	30	16,197	-62.1		27	22.1
80	30	17,576	-62.2		28	16.4
70	30	18,401	-61.7		28	12.9
60	30	19,359	-60.3		28	11.4
50	30	20,501	-58.7		30	6.4
40	30	21,909	-56.6		30	4.6
30	29	23,744	-54.5		31	3.7
25	29	24,914	-53.5		30	4.3
20	27	26,361	-51.9		32	2.8
15	26	28,237	-48.9		29	3.9
10	24	30,918	-44.8		30	7.2
7	15	33,298	-42.6		28	13.8
5	10	35,589	-40.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

+ TRUK, CAROLINE IS. — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	2	27.9	24.1	07	3.6
1000	31	85	27.0	22.4	07	4.4
950	31	532	23.3	18.1	08	6.6
900	31	1,009	20.5	14.7	08	6.6
850	31	1,502	17.8	11.3	09	5.0
800	31	2,019	15.2	8.0	09	3.9
750	31	2,565	12.6	4.5	[illegible]	3.2
700	31	3,142	9.9	.5	10	2.7
650	31	3,752	6.6	-3.6	10	2.8
600	30	4,408	3.1	-8.8	10	3.5
550	30	5,102	-.7	-14.5	10	3.9
500	30	5,866	-4.7	-19.6	09	4.9
450	30	6,686	-9.1	-25.0	10	5.9
400	30	7,593	-14.7	-30.7	09	7.8
350	30	8,590	-21.6	-37.[illegible]	08	8.1
300	30	9,708	-29.8	-44.5	09	6.9
250	30	10,981	-40.1	-53.[illegible]	11	5.8
200	30	12,464	-52.4		12	6.7
175	30	13,313	-59.6		12	7.5
150	30	14,259	-67.5		12	8.9
125	30	15,335	-75.5		10	10.2
100	30	16,603	-81.6		09	12.4
80	30	17,87[illegible]	-75.3		10	2.9
70	29	18,655	-70.2		27	4.8
60	29	19,580	-65.8		28	9.4
50	29	20,698	-61.4		27	10.4
40	29	22,096	-57.0		28	9.3
30	29	23,[illegible]31	-54.1		28	5.9
25	29	25,106	-51.8		26	1.7
20	28	26,567	-48.5		11	4.1
15	28	28,466	-47.2		10	12.4
10	26	31,180	-41.1		10	23.6
7	17	33,610	-36.4		10	30.1
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* TUCSON, ARIZ. — 925 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	789	10.0	-4.8	15	2.7
1000	31	128				
950	31	559				
900	31	1,015	14.5	-3.6	18	2.5
850	31	1,496	12.1	-6.0	21	2.7
800	31	2,000	9.1	-9.2	22	5.2
750	31	2,527	5.6	-11.6	23	7.3
700	31	3,093	2.4	-14.7	24	8.4
650	31	3,682	-1.2	-17.8	25	9.6
600	31	4,321	-5.7	-20.3	25	12.1
550	31	4,990	-10.4	-24.9	25	14.7
500	31	5,725	-15.5	-28.5	25	17.2
450	31	6,504	-21.0	-32.9	25	19.8
400	31	7,372	-27.5	-37.6	25	23.1
350	31	8,320	-34.4	-43.7	25	24.9
300	31	9,379	-42.6		25	27.7
250	31	10,586	-51.7		26	33.2
200	31	12,008	-57.6		26	34.8
175	31	12,85[illegible]	-58.0		26	32.1
150	31	13,819	-59.4		25	29.3
125	31	14,951	-62.5		25	26.2
100	31	16,319	-65.0		25	21.3
80	29	17,675	-65.9		26	16.4
70	29	18,484	-65.4		26	12.3
60	28	19,422	-64.3		26	9.7
50	27	20,543	-62.4		28	5.7
40	27	21,93[illegible]	-59.0		29	2.4
30	26	23,752	-56.0		04	1.5
25	26	24,916	-54.4		34	.9
20	26	26,352	-52.4		35	1.1
15	25	28,224	-49.1		30	1.2
10	25	30,921	-44.3		28	3.1
7	22	33,339	-39.5		28	4.7
5	6	35,627	-36.6			

* VANDENBERG AFB, CALIF. — 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	100	8.6	6.9	04	.2
1000	31	145	9.0	6.6	01	.8
950	31	570	8.7	2.7	32	2.3
900	31	1,017	7.3	-1.0	30	2.4
850	31	1,486	5.0	-5.4	28	3.4
800	31	1,978	2.9	-9.9	27	5.3
750	31	2,499	.6	-13.7	27	7.5
700	31	3,050	-2.1	-17.8	26	9.8
650	31	3,632	-5.2	-20.2	26	12.3
600	31	4,260	-8.9	-23.3	26	15.2
550	31	4,921	-13.2	-26.9	26	16.1
500	31	5,648	-18.2	-31.3	26	18.1
450	31	6,415	-23.9	-35.8	26	19.6
400	31	7,276	-30.1	-41.6	26	22.4
350	31	8,212	-37.3	-46.2	26	23.5
300	31	9,258	-45.4		26	26.3
250	31	10,452	-53.4		26	30.3
200	31	11,871	-57.0		26	29.0
175	31	12,716	-57.2		26	26.8
150	31	13,692	-57.3		26	24.7
125	30	14,832	-59.9		26	20.7
100	30	16,219	-61.7		26	16.4
80	30	17,597	-62.3		26	13.0
70	30	18,421	-61.9		26	10.5
60	30	19,376	-60.6		27	6.9
50	30	20,511	-60.1		28	4.3
40	30	21,909	-58.2		33	1.8
30	28	23,726	-56.1		34	1.0
25	28	24,888	-54.4		01	1.2
20	27	26,324	-52.0		04	2.3
15	26	28,195	-49.0		02	2.1
10	13	30,893	-43.0		35	2.5
7	7	33,373	-35.7			
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VICTORIA, TEXAS — 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	33	15.5	13.2	15	1.6
1000	30	145	16.0	12.9	15	3.2
950	30	580	15.1	8.7	17	6.2
900	30	1,040	14.1	4.0	19	6.4
850	30	1,521	12.8	-.8	22	5.1
800	30	2,029	11.2	-5.9	24	4.3
750	30	2,560	8.6	-10.6	25	4.1
700	30	3,133	5.5	-13.3	26	4.7
650	30	3,727	1.6	-16.3	26	6.6
600	30	4,374	-2.8	-19.4	27	8.0
550	30	5,052	-7.5	-22.6	27	8.7
500	30	5,793	-12.5	-27.0	27	10.7
450	30	6,582	-18.3	-32.3	27	13.6
400	30	7,458	-24.6	-36.8	27	16.1
350	30	8,416	-31.8	-43.5	27	19.2
300	30	9,487	-40.3	-51.2	27	22.2
250	30	10,706	-49.6		27	25.3
200	30	12,139	-56.8		27	29.4
175	30	12,982	-58.7		27	29.3
150	30	13,943	-62.1		27	27.6
125	30	15,058	-66.4		27	23.3
100	30	16,395	-70.2		27	20.2
80	30	17,715	-71.4		27	13.7
70	30	18,505	-70.6		27	10.1
60	30	19,423	-68.2		27	6.9
50	30	20,529	-63.4		29	3.7
40	30	21,913	-59.3		29	2.2
30	29	23,732	-55.5		31	2.6
25	29	24,899	-53.7		29	3.8
20	28	26,339	-51.5		29	5.6
15	28	28,220	-47.9		28	8.9
10	26	30,921	-42.4		27	14.4
7	20	33,340	-37.6		27	21.1
5	8	35,658	-34.1			

* WAKE IS., PACIFIC AREA — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	5	24.1	20.9	08	6.3
1000	31	128	23.0	20.0	08	7.3
950	31	569	19.4	17.1	08	7.8
900	31	1,038	16.2	13.9	09	6.5
850	31	1,523	13.8	9.9	09	4.1
800	31	2,034	12.4	3.0	10	2.2
750	31	2,570	10.1	-1.9	15	.4
700	31	3,145	7.4	-7.4	30	.9
650	31	3,748	4.4	-11.4	28	1.9
600	31	4,401	1.0	-14.4	27	3.7
550	31	5,090	-2.8	-18.5	28	4.6
500	31	5,846	-7.3	-23.1	28	6.5
450	31	6,655	-12.5	-26.8	28	9.1
400	31	7,550	-18.2	-32.6	28	11.2
350	31	8,533	-25.1	-39.2	28	13.1
300	31	9,637	-32.4	-46.3	29	18.5
250	31	10,899	-41.7		29	20.1
200	31	12,375	-53.1		29	21.5
175	31	13,223	-59.5		30	20.2
150	30	14,176	-66.5		30	17.7
125	28	15,255	-73.5		29	16.6
100	25	16,537	-79.6		29	12.4
80	19	17,793	-78.1		28	5.7
70	13	18,570	-74.8		26	1.9
60	13	19,478	-68.4		19	1.2
50	12	20,590	-63.0		24	2.1
40	12	21,976	-58.9		35	.5
30	10	23,800	-53.6		33	.7
25	10	24,976	-52.1		01	2.3
20	9	26,417	-49.3		35	.4
15	9	28,316	-46.1		04	2.2
10	7	31,039	-41.1			
7	5	33,497	-36.8			
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* WALLOPS IS., VA. NASA — 1022 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	[illegible]	2.6	.1	31	.5
1000	31	174	[illegible]	-2.0	[illegible]	.8
950	31	59[illegible]	4.0	-3.1	26	4.8
900	31	1,032	2.9	-6.3	29	8.0
850	31	1,494	1.3	-8.2	29	10.1
800	31	1,981	-.2	-10.9	29	11.7
750	31	2,495	-2.3	-13.7	29	13.8
700	31	3,042	-5.0	-15.4	29	14.8
650	31	3,616	-8.5	-18.7	28	16.5
600	31	4,238	-12.0	-23.2	28	18.7
550	31	4,894	-15.8	-27.6	28	20.6
500	31	5,613	-20.3	-31.1	28	23.3
450	31	6,380	-25.4	-34.7	28	24.8
400	31	7,232	-31.3	-39.0	28	27.7
350	31	8,165	-38.[illegible]	-43.8	28	30.3
300	31	9,211	-45.5		29	32.6
250	31	10,406	-53.5		29	33.3
200	30	11,829	-57.6		29	33.[illegible]
175	30	12,673	-57.1		29	30.9
150	29	13,648	-56.9		29	30.1
125	28	14,80[illegible]	-58.3		29	25.1
100	27	16,191	-60.4		29	20.4
80	26	17,577	-60.4		29	17.0
70	25	18,401	-60.4		29	13.6
60	25	19,363	-58.9		29	11.8
50	25	20,5[illegible]	-57.9		29	9.9
40	24	21,919	-56.0		29	7.2
30	23	23,764	-53.9		29	5.3
25	23	24,[illegible]	-53.1		28	4.7
20	23	26,378	-51.2		28	5.0
15	20	28,257	-48.6		28	6.6
10	19	30,[illegible]56	-42.9		28	10.9
7	13	33,353	-39.6		27	15.5
5	5	35,683	-34.9			

WASHINGTON DULLES INT. AP — [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	85	.6	-2.1	33	.6
1000	31	174	2.0	-3.1	[illegible]	.6
950	31	541	1.7	-4.8	27	4.5
900	31	1,024	.8	-5.6	29	7.9
850	31	1,483	.3	-7.6	29	10.9
800	31	1,968	-1.2	-10.4	29	12.9
750	31	2,484	-3.2	-12.3	29	13.0
700	31	3,024	-6.1	-15.3	28	15.6
650	31	3,6[illegible]2	-9.4	-19.1	28	17.7
600	31	4,215	-12.9	-24.7	28	19.5
550	31	4,871	-16.7	-27.4	28	21.5
500	31	5,584	-21.2	-31.[illegible]	28	23.8
450	31	6,348	-26.[illegible]	-36.[illegible]	28	26.3
400	31	7,196	-32.[illegible]	-41.5	28	28.8
350	31	8,126	-38.7	-45.8	28	31.9
300	31	9,168	-46.0		28	35.4
250	31	10,361	-53.2		28	36.5
200	31	11,781	-56.9		28	37.5
175	31	12,628	-56.2		28	34.7
150	29	13,623	-56.7		28	32.0
125	29	14,775	-58.2		28	27.4
100	29	16,174	-60.0		28	22.6
80	29	17,563	-60.5		28	15.9
70	28	18,395	-59.6		28	14.1
60	28	19,360	-59.0		29	11.1
50	27	20,595	-57.5		29	8.4
40	27	21,918	-55.8		29	6.6
30	26	23,754	-54.3		29	3.6
25	26	24,925	-53.2		29	3.9
20	26	26,368	-51.5		28	5.8
15	24	28,237	-49.8		29	7.0
10	21	30,901	-46.7		28	9.7
7	9	33,279	-44.2			
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WINNEMUCCA, NEV. — 866 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,31[illegible]	-.6	-7.4	19	1.2
1000	31	141				
950	31	558				
900	31	1,004				
850	31	1,462	2.[illegible]	-6.7	20	2.1
800	31	1,950	[illegible]	-9.2	24	4.2
750	31	2,459	-3.8	-11.5	25	6.2
700	31	3,005	-7.3	-15.1	24	9.9
650	31	3,576	-10.7	-18.6	25	12.7
600	31	4,191	-14.3	-23.5	25	14.3
550	31	4,840	-18.3	-27.8	25	16.2
500	31	5,551	-22.9	-32.5	25	16.7
450	31	6,307	-28.0	-37.5	25	17.7
400	31	7,151	-34.2	-43.2	25	21.0
350	31	8,073	-40.9	-44.4	25	24.2
300	31	9,105	-48.0		25	26.5
250	31	10,289	-54.2		26	26.1
200	31	11,712	-54.9		25	23.6
175	31	12,570	-53.8		26	22.7
150	31	13,558	-54.8		26	21.2
125	31	14,718	-56.5		26	20.4
100	31	16,131	-57.3		26	15.3
80	29	17,531	-58.4		26	10.7
70	29	18,370	-58.1		26	8.6
60	29	19,339	-57.9		27	5.7
50	28	20,493	-57.5		29	3.4
40	27	21,909	-56.2		31	2.5
30	24	23,742	-54.8		02	2.0
25	23	24,914	-53.3		03	3.7
20	20	26,363	-51.9		04	4.6
15	12	28,232	-48.9			

WINSLOW, ARIZ. — 850 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,492	2.3	-10.3	17	2.2
1000	31	153				
950	31	580				
900	31	1,028				
850	31	1,492			17	1.8
800	31	1,989	6.5	-8.6	22	4.9
750	31	2,516	3.2	-11.9	24	8.2
700	31	3,072	-.3	-15.4	24	11.2
650	31	3,656	-3.4	-18.4	25	13.6
600	31	4,290	-7.4	-21.7	25	14.3
550	31	4,956	-12.1	-24.6	25	15.3
500	31	5,684	-17.4	-28.7	25	17.0
450	31	6,457	-23.0	-33.5	25	18.9
400	31	7,319	-29.5	-38.8	25	20.9
350	31	8,258	-36.5	-44.2	25	24.0
300	31	9,310	-44.3		25	27.1
250	31	10,509	-52.7		25	31.7
200	31	11,929	-57.6		26	32.6
175	31	12,772	-57.8		26	31.1
150	31	13,742	-58.7		25	27.1
125	31	14,882	-61.3		26	24.1
100	31	16,259	-63.5		26	19.8
80	29	17,625	-64.3		26	14.9
70	28	18,442	-63.7		26	11.1
60	27	19,392	-62.5		26	8.0
50	27	20,519	-61.4		28	4.8
40	26	21,912	-58.6		28	1.8
30	26	23,734	-55.7		36	1.2
25	24	24,897	-54.7		01	1.7
20	22	26,330	-52.9		04	2.2
15	19	28,207	-49.1		04	2.9
10	7	30,889	-44.3			

YAKUTAT, ALASKA — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	12	-6.8	-10.3	09	1.7
1000	30	120	-3.3	-9.6	08	2.0
950	30	524	-4.1	-11.7	07	2.4
900	30	951	-6.9	-14.1	05	1.7
850	30	1,395	-9.4	-16.4	36	1.6
800	30	1,862	-11.8	-18.8	32	2.4
750	30	2,355	-14.4	-22.3	32	3.7
700	30	2,874	-17.1	-23.7	31	5.2
650	30	3,425	-20.3	-26.4	32	6.7
600	30	4,015	-23.9	-30.5	32	7.6
550	30	4,646	-27.6	-33.9	33	10.0
500	30	5,326	-31.6	-37.7	33	11.2
450	30	6,065	-36.4	-39.5	33	13.6
400	30	6,874	-41.3	-43.0	33	15.5
350	30	7,770	-46.8		33	17.3
300	30	8,780	-51.9		32	18.8
250	30	9,953	-54.8		31	20.7
200	30	11,380	-53.7		31	21.3
175	30	12,241	-52.6		31	21.7
150	30	13,237	-52.3		30	21.0
125	30	14,417	-52.6		30	22.1
100	29	15,849	-53.4		29	22.4
80	29	17,284	-53.3		29	23.3
70	29	18,143	-53.1		29	22.6
60	29	19,138	-52.8		29	23.9
50	29	20,315	-52.8		29	23.1
40	29	21,755	-52.8		29	24.9
30	29	23,609	-53.1		29	28.3
25	29	24,786	-52.4		29	30.2
20	29	26,232	-51.5		29	27.2
15	28	28,121	-50.5		29	28.3
10	25	30,784	-47.5		29	36.0
7	12	33,136	-44.6			
5	7	35,513	-43.1			

+ YAP, CAROLINE IS. — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	17	27.6	24.0	04	3.9
1000	31	8[illegible]	26.8	2[illegible].8	05	4.9
950	31	532	22.8	18.2	06	7.5
900	31	1,0[illegible]8	19.7	14.5	06	7.6
850	31	1,500	17.5	10.2	07	6.7
800	31	2,017	15.2	4.2	06	5.6
750	31	2,557	12.7	.3	06	5.5
700	31	3,139	10.0	-3.6	06	4.9
650	31	3,747	7.0	-9.1	06	5.3
600	31	4,406	3.3	-14.6	07	5.5
550	31	5,099	-.4	-18.2	07	5.6
500	31	5,664	-4.8	-21.9	07	6.2
450	31	6,682	-9.6	-26.7	08	6.4
400	31	7,587	-15.5	-32.6	10	7.0
350	31	8,582	-22.3	-38.3	[illegible]	7.5
300	31	9,696	-30.9	-45.4	10	7.3
250	31	10,[illegible]62	-41.2		12	8.2
200	31	12,439	-53.5		12	10.9
175	31	13,284	-60.6		12	11.9
150	31	14,227	-68.0		11	13.2
125	31	15,300	-75.9		11	15.7
100	31	16,570	-80.5		10	12.0
80	31	17,839	-76.4		09	4.5
70	31	18,616	-71.7		06	.2
60	31	19,538	-66.2		29	4.8
50	31	20,654	-62.1		28	6.6
40	31	22,046	-57.9		26	5.8
30	31	23,877	-53.8		26	4.0
25	31	25,054	-51.1		28	.6
20	28	26,510	-48.5		10	6.5
15	28	28,413	-45.4		10	14.1
10	23	31,137	-40.9		09	24.5
7	13	33,569	-36.4			

YUCCA FLAT, NEV. — 879 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	1,196	3.4	-7.7	19	2.3
1000	31	129				
950	31	554				
900	31	1,004				
850	31	1,470	7.4	-7.2	20	4.7
800	31	1,966	4.2	-9.4	20	7.9
750	31	2,484	.8	-12.0	21	8.5
700	31	3,040	-2.6	-15.4	23	9.4
650	31	3,619	-5.9	-19.6	24	11.6
600	31	4,247	-9.8	-23.3	25	14.0
550	31	4,908	-14.2	-27.0	25	16.3
500	31	5,630	-19.0	-31.6	25	19.1
450	31	6,400	-24.7	-35.7	25	20.1
400	31	7,253	-30.8	-40.7	25	22.5
350	31	8,187	-38.1	-45.0	26	24.6
300	31	9,231	-45.8		26	28.3
250	31	10,423	-53.5		26	30.4
200	31	11,842	-56.5		26	30.5
175	31	12,689	-56.4		26	29.0
150	30	13,670	-56.6		26	24.5
125	30	14,820	-58.8		26	21.0
100	27	16,216	-61.3		26	18.2
80	23	17,607	-61.5		26	14.9
70	23	18,434	-61.2		26	11.0
60	22	19,395	-60.4		27	6.2
50	22	20,532	-59.6		28	4.2
40	22	21,933	-57.7		31	1.9
30	19	23,759	-55.7		05	3.0
25	17	24,920	-54.4		03	2.1
20	15	26,361	-52.1		05	4.0
15	11	28,223	-50.5			

YUMA, ARIZ. — 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	23	131	12.2	-3.4	05	.5
1000	23	122				
950	23	559	17.2	-1.5	30	2.7
900	23	1,018	14.6	-3.8	29	2.6
850	23	1,498	11.8	-6.9	23	2.4
800	23	2,002	8.6	-10.1	23	3.9
750	23	2,530	5.8	-13.0	24	6.0
700	23	3,095	2.7	-16.2	24	7.7
650	23	3,685	-1.2	-18.7	24	8.9
600	23	4,323	-5.5	-21.4	24	11.0
550	23	4,992	-10.4	-24.6	24	12.5
500	23	5,726	-15.7	-28.0	25	13.7
450	23	6,501	-21.6	-33.2	25	15.7
400	23	7,368	-28.0	-38.1	25	18.4
350	23	8,313	-35.3	-43.8	25	22.2
300	22	9,368	-43.9		26	24.5
250	21	10,575	-53.2		25	27.7
200	17	11,996	-59.0		25	31.6
175	16	12,831	-57.6		25	28.3
150	15	13,792	-60.1		25	25.0
125	13	14,931	-62.8		26	21.7
100	11	16,296	-64.9		26	16.5
80	11	17,654	-65.0		26	14.4
70	11	18,467	-65.1		27	11.7
60	9	19,408	-63.7			
50	8	20,538	-61.8			
40	8	21,931	-58.6			
30	8	23,753	-56.0			
25	7	24,917	-53.5			
20	5	26,357	-51.8			
15	5	28,237	-48.4			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G. C. T.

See reference note at end of table

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. MARCH 1967

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N. MEX.									
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Mar.									
1-----	1.02	1.13	1.25	1.41	1.50	1.41	1.26	1.19	1.09
2-----	1.10	1.21	1.32	1.44	1.55	1.42	1.28	1.15	1.04
3-----	1.03	1.15	1.25	1.40	----	----	----	----	----
4-----	.95	----	1.17	----	1.44	----	----	----	----
6-----	1.03	1.12	1.24	1.37	1.56	1.41	1.25	1.13	1.03
7-----	.96	1.08	1.21	1.37	----	----	----	----	.77
8-----	1.02	----	1.25	1.42	----	1.40	1.24	1.12	.99
9-----	1.03	1.13	1.27	----	----	----	----	----	----
12----	----	----	1.25	1.39	1.15	----	----	----	----
14----	.89	1.03	1.15	1.32	----	----	----	----	----
16----	.83	.96	1.10	1.29	----	----	----	----	----
20----	.96	1.08	1.21	1.37	----	----	----	----	----
22----	.88	1.01	1.15	----	----	----	----	----	----
23----	.76	.89	1.04	----	----	----	----	.93	.81
25----	----	----	----	----	----	----	----	.94	.83
31----	.94	1.03	1.18	1.33	1.53	----	----	----	----
Averages	0.96	1.07	1.20	1.37	1.52	1.41	1.26	1.08	0.94
BLUE HILL OBS., MASS.									
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Mar.									
1-----	0.70	0.81	0.96	1.15	----	----	1.16	1.04	0.89
10----	.45	.58	.72	.96	----	----	----	----	----
12----	----	----	----	----	----	1.16	.96	.82	.72
13----	.67	.77	.93	1.11	1.28	----	----	----	----
16----	----	----	----	----	----	1.24	1.05	.90	.77
18----	.75	.84	.99	1.20	1.40	1.27	1.08	1.01	.87
19----	.93	1.04	1.16	1.34	1.47	1.29	1.12	.96	.87
24----	----	----	----	----	----	1.20	1.03	.88	.77
25----	.84	.94	1.08	1.25	1.39	1.21	----	----	----
26----	.82	.94	1.10	1.25	1.39	----	----	----	----
30----	----	----	----	----	1.30	1.21	1.01	.88	.79
31----	.82	.93	1.05	----	1.28	----	----	----	----
Averages	0.75	0.86	1.00	1.18	1.36	1.23	1.06	0.93	0.81
GUAM, M. I.									
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
	No observation due to cloudiness								

Date	Sun's zenith distance								
	A. M.				*	P M			
	78.7°	75.7°	70.7°	60.0°		60 0°	70.7°	75.7°	78 7°
MADISON, WIS.									
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Mar.									
8-----	S 0.89	S 0.97	S 1.13	S 1.51	----	----	----	----	----
17----	S .86	S .97	S 1.11	S 1.30	S 1.42	S 1.31	S 1.18	S 1.03	S 0.95
18----	S .91	S 1.01	S 1.16	----	----	----	----	----	----
Averages	0.89	0.98	1.13	1.41	1.42	1.31	1.18	1.03	0.95
TUCSON, ARIZ.									
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Mar.									
1-----	----	----	----	1.34	1.46	1.32	1.15	0.98	0.79
2-----	0.93	1.05	1.15	1.31	----	----	----	----	----
3-----	.87	.98	1.11	1.24	----	----	----	----	----
5-----	.75	.83	----	----	----	----	----	----	----
6-----				Pyreheliometer malfunction					
7-----	.89	.99	1.42	----	----	----	----	----	----
12----	.90	.99	1.10	1.21	.87	----	----	----	----
14----	.86	.96	1.02	1.21	1.38	----	----	----	----
15----	----	----	----	1.22	1.33	1.06	.95	.85	.76
16----	.77	.87	----	----	----	----	.61	.57	.51
19----	----	----	.96	1.10	----	1.05	.93	.83	.74
22----	.47	.54	.67	.86	1.18	.93	.76	.65	.53
23----	.42	.52	.62	.79	.98	----	----	----	----
24----	.55	.63	.74	.86	----	----	----	----	----
25----	.38	.75	.66	.81	.96	----	----	----	----
31----	.80	.91	1.02	1.21	1.40	----	----	----	----
Averages	0.72	0.83	0.95	1.09	1.19	1.09	0.88	0.78	0.67
OMAHA, NEBR.									
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Mar.									
6-----	HS1.10	HS1.18	HS1.28	HS1.40	HS1.40	HS1.39	HS1.23	HS1.12	HS1.01
8-----	HM1.02	HM1.09	HM1.21	HM1.30	----	----	----	HM .91	----
17----	----	----	----	----	----	HS1.22	HS1.04	HS .88	----
21----	HS .86	HS .95	HS1.06	HS1.20	HS1.35	----	----	----	----
22----	----	----	----	----	HS1.22	HI1.03	----	----	----
28----	HI .50	HM .61	HM .78	HM .98	----	----	----	----	----
Averages	0.87	0.96	1.08	1.22	1.32	1.31	1.13	0.97	1.01

HS Slight haze
HM Moderate haze
HI Intense haze
S Slight haze - indeterminable
* Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. MARCH 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
																Day of month																
AMES IOWA	---	---	451	201	297	480	---	467	445	360	335	62	160	116	521	469	535	371	58	89	498	475	436	499	148	84	341	509	415	298	354	340
ANNETTE ALASKA	157	155	91	227	153	185	46	205	280	332	344	333	340	365	336	96	186	225	372	133	117	65	367	349	395	274	113	312	453	459	456	256
APALACHICOLA FLORIDA	486	498	202	360	399	251	551	521	427	260	453	480	480	534	497	573	538	567	561	406	395	581	589	575	572	385	25	329	462	590	586	456
ASTORIA OREGON	133	457	433	496	---	---	269	104	72	225	160	416	185	106	76	330	108	364	176	261	302	78	202	242	177	313	266	184	268	214	204	235
ATLANTA GEORGIA	---	---	471	443	365	191	380	475	368	36	271	498	425	451	311	554	531	572	543	237	314	573	565	540	514	475	244	165	451	272	547	406
BARROW ALASKA	75	105	48	78	83	117	176	120	141*	142	55	136	111	133	105	208	147	146	146	208	212	276	289	305	268	309	295	319	335	345	291	185*
BETHEL ALASKA	95	111	138	139	196	154	144	280	238	221	171	287	217	268	245	274	278	343	323	337	139	233	358	362	141	206	240	285	234	160	145	225
BISMARCK N.DAK.	316	225	339	271	438	193	461	391	354	131	163	201	216	463	458	390	426	483	113	282	401	490	391	409	525	225	481	393	445	133	489	345
BLUE HILL MASS.	368	226	162	338	93	59	34	289	193	392	339	395	336	113	55	337	160	532	547	485	250	83	196	512	534	536	113	193	127	520	471	290
BOISE IDAHO	134	304	359	426	424	423	418	327	94	46	116	207	264	264	432	219	365	348	400	246	376	279	162	468	387	445	428	171	333	347	223	305
BOSTON MASSACHUSETTS	360	---	---	---	---	---	30	327	187	353	362	373	321	84	48	357	155	515	523	440	245	79	153	5[illegible]6	489	495	163	159	110	517	454	301
BROWNSVILLE TEXAS	133	482	489	378	567	---	595	533	556	506	463	574	553	587	535	---	423	245	490	365	417	376	204	---	583	515	[illegible]	618	638	646	616	482
CANTON ISLAND P.I.	691	688	681	701	666	695	703	644	689	692	534	652	658	437	615	639	705	693	686	652	691	694	679	689	680	674	638	678	550	681	596	657
CAPE HATTERAS N.C.	484	465	452	417	446	360	358	188	489	433	351	300	326	295	428	555	227	571	570	303	87	515	470	485	537	489	523	480	---	582	576	425
CHARLESTON S.C.	533	511	408	508	399	286	541	541	481	133	429	505	352	558	528	635	565	672	583	226	133	542	628	629	593	556	343	325	320	665	596	475
CLEVELAND OHIO	435	209	297	145	47	124	376	201	407	385	43	251	211	105	50	372	438	449	484	123	41	268	81	432	348	394	510	92	454	499	389	279
COLUMBIA MISSOURI	405	426	326	36	42	331	175	520	497	455	376	188	155	48	372	498	491	357	50	52	558	520	475	509	144	95	437	517	494	443	132	327
DAVIS CALIFORNIA	365	449	345	467	468	453	462	430	468	211	356	147	193	493	372	336	471	446	480	279	403	289	451	567	408	314	554	197	515	119	399	384
DODGE CITY KANSAS	423	429	297	380	178	502	257	536	521	522	282	534	222	408	506	529	438	146	373	581	366	551	551	428	327	572	494	545	313	500	559	428
E. LANSING MICHIGAN	450	196	425	269	190	253	281	482	464	431	144	389	217	317	172	339	538	548	365	88	127	461	246	432	432	318	110	279	518	477	181	328
EL CENTRO CALIF. NPF	---	---	250	403	414	420	417	424	369	341	435	424	330	392	429	397	421	418	473	453	455	477	373	644	624	159	179	346	435	508	485	410
EL PASO TEXAS	583	594	585	570	524	618	618	506	593	550	539	615	551	614	627	624	614	565	371	657	642	612	661	610	693	629	574	683	551	719	698	600
ELY NEVADA	449	486	450	295	524	526	534	526	529	526	255	387	327	556	446	267	---	294	576	255	577	555	277	498	547	309	470	286	343	574	276	431
EPPLEY NEWPORT R.I.	---	203	275	266	70	60	44	373	277	395	371	386	254	197	71	340	132	497	525	471	255	95	190	491	530	525	152	276	133	522	502	296
FAIRBANKS ALASKA	103	59	88	36	142	89	108	142	188	140	206	252	106	238	244	263	273	174	323	314	145	316	326	349	352	349	333.	244	241	144	288	212
FORT WORTH TEXAS	543	537	526	515	191	299	571	528	340	462	525	558	514	396	594	578	450	452	95	439	615	557	573	467*	277	592	634	624*	597	293	200	469*
FRESNO CALIFORNIA	437	407	159	369	485	476	474	470	482	230	90	246	238	545	346	188	403	499	547	487	534	391	302	586	369	355	473	121	605	343	188	382
GAINESVILLE FLORIDA	---	---	---	475	450	480	425	410	265	325	388	470	418	375	371	493	480	478	465	340	283	478	489	518	465	400	285	203	341	467	428	407
GLASGOW MONTANA	342	267	367	384	421	279	432	281	282	212	290	400	340	455	419	374	352	446	340	434	379	460	381	487	514	335	510	477	180	155	522	371
GRAND JUNCTION COLO.	448	482	---	382	394	513	527	518	522	401	330	458	300	422	468	488	395	---	423	475	570	587	447	412	473	341	271	393	365	651	310	440
GREAT FALLS MONTANA	304	274	---	---	---	---	---	---	---	185	---	449	428	477	397	338	480	383	292	456	271	366	344	477	481	401	325	403	89	---	434	366
GREENSBORO N.C.	483	435	434	345	410	201	480	435	482	195	353	---	---	---	---	527	498	550	518	29	248	507	484	534	491	476	408	284	475	528	538	420
INDIANAPOLIS INDIANA	464	361	367	39	48	133	457	293	504	434	342	136	219	104	122	516	405	561	488	49	87	533	503	160	489	246	144	210	468	493	408	316
INYOKERN CALIFORNIA	477	431	435	371	451	476	490	475	486	489	482	421	416	560	441	337	499	569	545	495	546	513	476	534	552	354	543	535	599	512	593	487
ITHACA NEW YORK	329	133	109	236	34	45	223	262	341	346	74	390	43	40	79	343	371	414	475	424	44	234	181	305	392	411	150	65	403	464	425	251
LAKE CHARLES LA.	430	353	288	381	377	128	570	515	476	436	323	221	453	493	492	574	553	545	524	170	558	593	517	549	156	332	568	581	550	490	390	438
LAKELAND FLORIDA	536	441	257	480	481	424	189	379	479	414	535	563	583	609	569	551	621	609	456	510	397	619	622	620	616	572	415	272	388*	607	590*	497*
LANDER WYOMING	393	446	179	289	381	395	511	503	---	420	441	429	221	401	441	354	382	405	344	539	535	499	370	527	542	509	529	525	380	583	433	430
LARAMIE WYOMING	344	453	325	115	402	477	518	490	421	498	508	495	427	311	382	415	385	349	261	490	547	573	240	492	412	401	295	544	514	591	417	422
LAS VEGAS NEVADA	489	499	424	506	531	520	515	532	507	463	539	417	337	563	507	423	487	464	572	555	585	579	430	490	541	372	553	457	518	545	235	489
LITTLE ROCK ARKANSAS	475	484	201	224	216	78	483	475	476	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LOS ANGELES, CALIF.	522	467	192	438	528	517	519	483	127	244	340	321	252	541	394	430	459	489	579	551	553	465	468	580	527	316	529	328	616	628	577	451
MADISON WISCONSIN	---	262	426	288	312	467	430	480	404	413	198	144	97	108	397	233	547	518	132	133	260	345	419	271	444	120	330	318	339	382	201	314
MANHATTAN KANSAS	322	385	364	199	136	450	241	457	413	435	269	388	117	203	439	447	130	149	39	320	253	213	467	407	161	300	390	---	451	239	289	302
MATANUSKA ALASKA	177	67	51	46	207	85	138	218	261	280	247	270	268	277	280	293	302	254	319	322	142	355	362	366	367	257	288	306	386	256	81	243
MEDFORD OREGON	212	348	428	441	441	429	440	432	223	78	460	303	306	394	367	351	232	250	180	368	429	346	---	---	---	---	---	118	311	304	368*	329*
MIAMI FLORIDA	293	292	345	316	396	383	321	170	412	412	438	426	426	414	456	206	405	371	250	439	434	378	448	476	436	440	384	82	102	354	357	357
MIDLAND TEXAS	503	498	493	502	330	515	523	449	446	498	505	497	522	443	557	547	527	84	349	579	490	287	306	446	430	584	538	589	508	574	214	462
NASHVILLE TENNESSEE	486	475	388	455	136	36	525	498	---	210	293	375	394	442	96	554	512	577	409	85	284	579	395	510	452	373	260	264	455	543	504	386
NEW YORK N.Y. U	449	113	339	141	20	33	54	251	338	392	336	403	75	286	9	479	273	559	470	315	44	67	185	452	548	530	214	306	288	530	416	288
NORTH OMAHA NEBRASKA	327	439	454	196	313	507	---	506	490	483	314	86	163	312	538	484	405	417	80	131	538	515	474	475	146	463	---	542	507	289	---	378
OAK RIDGE TENNESSEE	499	469	438	354	159	40	369	506	490	195	307	236	447	469	457	560	474	597	489	294	541	570	433	522	474	411	284	92	545	530	519	412
OKLAHOMA CITY OKLA.	408	342	350	369	35	393	411	453	430	419	369	391	434	283	---	551	542	98	112	552	518	82	543	358	181	415	522	562	414	345	201	369
PAGE ARIZONA	321	392	270	378	264	422	417	426	403	320	425	385	369	441	406	390	388	286	464	387	448	481	331	232	487	416	434	348	209	484	415	382
PHOENIX ARIZONA	507	---	---	---	---	---	544	538	349	192	507	547	360	527	552	527	521	312	587	491	576	593	506	489	574	389	481	352	105	630	628	476

Note. --Langley is the unit used to denote one gram calorie per square centimeter. Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. MARCH 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
	Day of month																															
PORTLAND MAINE	314	253	116	421	204	78	81	346	210	372	571	451	277	71	102	319	328	482	511	461	394	364	403	444	358	505	188	105	319	543	516	320
PROSSER WASHINGTON	297	282	386	391	406	392	263	189	197	260	353	414	373	275	196	199	307	380	415	460	354	104	281	487	299	477	321	313	489	338	247	327
RAPID CITY S.DAK.	294	136	196	382	415	205	525	464	---	176	131	145	75	320	473	233	398	477	210	477	456	533	358	442	238	452	508	461	443	249	580	348
RENO NEVADA	334	398	101	434	434	432	430	428	320	177	176	147	213	423	481	358	444	475	412	352	469	244	445	520	325	162	465	189	386	312	319	348
RICHLAND 25 NW WASH.	248	296	371	370	371	359	267	193	200	251	326	415	398	322	157	220	270	291	389	421	314	95	446	490	273	468	297	200	449	345	184	313
RIVERSIDE CALIFORNIA	471	---	---	---	---	---	---	---	---	---	---	---	---	---	505	457	524	253	519	541	544	583	420	417	555	354	420	278	559	651	294	---
RUSTON LOUISIANA	424	429	251	272	193	58	454	430	377	121	400	455	458	332	236	489	421	471	445	74	495	494	475	380	90	243	497	---	---	461	355	354
SAINT CLOUD MINN.	292	299	394	296	422	260	436	440	411	399	382	114	402	317	470	391	502	311	150	210	307	475	361	402	289	135	183	237	282	205	503	331
SALT LAKE CITY	444	437	448	293	488	485	516	479	510	465	351	488	208	---	---	---	392	159	333	273	548	537	141	358	577	226	428	167	104	639	347	387
SAN ANTONIO TEXAS	542	529	467	203	263	566	547	369	306	511	549	482	556	524	541	442	218	203	155	332	335	217	346	87	259	612	628	608	604	551	422	418
SANTA MARIA CALIF.	451	403	219	452	505	506	504	474	160	139	192	368	311	502	231	134	379	533	560	549	567	436	346	579	527	339	578	312	597	449	380	409
SAULT STE MARIE MICH	374	292	349	---	242	---	466	---	187	335	454	306	237	434	454	276	449	529	487	---	193	521	534	471	152	158	126	---	454	152	170	338
SEATTLE TACOMA WASH.	108	227	297	365	363	146*	253*	48	173	302	195	437	234	97	106	161	139	343	374	318	215	75	217	197	252	280	279	114	248	278	190	227*
SPOKANE WASHINGTON	289	248	---	371	384	315	203	181	204	219	231	473	421	299	183	99	319	222	354	221	263	74	341	399	319	402	239	238	150	393	399	282
STATE COLLEGE PENN.	471	353	306	146	51	46	307	300	439	463	137	430	30	170	14	459	422	575	552	202	59	340	101	447	475	500	231	177	453	560	518	314
STERLING VIRGINA	490	386	408	65	76	48	242	444	443	384	300	106	95	386	38	541	438	512	567	159	87	358	159	426	---	508	320	206	454	559	548	325
STILLWATER OKLAHOMA	433	395	397	347	63	414	417	510	467	457	390	453	449	310	491	481	405	67	143	474*	448	344	458	324	207	347	503	532	468	272	253	378*
TAMPA FLORIDA	492	425	242	499	477	476	105	387	434	515	540	555	547	570	475	559	601	585	449	511	390	556	596	603	591	579	350	536	339	562	455	484
TUCSON ARIZONA	498	488	492	488	361	530	525	495	302	188	489	529	431	545	544	531	501	419	560	501	547	561	533	479	569	513	459	495	230	486	610	481
WAKE ISLAND,PACIFIC	457	472	482	469	133	82	200	---	---	---	---	---	---	---	---	---	---	83	502	560	535	536	400	624	648	648	573	603	632	671	668	---

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

MARCH 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-26	5	-11	-31	34	37	-28	-101	-82	-37	-17	-41	-14	25	68	39	55	46	30	41	-26	31	37	46	70	64	112	50	87	97	-16	18

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

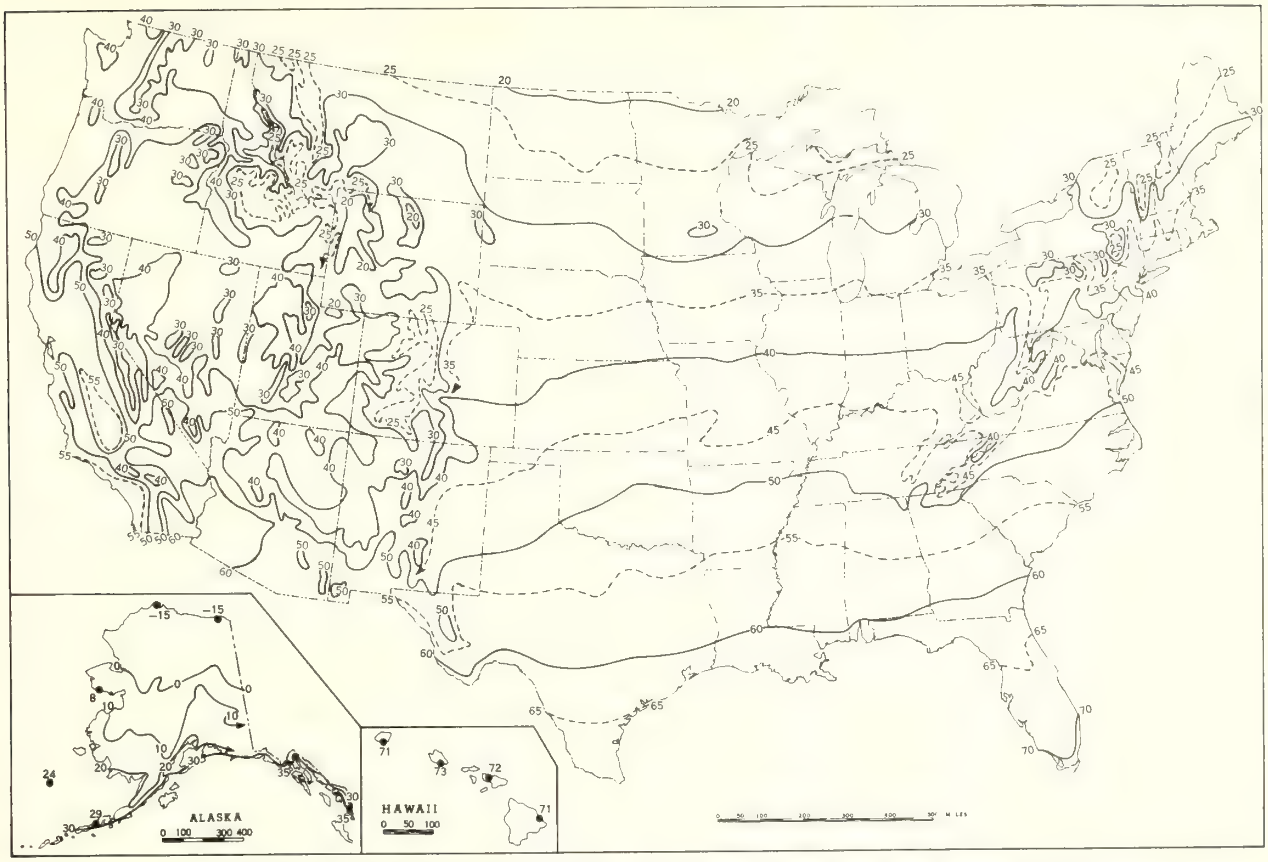
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Nex.	00290	00289	00292	06287	05330	00288	00327	00326	05297	05278	05275	00296	02263	00278	00273	00273	02268	03257	05289	00300	00295	00322	00293	05282	05348	00301	00294	05283	05279	00362	00303	295
Bedford, Mass.	00427	00404	-----	00448	-----	-----	-----	00374	00372	00358	-----	-----	00355	05374	05371	-----	04548	-----	-----	00431	00370	-----	00435	00445	-----	-----	-----	04389	-----	-----	00342	403
Bismarck, N. Dak.	05361	05416	00442	05435	00432	06400	00509	02406	06368	05374	05369	05377	06415	04361	00396	03381	00367	00334	35387	35424	05377	00366	06332	00357	00376	04404	00393	00340	04329	04417	00424	389
Caribou, Maine	00487	00433	05459	00459	00440	-----	04384	00463	00432	05451	-----	00457	05405	05439	00394	03434	00565	00562	00420	05458	00425	00420	05408	05443	04439	00388	00360	05427	00394	00416	00343	435
Fairbanks, Alaska	-----	-----	34408	-----	32504	34451	-----	-----	-----	-----	-----	-----	-----	05359	32328	32387	32404	35453	00324	-----	-----	00450	00436	00412	00407	00393	00463	05461	-----	-----	05471	418
Green Bay, Wis.	00370	04423	00426	00404	00401	00419	00473	00445	00358	00347	00355	00355	05384	00363	00410	06479	00455	00390	04348	03418	00382	04459	00375	04366	00348	04385	00411	00382	00351	00342	00365	393
Mauna Loa, Hawaii	00294	-----	00277	00279	-----	00289	06270	00273	06267	06278	05300	-----	00312	00278	06279	00281	00264	05252	-----	05261	-----	-----	05290	00279	00283	-----	05270	05286	00298	00313	00308	283
Nashville, Tenn.	00341	00309	00316	00312	05318	-----	00355	00346	00329	00313	00292	00289	00294	00300	04334	00344	00361	00351	00318	05333	00345	00352	00358	00335	00331	00312	00362	00360	00357	00320	00308	330
Sterling, Va.	00412	00345	00344	-----	-----	-----	00357	00372	00352	-----	-----	-----	05351	00314	05358	00401	00444	00397	00341	05351	-----	05375	05424	00360	00326	00325	00333	05364	00355	00340	00331	361
Tallahassee, Fla.	00337	00340	00323	05307	00302	05288	00311	00317	00293	00273	00284	00270	00279	00281	00289	00310	00315	00333	00315	00306	02328	00319	00356	00306	00305	00295	05367	06337	00347	00333	00314	312
Huancayo, Peru	00265	00268	00265	00271	00271	00270	00272	00271	00267	00270	00263	00264	-----	00271	00278	00267	00261	05264	05267	00270	35250	00273	00276	00280	00270	00268	00263	-----	00264	00267	05264	268

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), March



B. Temperature Departure from 30 - Year Mean (°F 1931-60), March 1967.

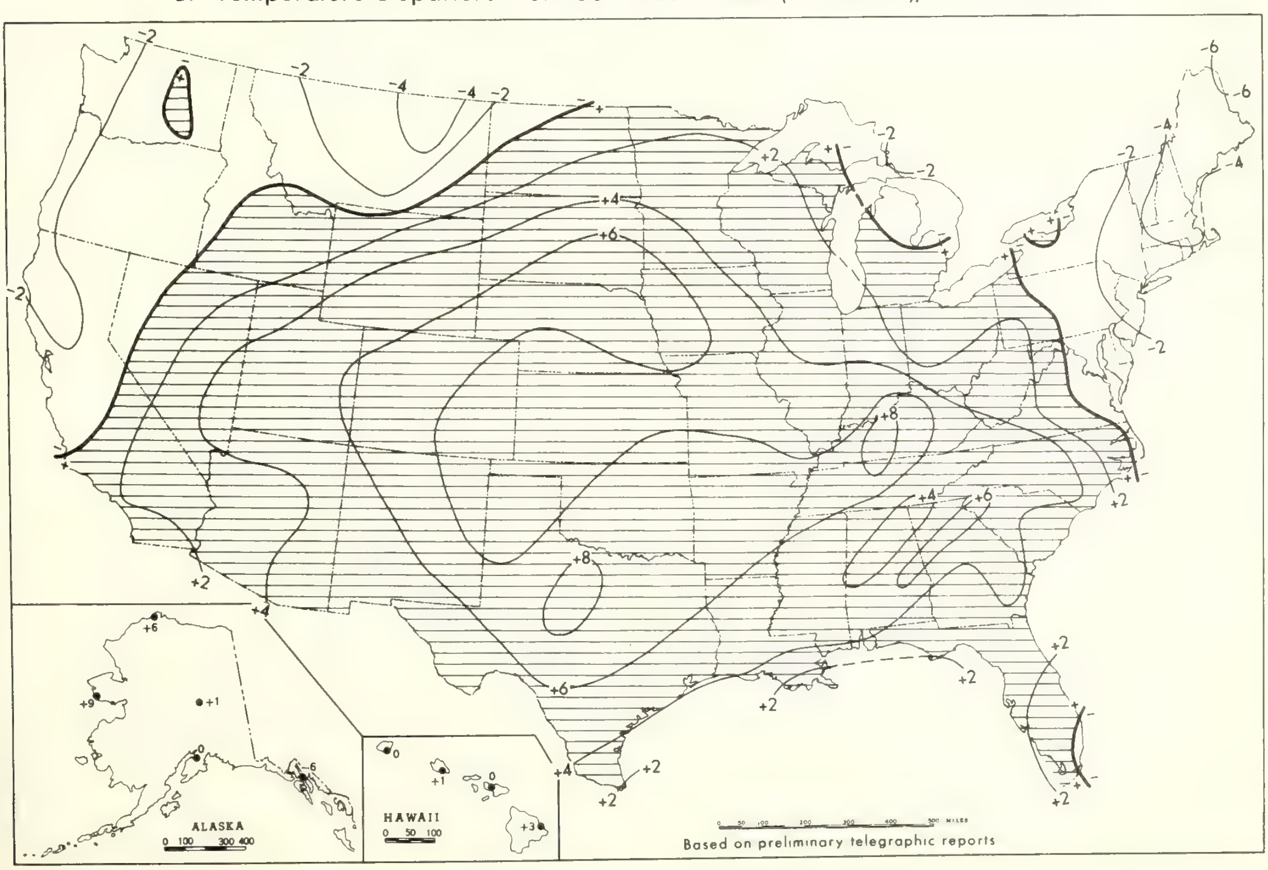


Chart II. Total Precipitation (Inches), March 1967.

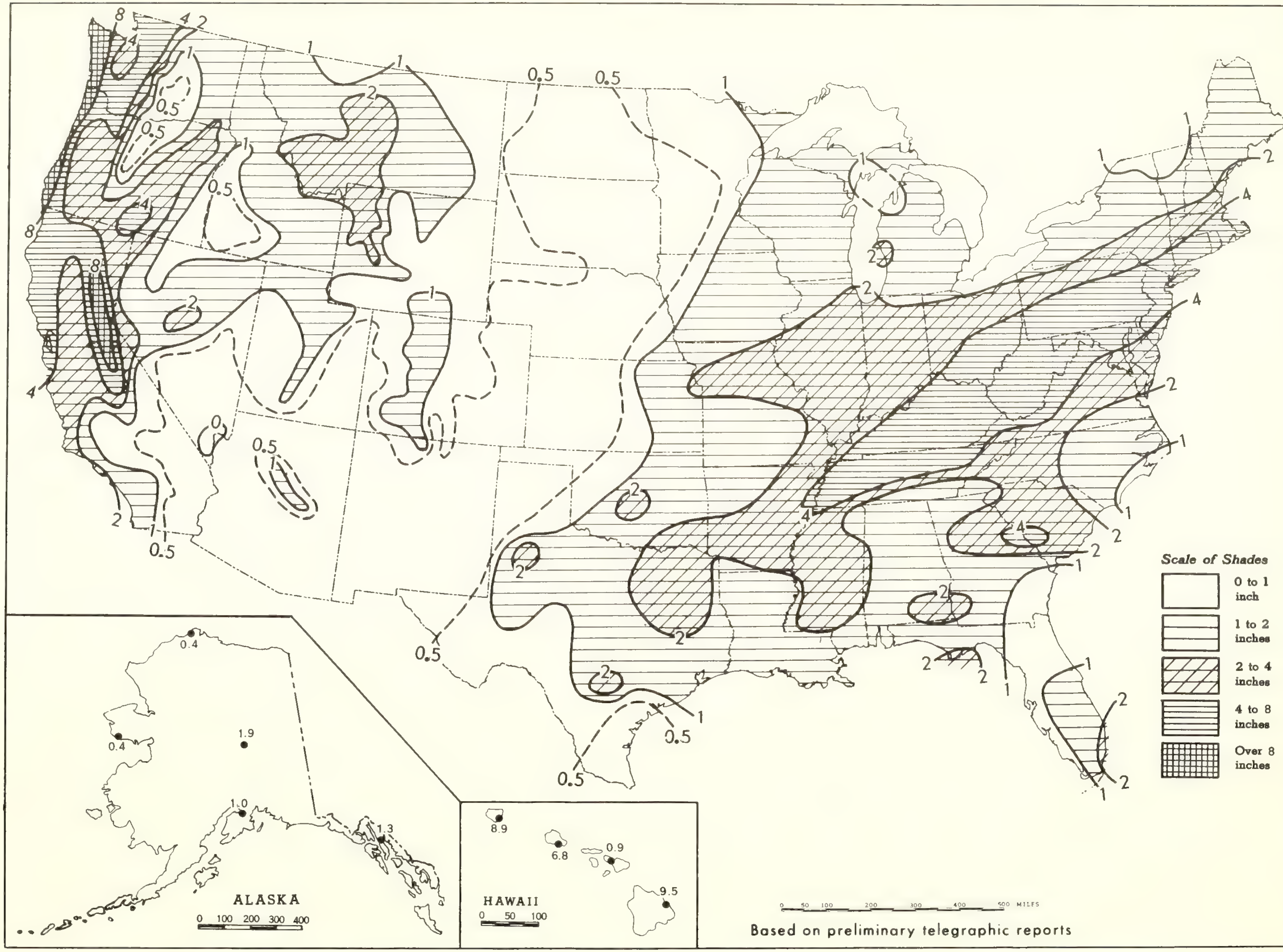


Chart III. Percentage of Normal Precipitation, March 1967.

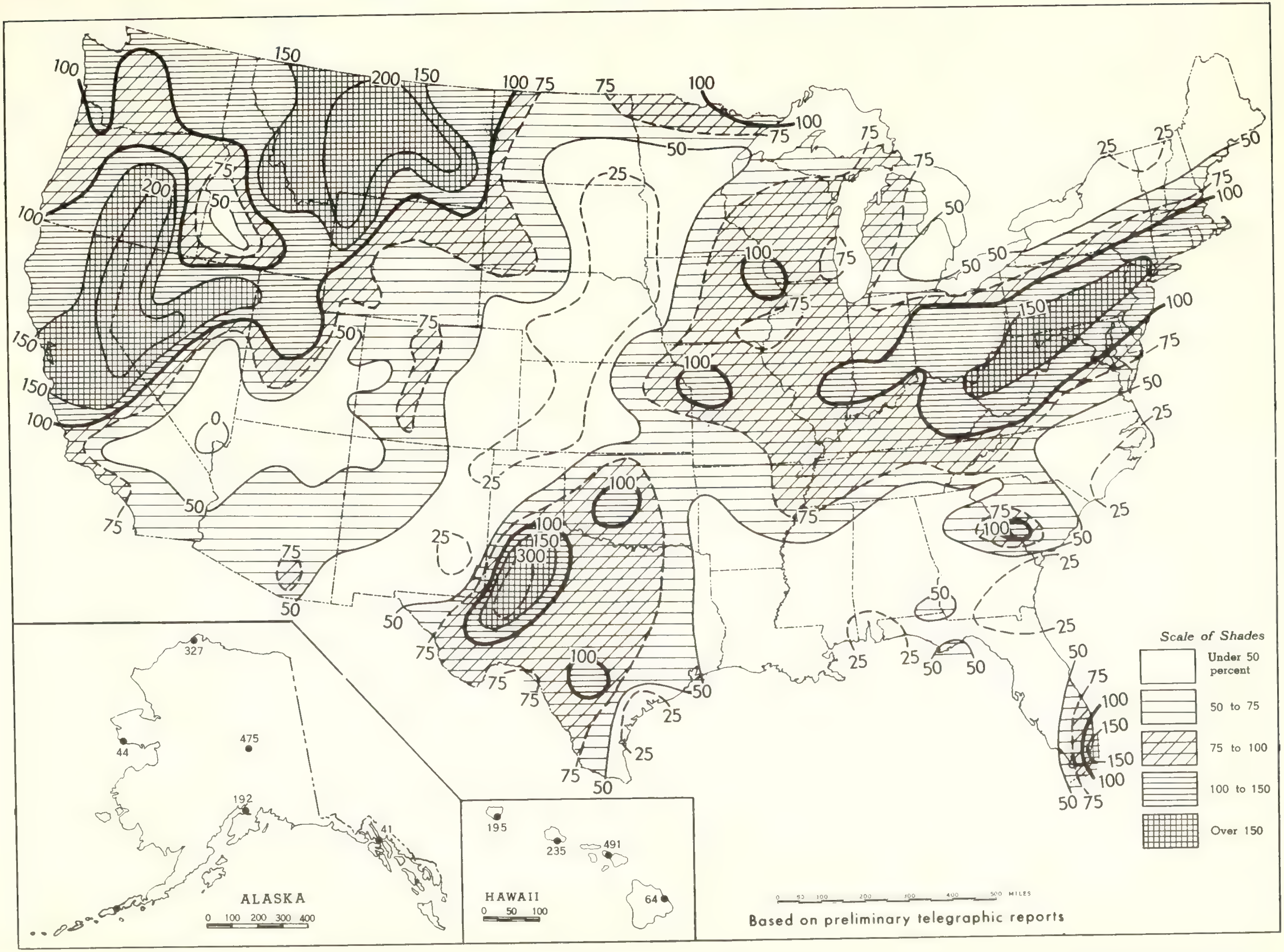
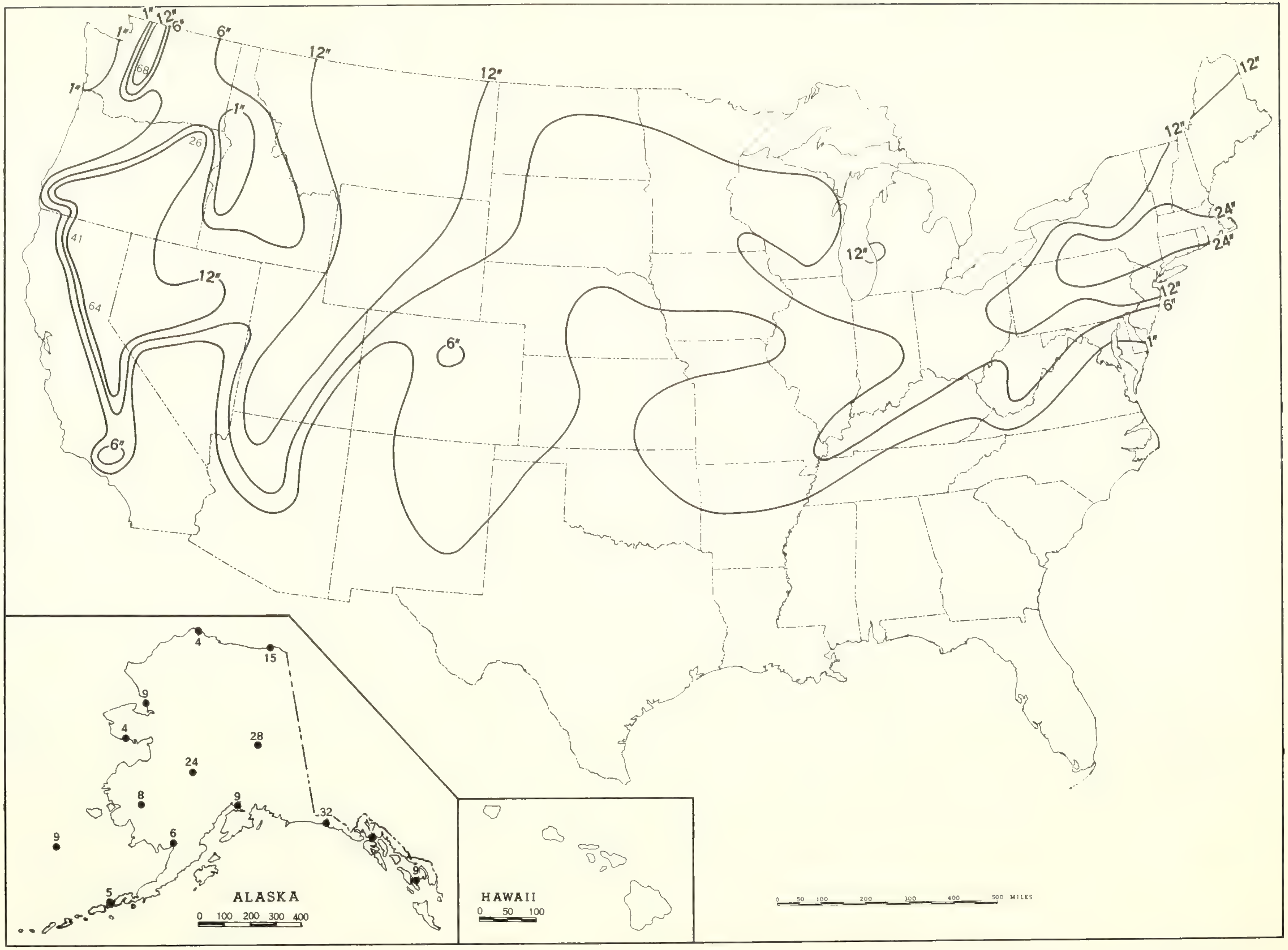
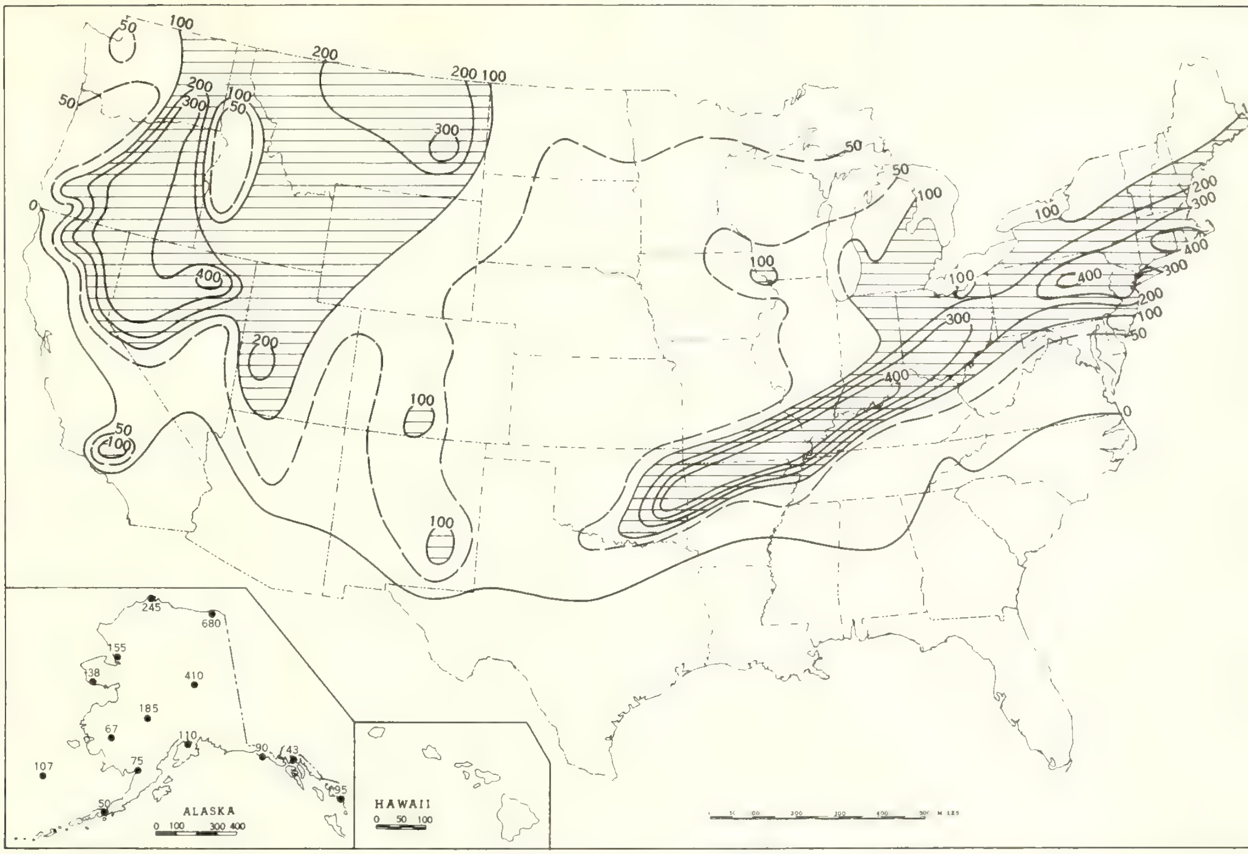


Chart IV. Total Snowfall (Inches), March 1967.



This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, March 1967.



B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., March 27, 1967.

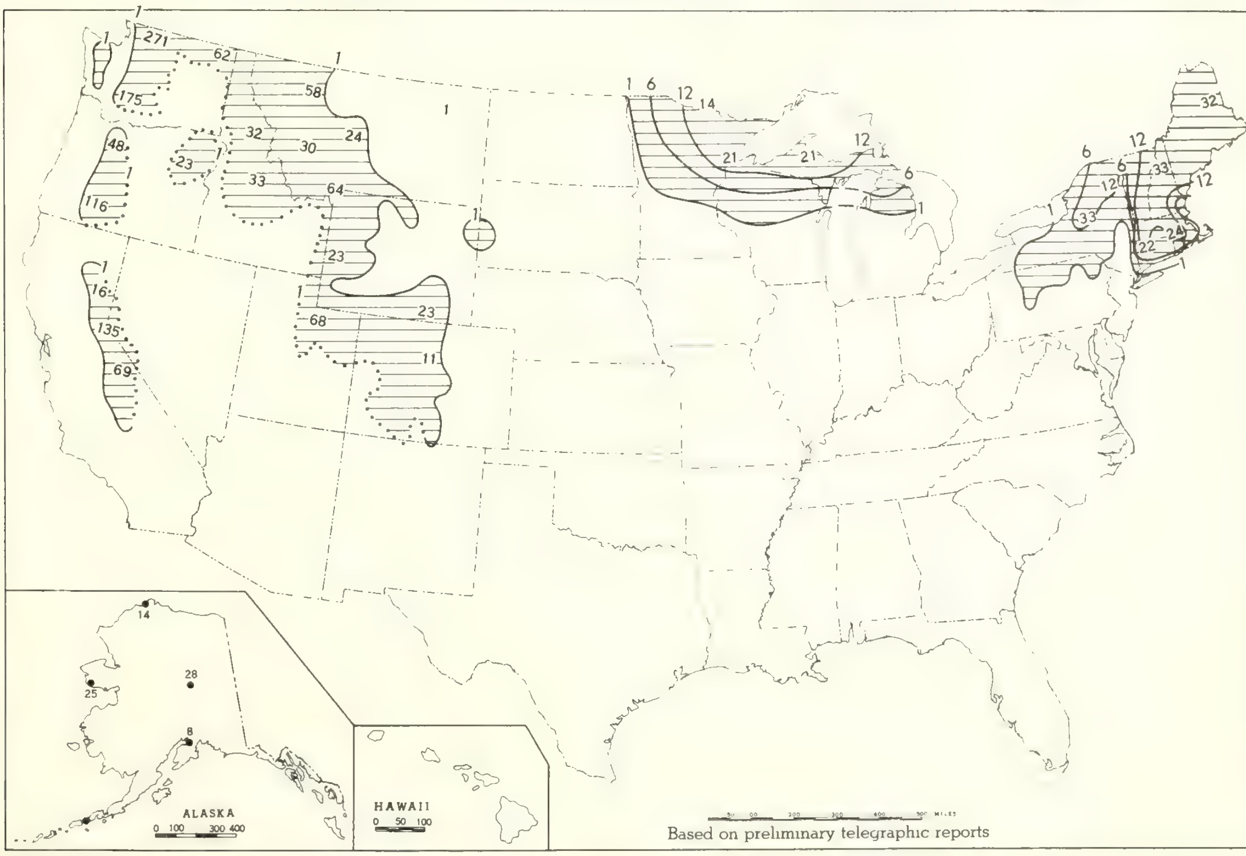
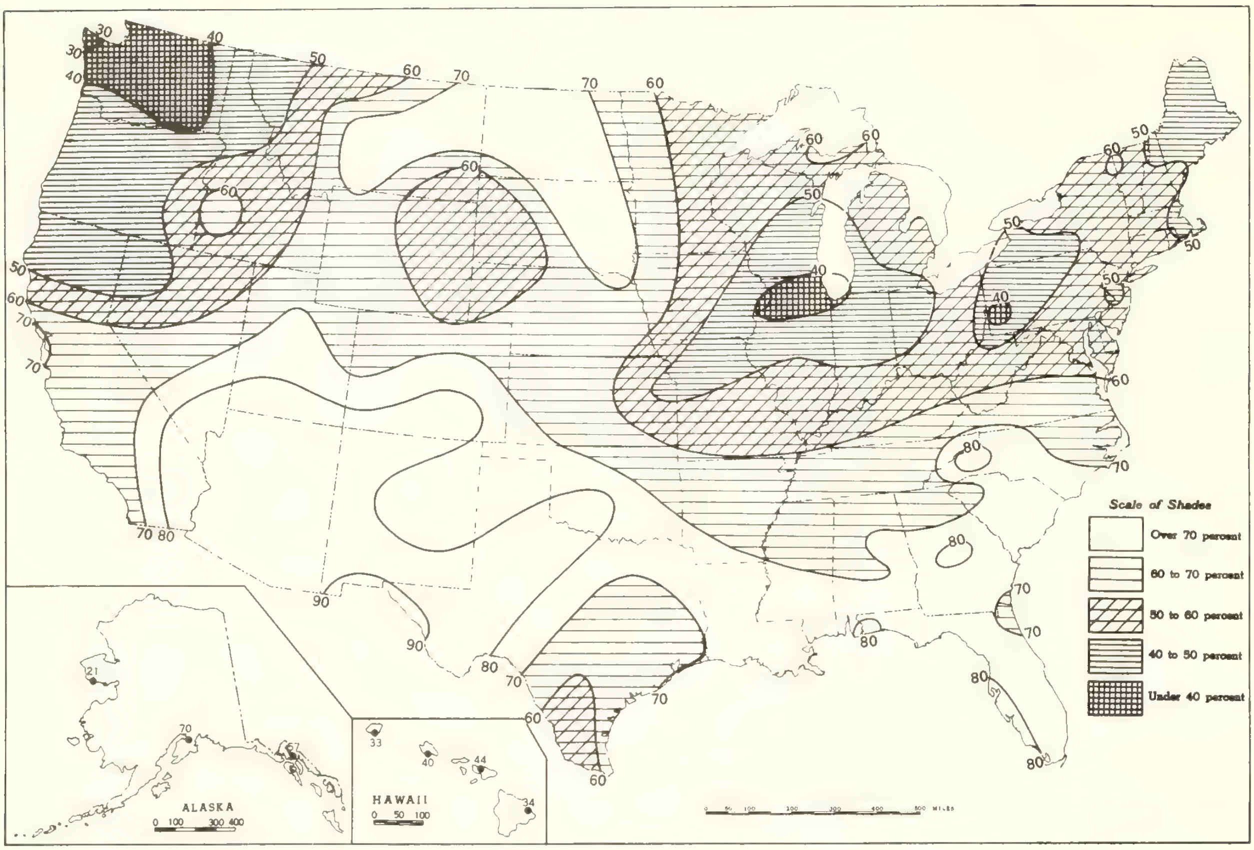
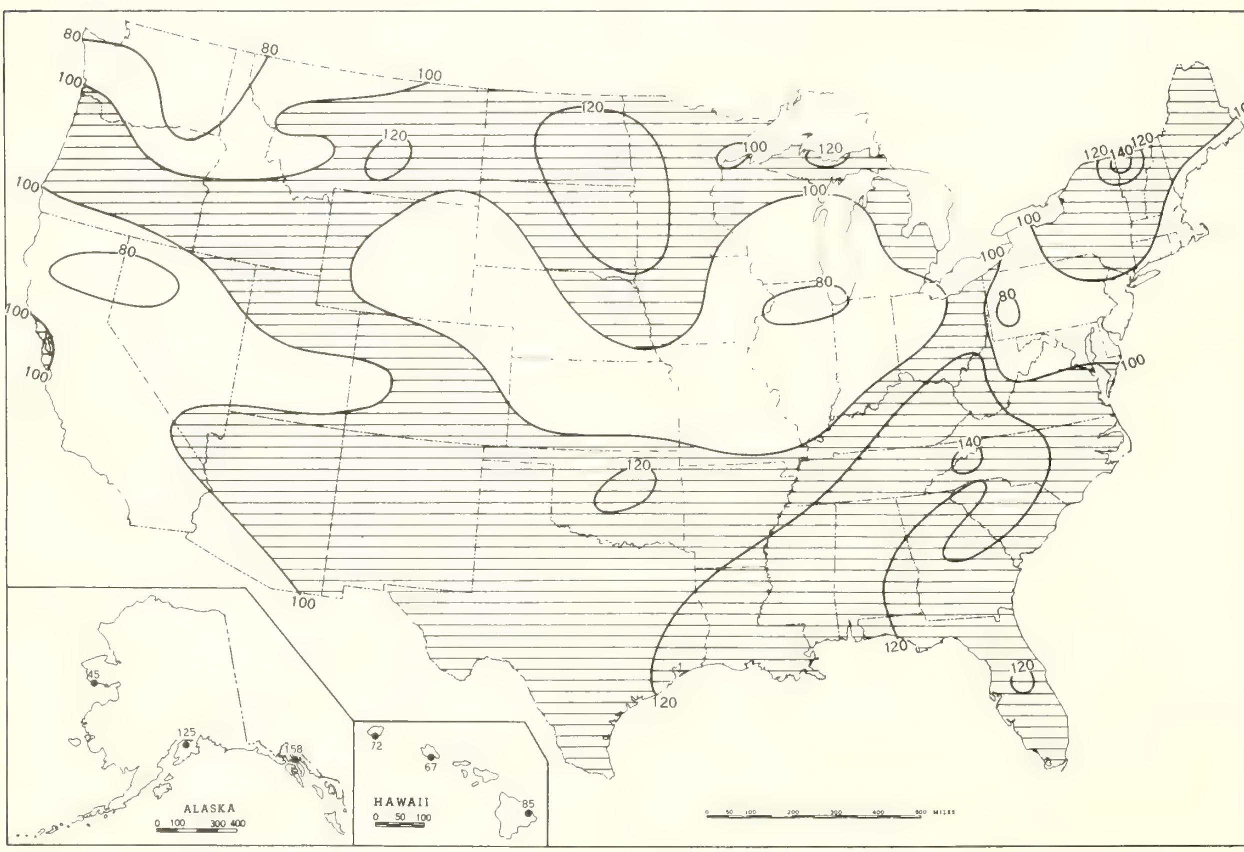


Chart VI. A. Percentage of Possible Sunshine, March 1967.

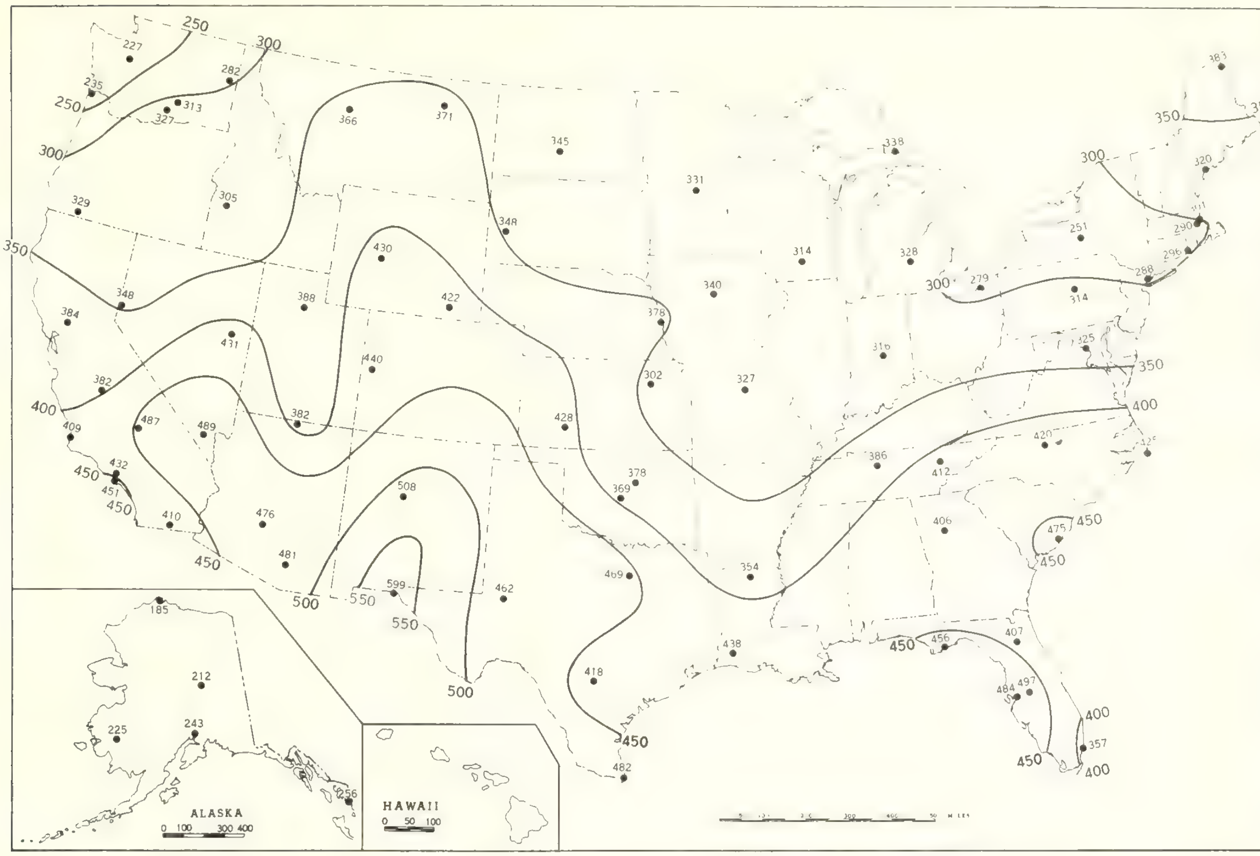


B. Percentage of Mean Monthly Sunshine, March 1967.

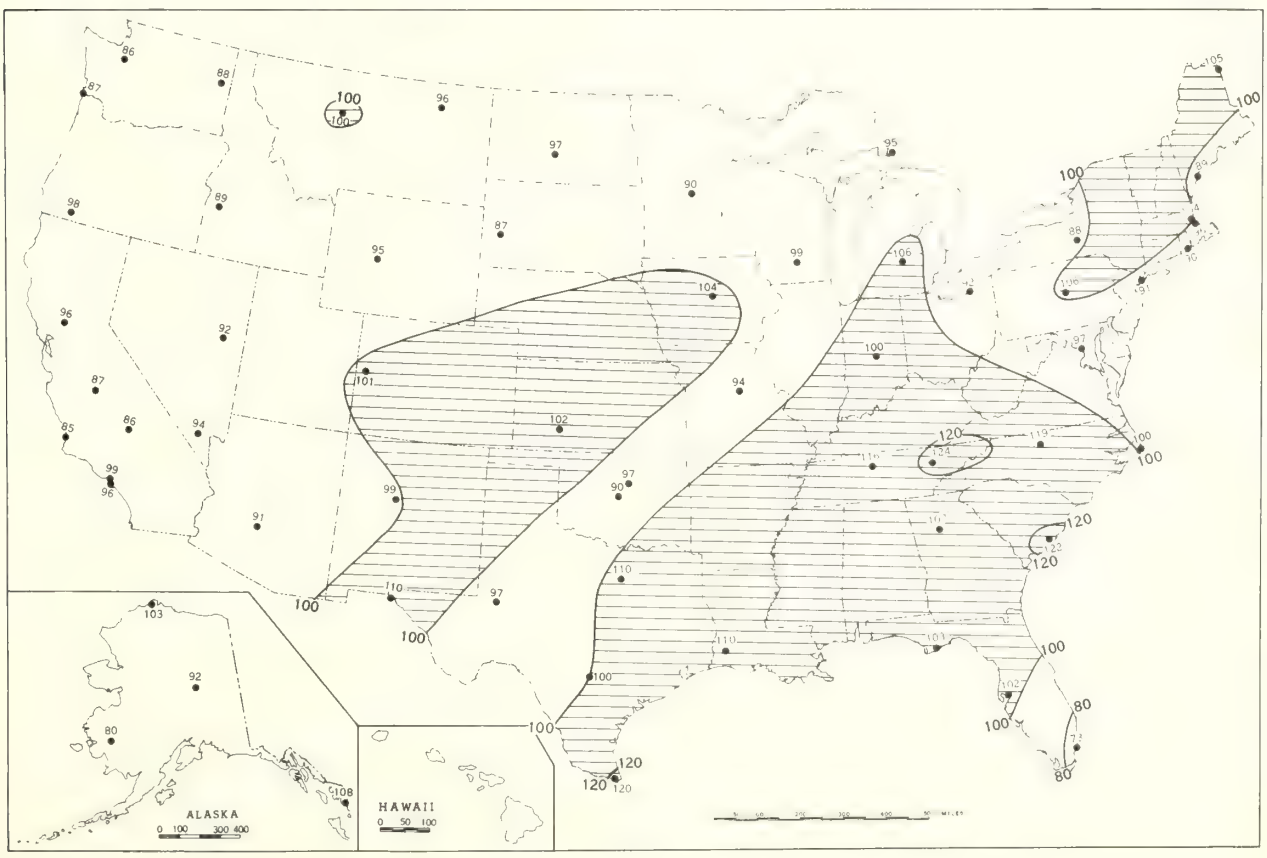


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, March 1967.

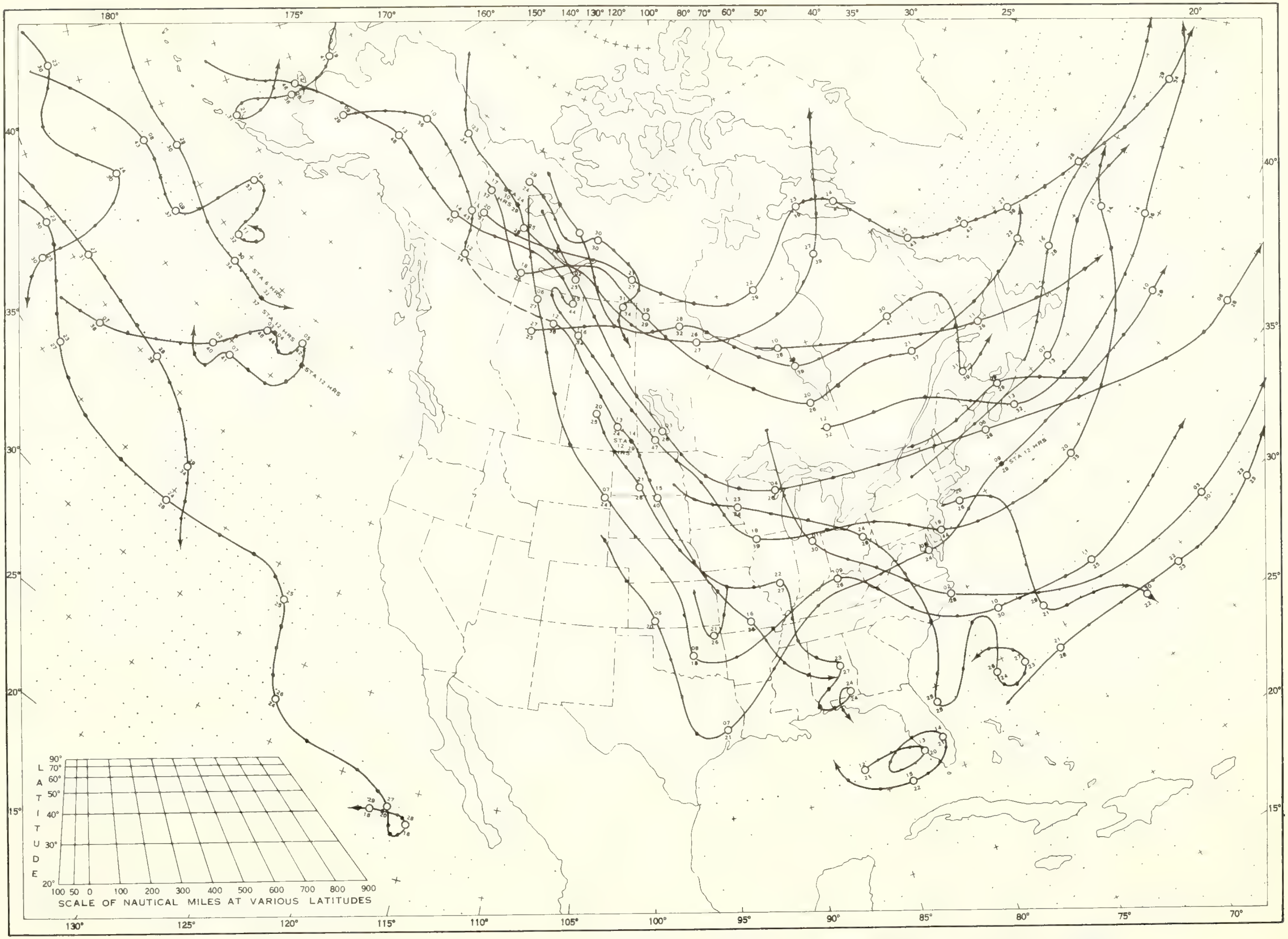


B. Percentage of Mean Daily Solar Radiation, March 1967.



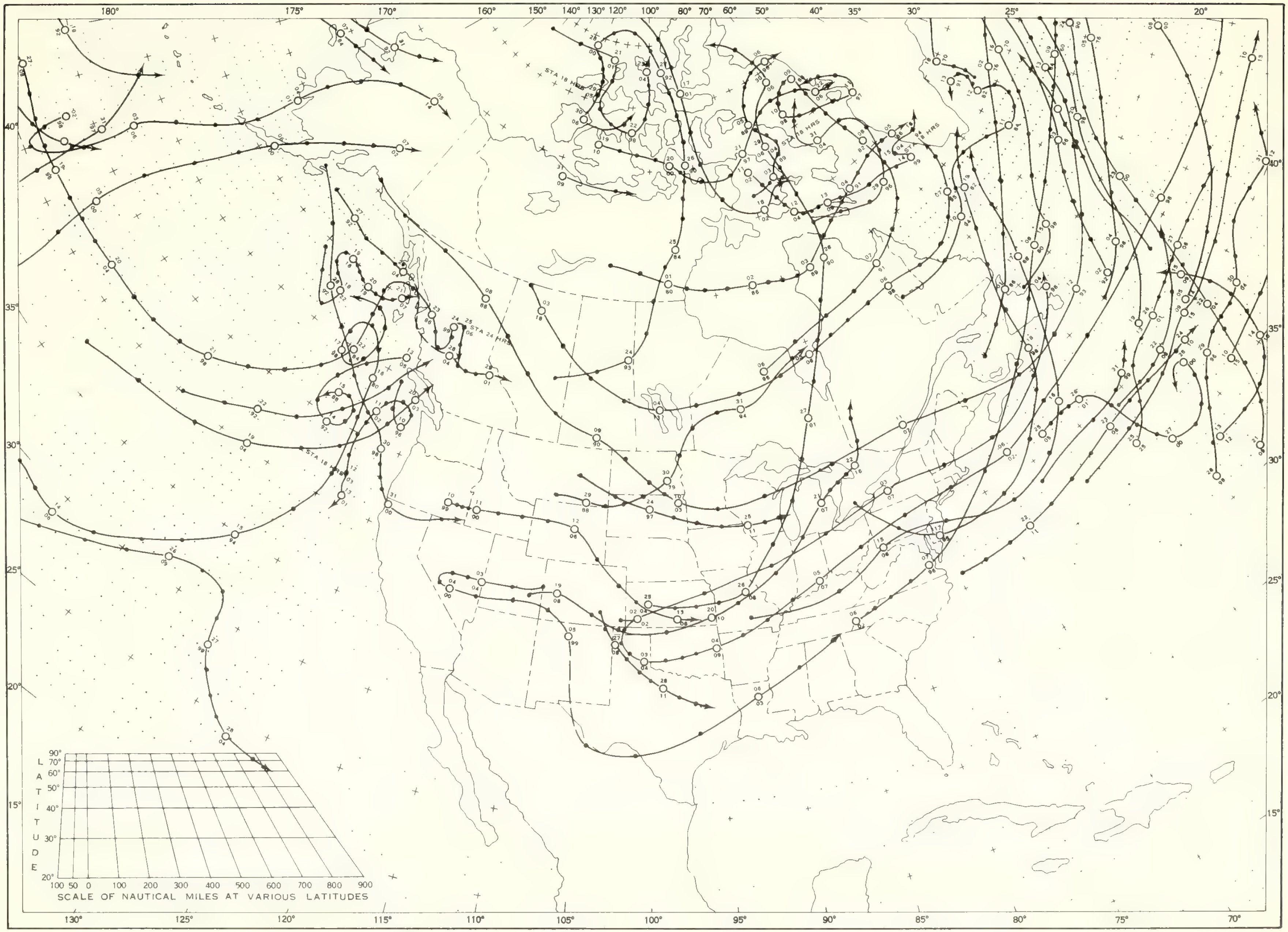
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, March 1967.



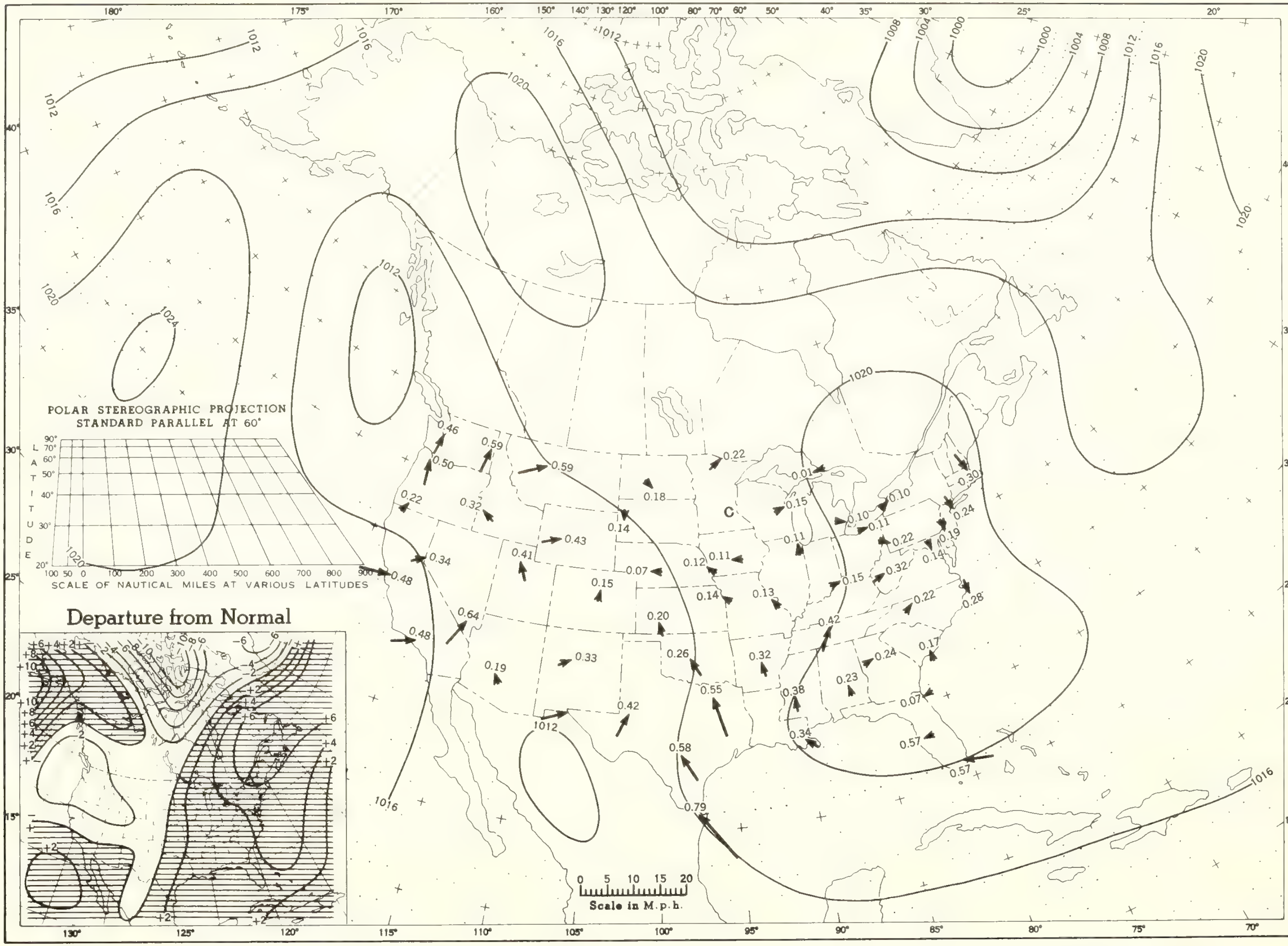
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, March 1967.



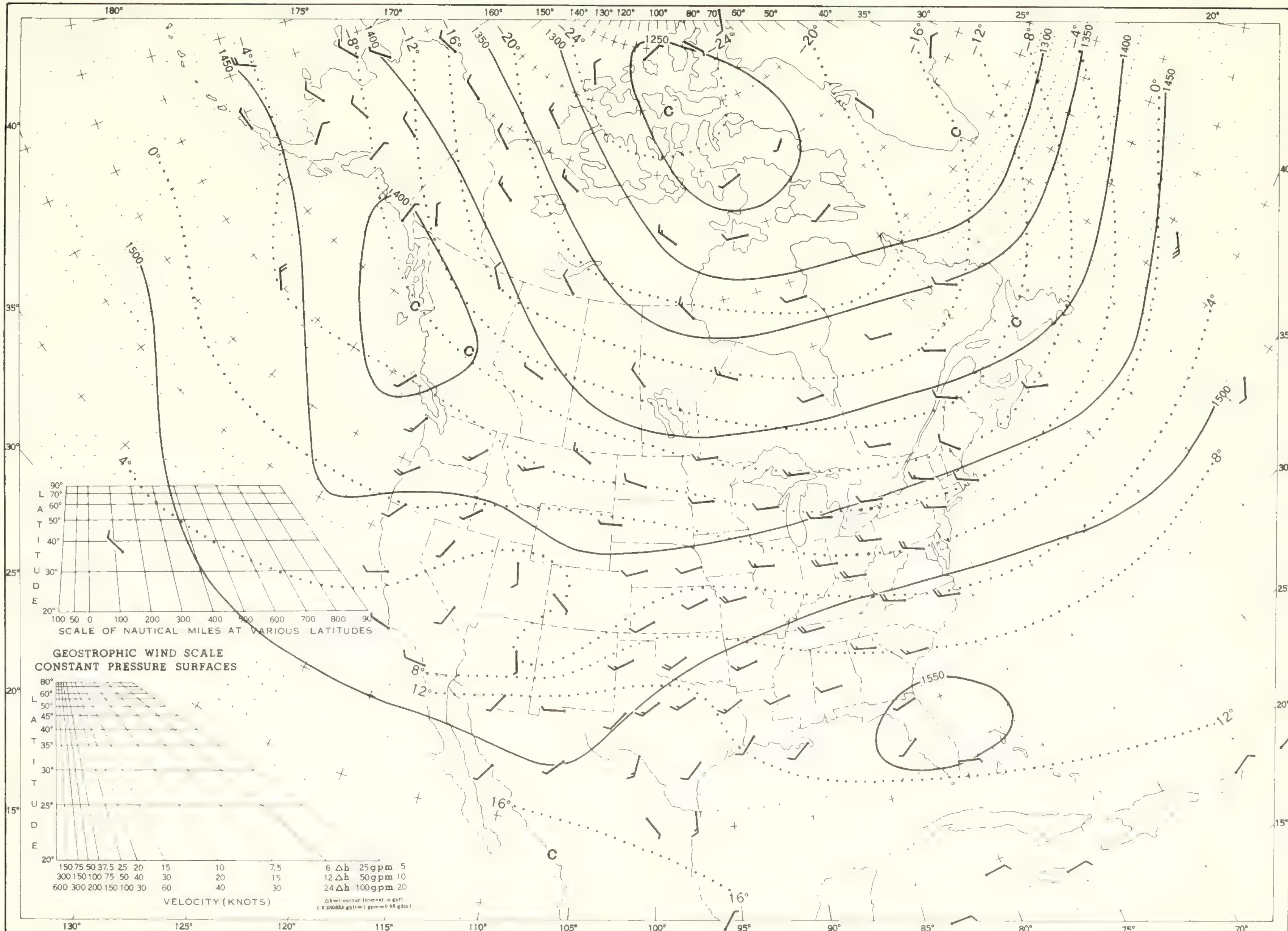
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, March 1967. Inset: Departure of Average Pressure (mb) from Normal, March 1967.



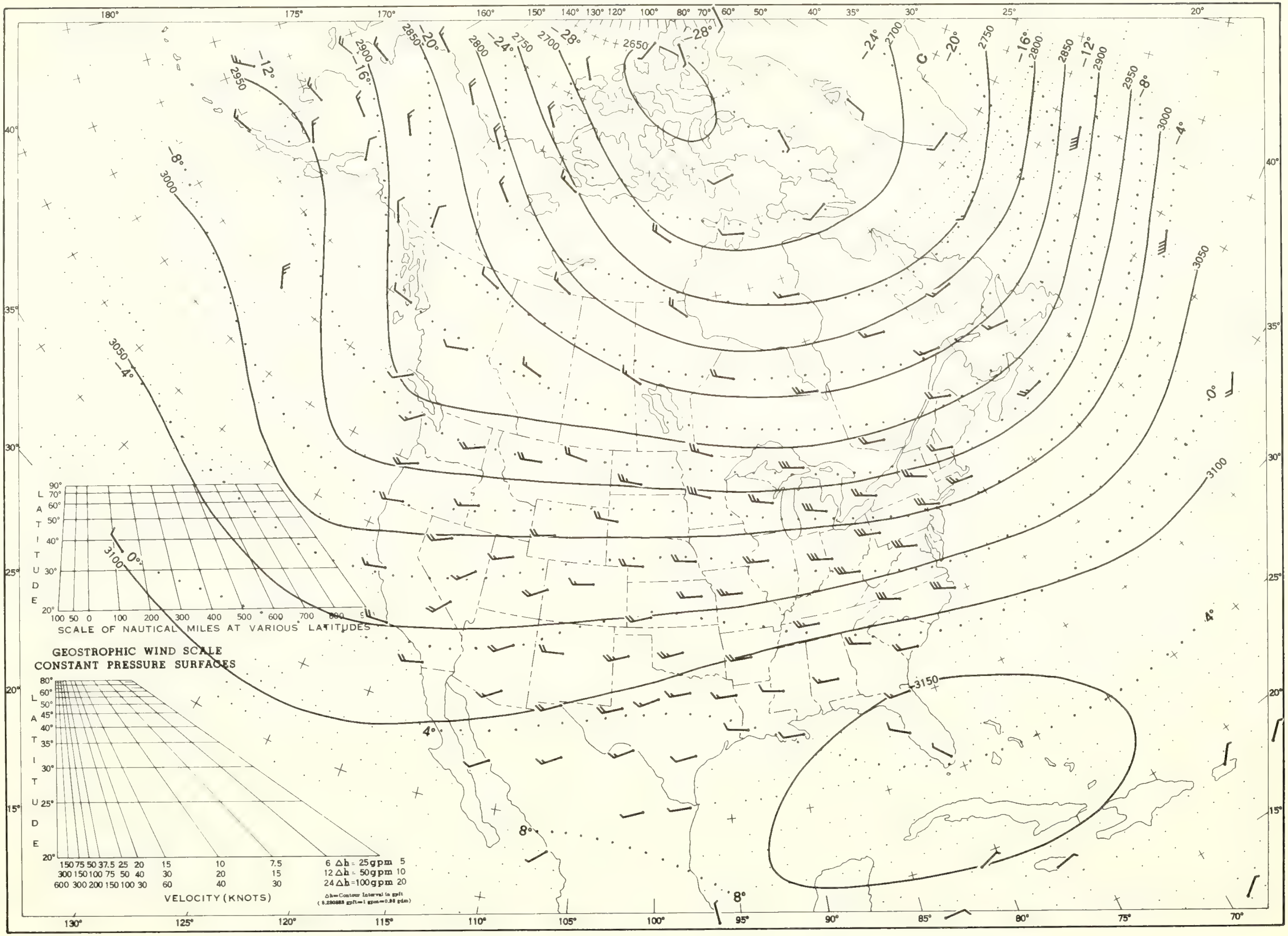
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.



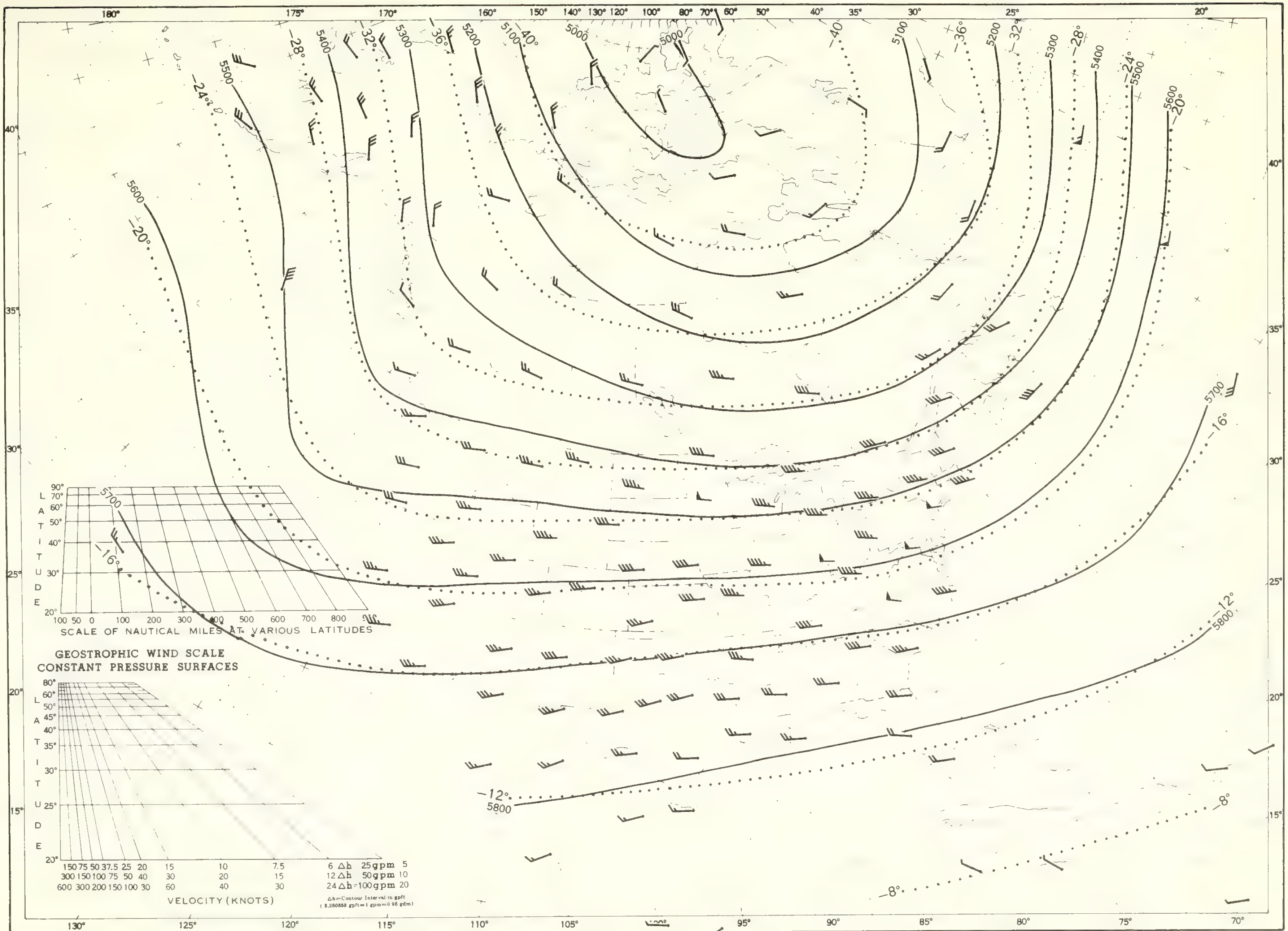
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.



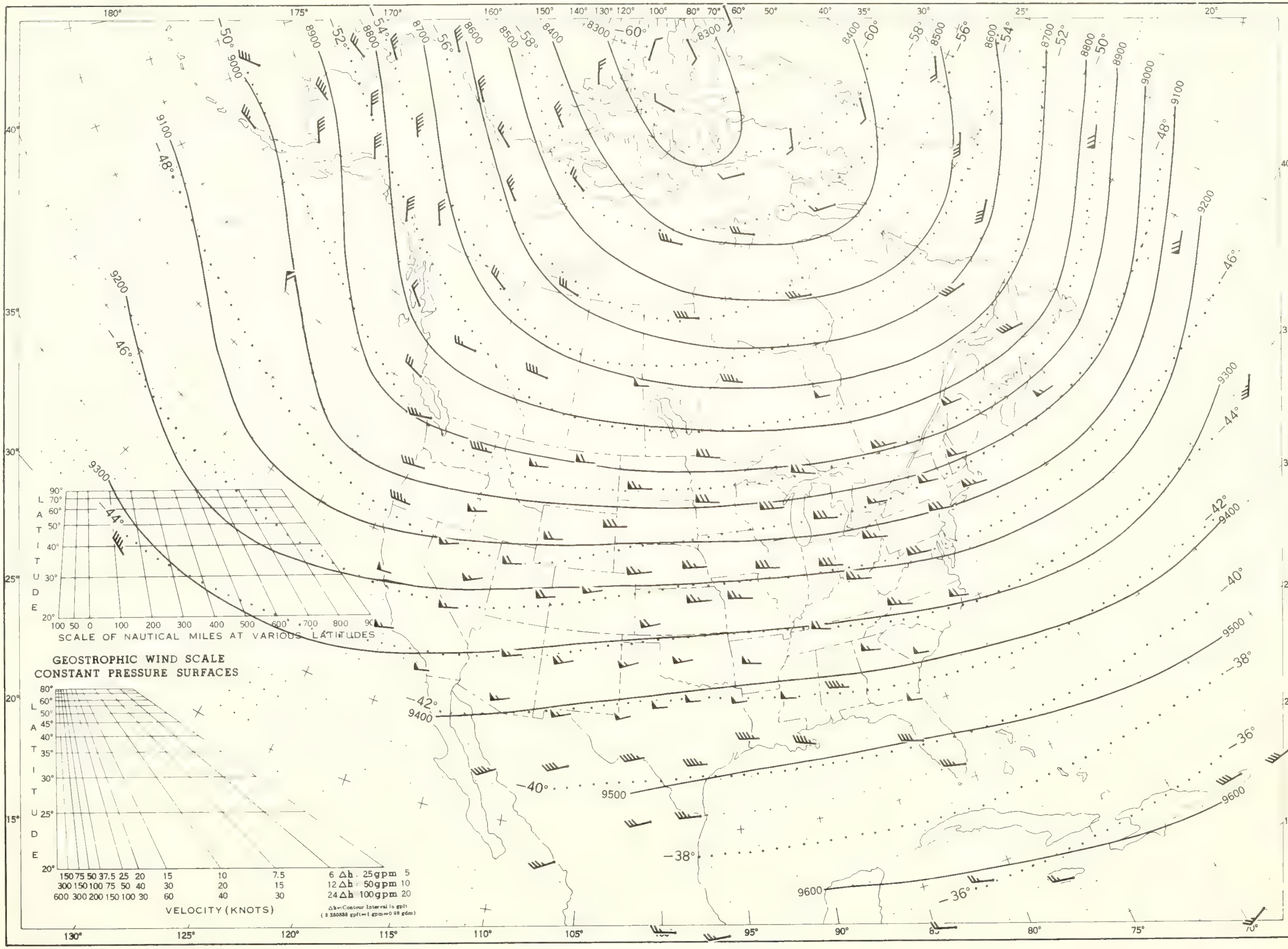
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.



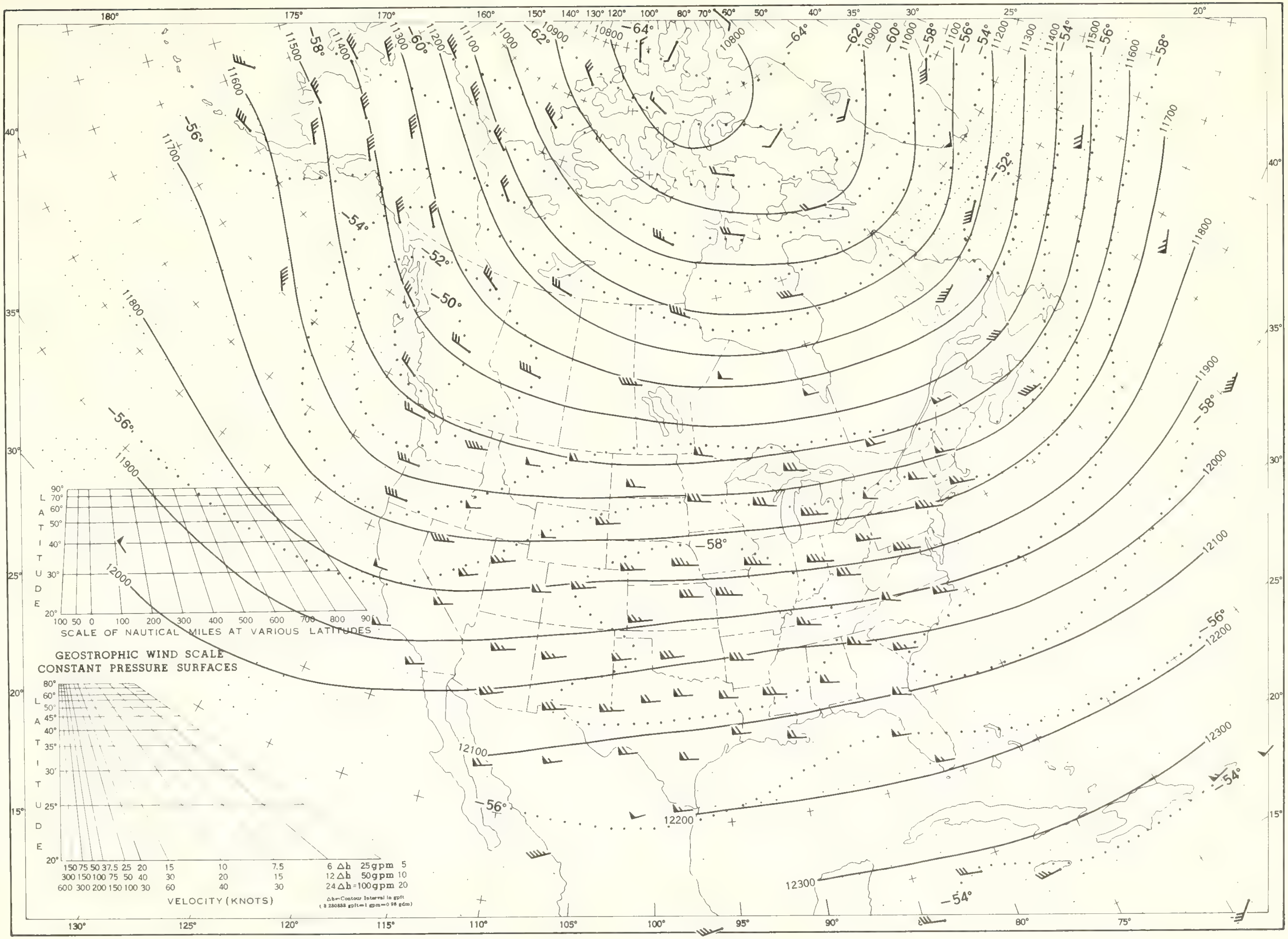
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.



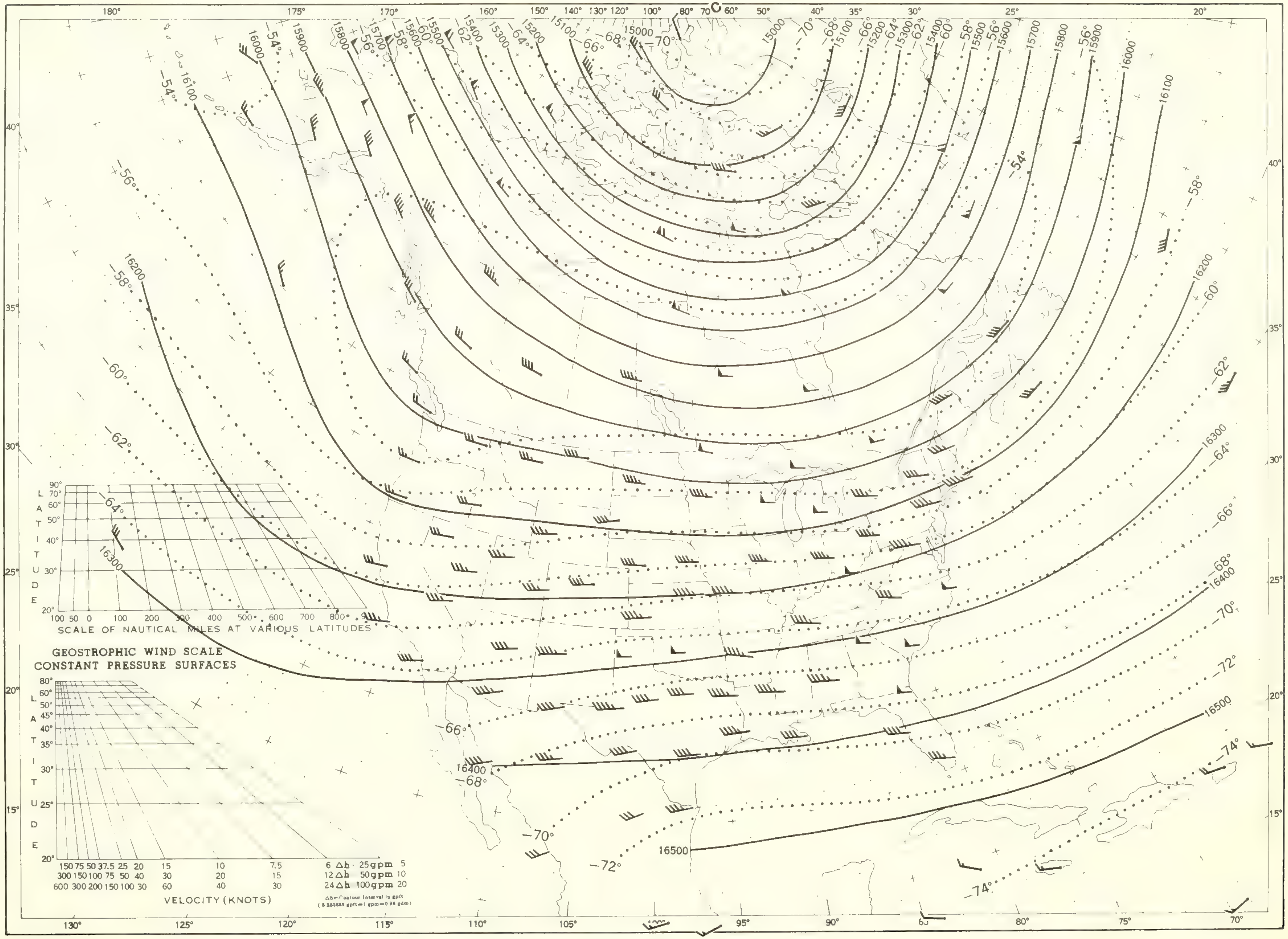
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.



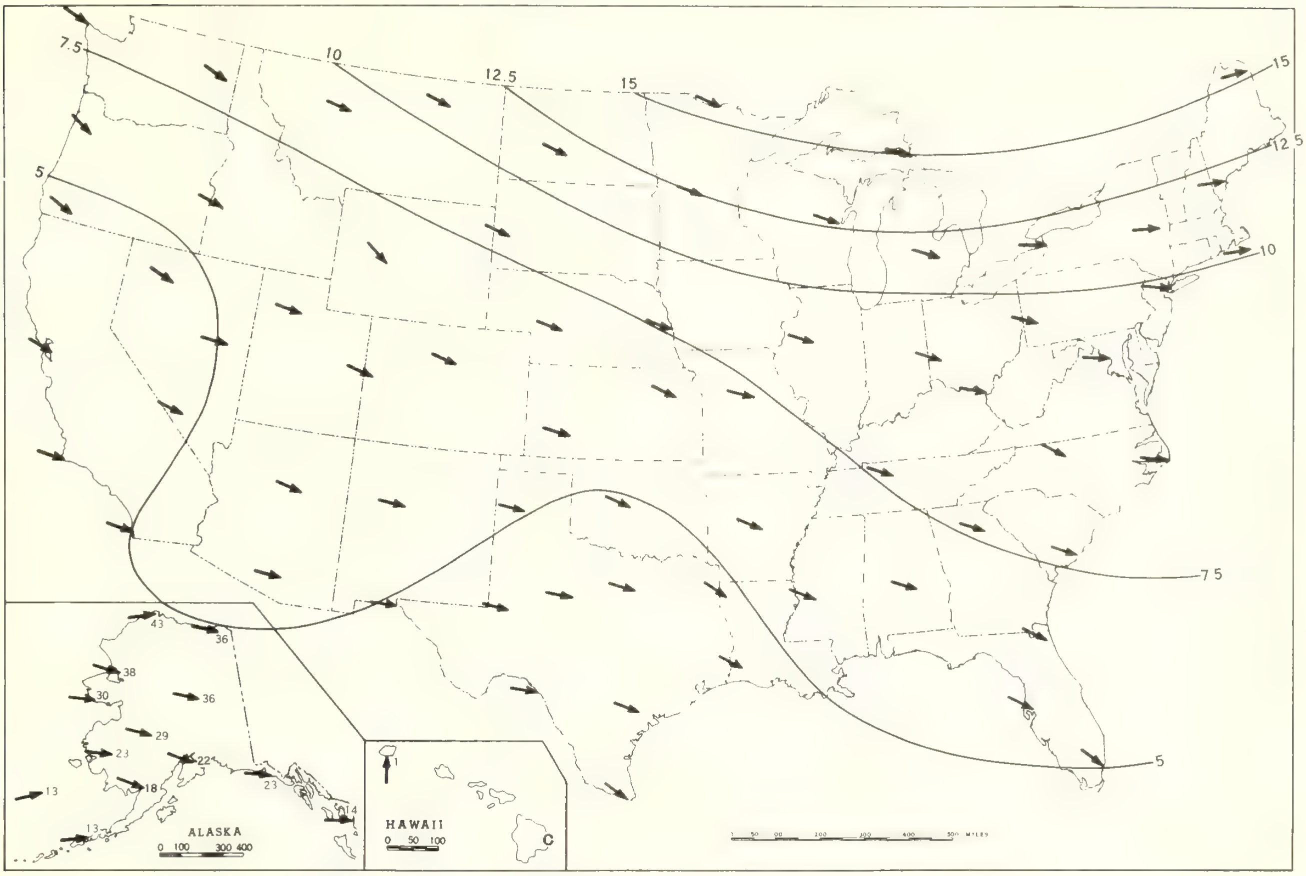
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, March 1967. Average Height and Temperature, and Resultant Winds.

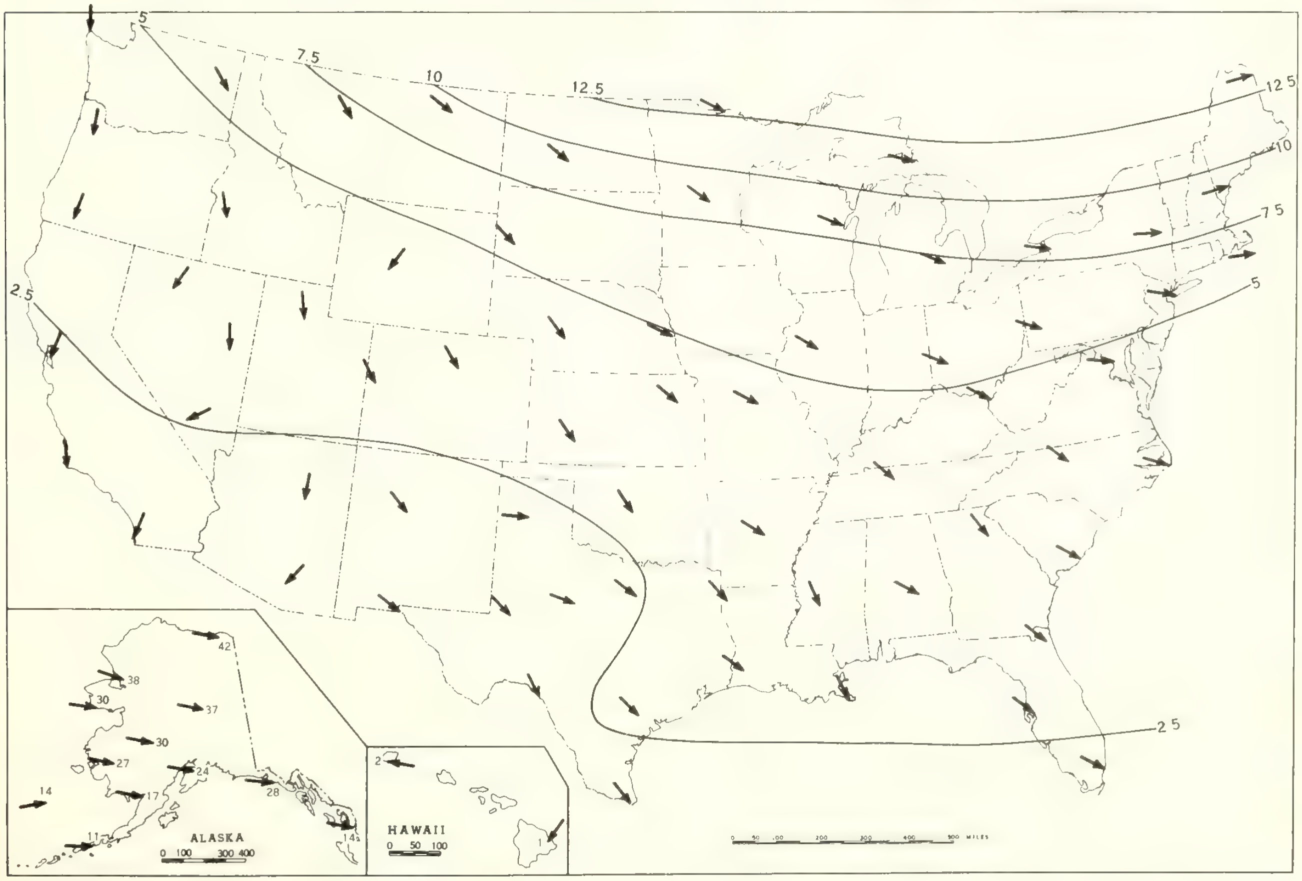


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, March 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, March 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. -7/13/67-1950

U. S. DEPARTMENT OF COMMERCE
ALEXANDER B. TROWBRIDGE, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

APRIL 1967
Volume 18 No. 4

ASHEVILLE: 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 4 APRIL 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Among coldest, wettest, snowiest, and windiest Aprils Far West.
2. Unusually warm South Central.
3. Record snowpack in California.
4. Increasing drought in Florida.
5. Tornado outbreak in Midwest on 21st.

TEMPERATURE.--Temperatures averaged below normal in the Far West, the extreme northern Great Plains, and Northeast and above elsewhere in the 48 States. This temperature pattern was much the same as that for the preceeding March. In the Far West below-normal temperatures were unusually persistent. East of the Rockies the first half of the month was abnormally warm, but during the second half cold weather in extreme northern sections gradually pushed southward almost to the Gulf.

The month was unusually cold in the Far West, particularly so in California where monthly averages ranged from 10° below normal in the Central Valley to 15° or more below in the Sierras. At scattered stations with long records in the Great Basin and the Pacific States, this was the coldest April on record. Among these were Boise, Idaho, San Francisco, Calif., and Yuma, Ariz., where records date back to 1864, 1871, and 1878, respectively. Red Bluff, Calif., recorded 31° on April 28, the lowest ever recorded there after April 7. April was colder than March at Las Vegas, Nev. At San Diego, Calif., the weather was much like the average weather for February, and temperatures were below normal every day. Havre, Mont., had its coldest April since records began in 1880 and also recorded its lowest temperature for April, -14° on the 22d. Grand Junction, Colo., recorded 24° on the 21st, the lowest there for so late in the season; this freeze caused heavy fruit losses.

East of the Rockies the month was 8° or more warmer than normal in some parts of the South. Generally southern stations reported their warmest April, among which were San Antonio, Tex., and Mobile, Ala., during records dating back to 1885 and 1871, respectively. Wide temperature fluctuations occurred during the second half of the month in the Southeast where, for example, Savannah, Ga., recorded an early season high of 95° on the 17th and a late season low of 39° on the 29th.

PRECIPITATION.--Precipitation was normal or above in much of the area west of the Mississippi River except below in the central and southwestern Great Plains and Colorado and Rio Grande River Basins. East of the Mississippi above normal precipitation was mostly limited to Wisconsin, Michigan, and western New England. Along the central and lower Atlantic coast and in Florida, Georgia, Alabama, and Mississippi, precipitation was much below normal.

Low pressure systems at frequent intervals moving across the Far West to the Great Lakes or Northeast accounted for most of the month's precipitation in those areas. California's precipitation ranged up to more than 400 percent of normal and this was one of the wettest Aprils in that State.

In a narrow belt extending from Denver, Colo., and Cheyenne, Wyo., through the Dakotas, precipitation ranged up to 300 percent of normal. Denver, Colo., recorded 3.25 inches on the 13th, a record there for April since records began in 1871. Williston, N. Dak., measured 3.31 inches for its wettest April.

In another belt of heavy precipitation extending from Oklahoma and eastern Texas to the Great Lakes, precipitation ranged up to 200 percent of normal. Topeka, Kans., recorded 8.06 inches for the month, the third greatest total for April in 90 years; and dryness of 15 months duration in the vicinity was greatly relieved. Some other parts of the Great Plains that were in this belt of heavy precipitation also were greatly benefited, particularly eastern portions of Kansas, Oklahoma, and Texas.

Probably the most intense precipitation of the month occurred at Baton Rouge, La., when 11.99 inches fell there on the 14th and caused local flooding.

The Southeast, particularly the Florida Peninsula, was one of the driest areas during April. In Florida this was the first time that Miami recorded no rain at all for April, and the second time for Fort Myers. Some areas in southern Florida had less than 20 percent of normal precipitation for the past 2 months. The dry weather in Florida created a high fire hazard and was causing scattered damage to crops.

SNOWFALL.--In the Far West abnormally cold weather which prevented or slowed melting and much heavier than normal snowfall increased the mountain snowpack. Usually the snowpack decreases during April. In California the pack was the heaviest of record for the end of April at a number of stations, some with records back to 1915. Mt. Shasta, Calif., measured 50.2 inches, the greatest April snowfall there since records began in 1888. The pack was near or above normal in the Pacific Northwest and the northern Rockies. Helena, Mont., reported 20.6 inches of snowfall, the most there for April since 1880. The pack was below normal in the southern Rockies.

Some northern areas east of the Rockies also reported abnormally heavy snowfall. Bismarck, N. Dak., had 14.8 inches which broke its previous April snowfall record of 13.4 inches in 1924. Up to 30 inches of snow fell in the northern half of the Black Hills of South Dakota on the 30th. In the Northeast, Portland, Maine, measured 15.7 inches for April, the most since 1907. Trenton, N. J., had 1/2 inch of snow on the 27th, a record for so late in the season.

SEVERE STORMS.--April had its usual share of severe local storms which were particularly frequent in the midcontinent area the second half of the month.

The month's worst outbreak of severe weather occurred in north-central areas on the 21st when tornadoes left paths of destruction in Iowa, Illinois, Wisconsin, Michigan, and Indiana. More than 50 persons were killed and over 1,000 injured in northeastern Illinois, most of them in Belvidere and the Chicago area. Property losses totaled many millions.

Severe thunderstorms, some with hail, occurred early in the month along a frontal zone from Oklahoma to the

Great Lakes and New England. About the middle of the 2d week heavy thunderstorms and a few tornadoes occurred in the lower Mississippi Valley.

A low pressure system, moving eastward near the Canadian border during the closing days of the month, gained strong intensity over north-central area. Blizzard conditions with winds up to 70 m.p.h. swept the northern Great Plains, and an outbreak of tornadoes in Iowa and Minnesota killed at least 17 persons and injured 100 or more.

In California where tornadoes are not a common occurrence, these storms were reported a number of miles west of Fresno on the 15th, 21st, and 22d.

Heavy snowfall caused a city-wide power failure in Colorado Springs, Colo., on the 13th.

CONDENSED CLIMATOLOGICAL SUMMARY

APRIL 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	4 Stations	92	23+	Valley Head	30	28	Boaz	7.44	Coffee Springs 2NW	T
Alaska	Data will be delayed									
Arizona	2 Stations	92	28+	Alpine	4	30	Junipine	2.04	5 Stations	.00
Arkansas	8 Stations	90	26+	2 Stations	33	27+	Okay	10.84	Portland	2.60
California	3 Stations	90	27	White Mountain 2	-9	20	Giant Forest	18.57	5 Stations	.00
Colorado	2 Stations	93	30+	Fraser	-8	17	Denver WBAP	3.95	2 Stations	T
Connecticut	Westbrook	79	3	Falls Village	13	12	Wolcott Reservoir	5.42	Easton Lake Reservoir	2.70
Delaware	Selbyville	87	15	2 Stations	24	12	Wilmington Porter Resvr	2.99	Selbyville	1.75
Florida	Melbourne	97	25	De Funiak Springs	35	29	Live Oak 2ESE	2.68	35 Stations	.00
Georgia	Savannah WBAP	95	17	2 Stations	27	29+	Cedartown	6.02	Swainsboro	.16
Hawaii	Data will be delayed									
Idaho	Blackfoot 2SSW	78	26	Galena	-6	2	Galena	3.93	Bonners Ferry 1SW	.52
Illinois	2 Stations	89	13+	Rockford WBAP	16	24	Galva	9.05	Anna 1E	2.03
Indiana	Evansville WBAP	90	16	Osgood	17	4	Lowell	7.52	Leavenworth Dam 44	2.43
Iowa	Adel 1SE	89	17	Cherokee	12	24	Augusta	D 7.29	Merrill 5W	.92
Kansas	Aetna 2S	98	5	Oberlin	19	22	Auburn 2W	10.07	Bird City 11S	.44
Kentucky	2 Stations	89	16+	Falmouth 5WNW	21	25	Irvington	6.95	Paducah	1.72
Louisiana	do	91	23+	Bastrop	42	28	Old River Lock	18.38	Franklin 3NW	.74
Maine	Saco	78	2	St Francis	5	4	Sanford 2NNW	5.22	Houlton	.18
Maryland	Cumberland Police Brks	90	15	Sines Deep Creek 2	15	12	Woodstock	5.53	Prince Frederick	.79

Section	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
Massachusetts	Haverhill	81	2	3 Stations	16	13	New Salem	6.77	South Egremont	3.22
Michigan	4 Stations	79	17+	Champion Van Riper Pk	5	11	Greenville 2NNE	8.32	Eagle Harbor Coast GD	D1.06
Minnesota	3 Stations	83	16	Wannaska 8SE	-6	3	Thief River Falls AP	7.48	Isle 8N	.82
Mississippi	Wiggins 4SE	93	9	Corinth 4SW	35	28	Woodville 4ESE	12.27	Enterprise	1.03
Missouri	2 Stations	91	16+	Memphis	19	24	Brookfield	8.08	Zalma 5E	1.29
Montana	Broadus	78	28	2 Stations	-14	22	Webster 3E	5.44	Harb	.25
Nebraska	Beaver City	94	29	Gordon	11	22	Sterling	4.11	Valentine WBAP	.25
Nevada	Overton	85	27	Ruth	-1	1	Ruth	3.75	2 Stations	.07
New Hampshire	Windham	79	2	Mount Washington	-11	12	Mount Washington	6.23	Jefferson 4S	3.04
New Jersey	Atlantic City WBAP	90	15	High Point Park	10	12	Phillipsburg Bridge	3.78	Bound Brook 2W	2.00
New Mexico	2 Stations	95	4	Gavilan	4	22	Obar	2.26	48 Stations	.00
New York	do	83	2	2 Stations	6	4	Lake Placid Club	D 6.25	Sodus Center	1.45
North Carolina	Wilmington WBAP	95	7	Grandfather Mountain	20	27	Hayesville 4NE	4.30	Elizabeth City FAA AP	.52
North Dakota	Mandan Ft Lincoln Park	77	3	3 Stations	-3	3+	Golden Valley 10S	6.69	Powers Lake 1N	1.13
Ohio	2 Stations	87	17+	Oberlin	16	12	Huntsville 3N	5.34	Marietta Lock 1	1.75
Oklahoma	do	98	15+	Boise City 2E	28	24	Coalgate	15.75	Kenton	.61
Oregon	The Dalles	77	8	Crater Lake NP HQ	3	28	Illahe 2N	10.16	Suntex	.48
Pennsylvania	5 Stations	87	16+	Clermont 4NW	10	12	Derry	5.91	Cedar Run	1.70
Puerto Rico	Comerio Falls Plant 2	96	28	Cayey 1E	50	5+	San German	5.11	4 Stations	.00
Rhode Island	2 Stations	78	3	Kingston	19	14+	Newport	5.17	Block Island WBAP	3.46
South Carolina	do	96	18+	Walhalla	29	28	Aiken	4.37	Charleston WBAP	.84
South Dakota	Harrold 12SSW	88	28	Deerfield 4NW	6	22	Roscoe	6.67	Harrington	.28
Tennessee	2 Stations	89	6	Mountain City No 2	22	29	Moscow	6.35	Knoxville WBAP	2.00
Texas	Rio Grande City 3W	103	26	2 Stations	28	24+	Clarksville 2E	10.51	13 Stations	.00
Utah	Moab 4NW	81	27	3 Stations	0	30+	Blowhard Mtn Radar	6.96	2 Stations	.00
Vermont	2 Stations	76	3+	Mount Mansfield	-5	4	Mount Mansfield	6.62	Bloomfield	2.05
Virginia	do	91	16+	Monterey	19	12	Chilhowie 1S	5.25	Riverton	.47
Washington	Sunnyside	73	8	Rainier Paradise RS	13	15	Cougar 6E	7.44	Richland	.31
West Virginia	2 Stations	89	10+	Bayard	13	12	Camden on Gauley	5.66	Brushy Run	.79
Wisconsin	Prairie Du Chien	81	16	3 Stations	8	3	Breed	6.10	Hillsboro	.99
Wyoming	2 Stations	82	28+	Lake Yellowstone	-1	3	Keeline	4.12	Deaver	.14

\+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	997.0	1019.2	81	54	67.2	4.1	88	6+	38	28	0	0	54	66	1.35	- 3.12	0.81	6	3	0.0	0	1.7	21	29	SW	26	5	11	14	6.1	70
HUNTSVILLE	600	995.9	1018.9	80	54	67.1	5.5	92	16	36	28	1	0	50	56	3.90	- 0.09	2.10	6	5	0.0	0	1.8	17	25	11	23	4	14	12	6.2	
MOBILE	211	1011.2	1018.9	85	64	74.6	7.0	90	8+	50	28	2	0	63	72	2.26	- 4.10	2.13	3	1	0.0	0	4.1	19	23	2	27+	8	16	6	5.5	
MONTGOMERY	194	1012.2	1019.3	82	59	70.6	6.5	88	23	46	29+	0	0	58	67	1.05	- 3.84	0.62	6	4	0.0	0	1.9	20	25	NW	26	6	15	9	6.0	69
ALASKA												B																				
ANCHORAGE	114	1014.2	1019.1	42	28	35.1	- 1.8	57	30	21	13	0	27	21	58	0.49	0.07	0.21	9	0	4.0	7	0.5	22	29	33	11	10	5	15	6.2	59
ANNETTE	110	1011.5	1015.7	54	35	44.1	0.7	71	30	30	13+	2	8	30	65	2.33	- 6.79	0.68	9	0	0.4	T	1.1	1	26	15	11	11	6	13	5.8	
BARROW	31	1014.9	1015.6	14	- 2	6.0	5.8	38	29	-26	1	0	29	2	81	0.13	0.02	0.04	8	0	1.7	14	5.0	15	35	9	16	7	8	15	6.3	
BARTER ISLAND	39	1016.3	1018.4	14	- 6	3.8	2.9	40	29+	-34	8	0	30	- 2	72	0.35	0.18	0.15	8	0	4.9	13	2.2	23	44	27	18	10	8	12	5.6	
BETHEL	125	1011.5	1017.4	36	26	30.9	5.0	53	30	4	15	0	23	28	88	1.54	0.96	0.45	16	0	5.1	18	9.3	20	38	18	18+	1	3	26	9.0	
COLD BAY	96	1017.3	1021.3	43	33	38.2	4.9	50	18+	26	21+	0	12	32	81	3.06	1.60	1.27	19	0	1.0	T	8.1	19	56	17	3	0	3	27	9.2	
FAIRBANKS	436	1000.3	1017.8	40	24	31.7	2.3	60	30+	3	16	0	29	24	72	0.84	0.59	0.20	10	0	11.1	37	2.2	25	21	24	20+	2	6	22	7.9	
JUNEAU	12	1015.9	1016.8	48	26	37.3	- 0.7	63	26	20	14+	0	29	28	74	1.12	- 1.75	0.45	10	0	3.0	1	2.7	14	37	12	11	9	6	15	6.1	66
KING SALMON	49	1018.0	1020.1	40	29	34.6	1.8	49	29	17	12	0	21	25	69	1.33	0.69	0.69	13	0	2.9	1	4.9	20	37	13	27+	2	8	20	8.0	
KOTZEBUE	10	1013.5	1014.1	28	11	19.5	6.3	39	30+	-15	15	0	29	17	86	0.86	0.55	0.15	19	0	18.1	47	7.4	15	47	11	16	1	3	26	8.8	
MC GRATH	344	1005.4	1018.4	38	25	31.8	4.2	58	30	2	12	0	25	23	71	2.48	2.01	0.80	15	0	24.3	32	4.5	21	30	19	5	2	5	23	8.5	
NOME	13	1012.2	1012.9	29	17	23.0	1.8	39	30+	-13	15	0	30	18	79	1.00	0.20	0.29	17	0	11.9	37	2.3	13	35	3	1	2	4	24	8.9	11
ST. PAUL ISLAND	22	1013.5	1014.7	39	32	35.6	7.2	41	28+	25	23	0	13	31	84	3.10	2.14	0.63	26	0	2.9	T	10.4	21	48	19	18	0	5	25	9.2	
SHEMYA	122	1008.8	1012.6	38	31	34.5	- 1.0	40	30+	26	14	0	21	31	87	1.54	- 0.52	0.66	19	0	1.4	T	8.2	24	48	20	11	0	8	22	8.8	
YAKUTAT	28	1015.6	1016.7	42	24	33.3	- 3.7	57	30	13	17	0	30	27	79	3.34	- 3.89	1.21	11	0	28.8	44	0.9	12	35	12	11	11	4	15	6.0	
ARIZONA																																
FLAGSTAFF	6993	784.0	1013.1	52	23	37.6	- 5.7	64	26+	10	30	0	28	19	50	1.90	0.72	1.32	6	0	17.7	16	9.2	21	25	20	22	12	13	5	4.4	
PHOENIX	1117	974.3	1013.0	77	48	62.4	- 4.8	87	27	39	30	0	0	31	34	0.08	- 0.24	0.08	2	0	0.0	0	2.0	24	39Y	WSW	11	20	2	8	3.4	87
TUCSON	2584	924.8	1012.4	78	47	62.1	- 3.8	88	26+	34	12	0	0	26	30	0.29	0.02	0.29	1	0	T	0	3.8	24	33	SW	11	14	8	8	4.3	88
WINSLOW	4895	848.6	1012.7	68	32	50.2	- 5.4	79	3	22	20	0	22	16	29	0.10	- 0.35	0.05	3	0	0.4	T	10.1	20	52	18	12	20	4	6	3.2	
YUMA	194	1007.1	1014.3	76	50	63.2	- 7.4	87	27	42	12	0	0	32	34	T	- 0.09	T	0	0	0.0	0	5.3	28	43	NW	11	18	6	6	3.2	86
ARKANSAS																																
FORT SMITH	447	999.0	1015.4	76	55	65.9	4.2	86	16+	38	27	0	0	53	66	6.81	2.57	1.64	14	10	0.0	0	3.3	13	40	W	16	6	4	20	7.2	50
LITTLE ROCK	257	1007.8	1017.1	77	56	66.7	4.3	86	16	42	28	0	0	55	67	7.58	2.65	2.38	13	7	0.0	0	2.7	15	30	S	13	3	13	14	7.1	41
TEXARKANA	391	1003.4	1016.3	78	59	68.5	4.6	87	23+	44	27	0	0			5.58	0.28	2.73	11	7	0.0	0	5.7	16				5	9	16	7.4	
CALIFORNIA																																
BAKERSFIELD	475	999.7	1017.4	61	44	52.7	-10.3	70	6	40	30+	0	0	41	68	2.65	1.84	0.59	13	1	0.0	0	3.1	35	25	32	15	3	12	15	6.9	
BISHOP	4108	868.6		58	31	44.9	-10.2	69	26	21	16	0	18			0.47	0.01	0.30	4		2.2	1						8	16	6	5.1	
BLUE CANYON	5280			35	25	29.6	-16.0	46	12	18	20	0	30			11.08	6.26	1.69	25		77.8	64			29	18	17	0	5	25	8.7	
EUREKA U	43			52	40	46.2	- 4.2	58	2	34	1	0	0			5.29	2.62	1.01	19		0.0	0			26	W	13	2	7	21	8.1	48
FRESNO	328	1005.8	1017.5	62	43	52.6	- 8.7	69	26	37	16	0	0	44	77	4.41	3.28	1.22	16	4	0.0	0	0.5	19	26	W	15	3	12	15	6.9	64
LONG BEACH	34	1016.6	1018.0	65	44	54.6	- 5.4	73	26	39	16	0	0	41	62	2.29	1.52	0.58	8	0	0.0	0	3.2	23	23	22	29+	11	12	7	4.7	
LOS ANGELES	97	1013.9	1017.4	63	49	56.0	- 3.4	70	26	45	16	0	0	44	66	2.68	1.63	0.83	10	1	0.0	0	5.1	26	38Y	W	11	12	10	8	4.5	
LOS ANGELES U	270			64	48	56.1	- 5.7	74	26	44	19	0	0			3.76	2.59	0.98	11		0.0	0			25	W	11	12	10	8	5.1	87
MT SHASTA R	3544			45	28	36.7	-10.8	57	12	21	28+	0	27			6.67	3.90	2.23	20		50.2	21										
OAKLAND	6	1017.3	1017.7	56	47	51.5	- 5.1	60	3	41	11+	0	0	41	69	4.46	3.08	1.14	17	2	0.0	0	4.5	24	25	21	17	4	9	17	7.2	
RED BLUFF	342	1003.7	1016.5	58	41	49.4	-11.0	68	12	31	28	0	1	40	72	2.60	0.77	0.52	20	3	0.0	0	4.6	17	35	SE	17	0	11	19	8.3	43
SACRAMENTO	17	1016.3	1017.0	59	41	49.6	- 8.8	65	12	34	1	0	0	42	79	3.40	2.00	0.89	15	3	0.0	0	4.3	19	24	SW	17+	3	8	19	7.5	59
SANDBERG R	4517	860.1		42	28	34.8	-16.0	58	26	22	19	0	28	29	83	4.11	3.14	0.88	13		21.9	5	3.3	23	43	32	12	8	6	16	6.5	
SAN DIEGO	13	1016.9	1017.9	63	50	56.5	- 5.0	67	26	46	17+	0	0	45	66	2.24	1.45	0.59	12	0	0.0	0	3.4	28	28	SW	11	12	12	6	4.9	68
SAN FRANCISCO	8	1016.9	1017.6	57	44	50.9	- 4.8	60	30+	38	20+	0	0	40	69	5.31	4.01	1.76	20	0	0.0	0	6.2	26	34	SSW	17	3	11	16	7.4	
SAN FRANCISCO U	52			55	46	50.8	- 4.9	59	12+	40	11	0	0			4.90	3.46	1.46	17		0.0	0			28	SW	17					72
SANTA CATALINA	1568			53	43	47.7	- 9.0	60	9	39	1	0	0			2.50	1.28	0.59	12	0	0.0	0						9	12	9	5.1	
SANTA MARIA	236			59	38	48.4	- 7.2	65	26	33	30+	0	0			3.63	2.44	0.77	16		0.0	0						7	12	11	5.7	
STOCKTON	22	1016.6	1017.7	59	41	50.1	- 9.6	65	12	34	1	0	0	41	73	2.81	1.67	0.74	16	4	T	0	3.1	23	26	27	18	3	6	21	7.5	
COLORADO																																
ALAMOSA	7536	767.7		59	25	41.8	0.0	70	3	9	14	0	29			0.58	- 0.11	0.56	2		6.4	5						11	13	6	4.6	
COLORADO SPRINGS	6145	806.0	1009.3	62	34	48.2	2.6	77	4	23	24	0	16	19	39	2.04	0.73	1.82	2	1	13.9	4	4.6	19	40	22	29	10	11	9	5.1	
DENVER	5283	830.7	1007.5	64	33	48.2	1.8	80	29	24	22+	0	19	24	48	3.95	1.84	3.25	4	1	3.6	4	2.7	19	42	W	30	10	12	8	4.9	75
GRAND JUNCTION	4855	847.3	1009.4	66	37	51.6	- 0.7	80	27	24	21	0	9	15	27	0.08	- 0.67	0.03	4	0	0.4	T	3.3	20	49	SW	29	9	12	9	5.6	64

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F	%	In.	In.	In			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	850.3	1007.8	70	39	54.5	3.8	84	29	33	12+	0	0	20	31	2.03	0.85	2.03	2	1	0.5	T	2.8	22	45	W	30	12	12	6	4.8	85
CONNECTICUT																																
BRIDGEPORT	7	1015.6	1016.3	53	37	44.8	- 3.2	75	3	28	13+	0	6	31	64	3.46	- 0.34	1.15	12	3	T	T	5.8	33	48	2	28	8	7	15	6.4	
HARTFORD	169	1009.1	1015.9	58	37	47.1	- 1.4	78	1	26	13	0	7	29	56	4.18	0.45	1.37	10	3	1.4	1	5.1	35	37	NE	28+	7	7	16	6.6	55
NEW HAVEN	6	1015.9		54	37	45.4	- 1.5	75	3	26	13	0	7			3.26	- 0.63	0.95	12		T	T			32	N	28	7	10	13	6.1	58
DELAWARE																																
WILMINGTON	78	1014.2	1017.3	63	41	51.5	- 0.6	83	15+	25	12	0	2	37	62	2.69	- 0.64	1.00	9	2	T	0	3.7	31	27	30	22	7	7	16	6.7	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.6	1018.0	69	46	57.6	1.9	88	15	32	12	0	1	38	53	0.80	- 2.35	0.37	6	2	0.0	0	3.2	30	36	NW	7	6	9	15	6.8	60
FLORIDA																																
APALACHICOLA U	13			79	66	72.6	5.1	90	18	52	28	1	0			0.23	- 4.07	0.21	3	1	0.0	0			30	E	8	15	13	2	4.0	76
DAYTONA BEACH	31	1019.3	1020.5	83	61	72.4	3.5	93	26+	48	29	5	0	59	66	T	- 2.97	T	0	0	0.0	0	2.7	11	25	10	21	14	12	4	4.1	
FORT MYERS	15	1019.3	1019.7	84	62	73.0	0.2	89	25	55	30+	0	0	59	66	T	- 2.64	T	0	1	0.0	0	1.6	10	26	8	1	20	9	1	3.0	
JACKSONVILLE	20	1019.3	1020.2	84	62	73.0	4.3	94	18	46	29	5	0	58	65	2.00	- 1.55	1.05	2	1	0.0	0	1.2	17	47	NW	24	10	18	2	4.4	72
KEY WEST	4	1018.0	1018.6	83	75	79.1	3.3	86	28+	70	2	0	0	66	65	0.02	- 2.46	0.01	2	0	0.0	0	10.1	9	33	E	13	13	13	4	4.4	85
LAKELAND U	214			84	63	73.6	2.1	89	19	56	30+	0	0			0.00	- 3.51	0.00	0		0.0	0						17	12	1	2.9	87
MIAMI	7	1019.0	1019.2	82	67	74.7	0.5	89	19+	61	5+	0	0	62	67	0.15	- 3.73	0.15	1	0	0.0	0	7.1	10	28	7	1	10	15	5	4.7	
ORLANDO	108	1015.9	1020.3	87	62	74.3	3.1	93	27+	53	29	12	0	59	65	0.28	- 3.14	0.28	1	0	0.0	0	1.7	10	23	29	27+	19	9	2	2.9	
PENSACOLA	112	1015.6	1019.7	81	64	72.5	4.6	87	18	52	28	0	0	62	73	1.57	- 3.68	1.56	2		0.0	0	3.9	16	40	N	14	8	12	10	5.5	71
TALLAHASSEE	55	1017.6	1019.9	86	58	72.1	4.6	91	23+	41	29	4	0	59	68	1.44	- 3.20	1.30	4	2	0.0	0	1.7	18	21	32	27+	9	19	2	4.8	
TAMPA	19	1019.3	1019.7	85	61	73.2	1.8	92	25	47	29	3	0	60	68	T	- 2.84	T	0	0	0.0	0	0.2	23	21	28	27+	18	11	1	2.6	81
WEST PALM BEACH	15	1019.0	1019.6	83	64	73.7	- 0.2	93	27+	53	4	3	0	61	67	0.04	- 4.30	0.04	1	1	0.0	0	6.4	11	26	7	1	14	13	3	4.0	
GEORGIA																																
ATHENS	802	990.5	1019.3	77	53	64.7	3.6	88	7	38	28	0	0	49	61	4.87	0.48	2.90	7	5	0.0	0	2.0	29	21	28	22	9	13	8	5.3	
ATLANTA	1010	982.7	1019.4	76	54	65.0	4.8	85	16+	39	28	0	0	49	61	2.81	- 1.66	1.11	7	4	0.0	0	1.6	26	30	NW	27	7	14	9	5.4	76
AUGUSTA	145	1013.9	1019.3	81	52	66.3	3.1	92	7	38	29	2	0	50	61	1.92	- 1.64	1.34	6	4	0.0	0	1.9	22	25	32	24+	11	10	9	5.2	
COLUMBUS	385			84	56	69.8	6.1	89	23+	43	29	0	0	54	63	0.86	- 3.73	0.60	5		0.0	0	1.1	24	22	24	23	9	10	11	5.4	
MACON	354	1007.1	1019.9	82	54	68.2	2.6	91	16+	38	29	3	0	51	58	1.38	- 2.37	1.21	5	3	0.0	0	1.0	22	26	NW	27	10	12	8	5.2	77
ROME	637			79	49	63.7	3.9	89	16	33	28	0	0			3.38	- 1.21	2.46	5		0.0	0										
SAVANNAH	46	1018.3	1020.1	82	56	69.0	3.3	95	17	39	29	5	0	54	64	1.38	- 2.32	1.26	5	3	0.0	0	2.1	17	29	N	23	11	11	8	5.0	80
HAWAII																																
HILO	27	1013.9	1015.1	82	67	74.3	2.7	86	27+	62	12+	0	0	66	79	21.26	9.34	4.50	21	6	0.0	0	0.8	25	18	E	24+	1	11	18	8.0	34
HONOLULU	7	1014.2	1014.7	83	67	74.7	0.5	88	24+	62	10	0	0	63	69	1.29	- 0.02	0.75	7	1	0.0	0	4.6	5	30	NE	10	9	11	10	5.5	65
KAHULUI	48	1011.9	1014.2	80	65	72.6	- 0.8	87	26+	60	21	0	0	63	73	1.19	- 0.25	0.79	6	3	0.0	0	6.0	6	29	NE	5	6	10	14	6.2	64
LIHUE	103	1010.5	1015.8	78	65	71.9	- 0.6	83	20	58	17	0	0	64	77	1.60	- 1.74	0.56	15	0	0.0	0	6.9	4	30	NE	11	5	15	10	6.1	61
IDAHO																																
BOISE	2838	911.6	1012.1	54	33	43.9	- 6.5	64	3	25	16	0	15	31	67	1.47	0.31	0.62	10	2	8.0	2	1.2	26	30	NW	20	1	6	23	8.4	56
IDAHO FALLS 46W R	4934			50	26	37.8	- 5.5	64	18	17	22+	0	29			0.86	0.35	0.40	7		6.0	2	4.5	24	39	WSW	5					
LEWISTON	1413			57	36	46.5	- 4.3	68	3	29	15	0	5			1.78	0.64	0.40	13		T	T						5	6	19	7.4	
POCATELLO	4454	857.8	1011.5	51	30	40.7	- 5.8	67	18	21	3	0	20	26	62	1.81	0.75	0.68	11	0	13.9	6	5.9	21	43	S	18	2	6	22	7.8	56
ILLINOIS																																
CAIRO U	314			73	54	63.3	3.9	85	5	40	24	0	0			2.18	- 1.89	0.61	11		0.0	0			42	SW	13	9	6	15	6.1	62
CHICAGO O HARE	658	992.2	1017.0	58	39	48.4	1.2	75	9	25	24	0	11	39	73	3.97	1.03	1.59	16	6	3.4	3	1.5	19	45	24	14	5	6	19	7.4	
CHICAGO MIDWAY	607	994.2		60	41	50.4	1.4	78	16	30	24	0	3	38	66	5.37	2.33	2.14	14	5	3.1	3	2.8	19	40	W	17	4	8	18	7.3	40
MOLINE	582	994.2	1016.0	61	42	51.6	1.6	84	16	25	24	0	3	43	77	4.91	1.74	1.35	14	7	1.1	1	3.0	19	49	SW	14	4	8	18	7.5	44
PEORIA	652	992.6	1016.7	62	43	52.7	1.9	83	16	26	24	0	3	41	67	5.47	1.50	2.38	14	6	1.4	1	3.2	18	40	W	17	5	8	17	7.3	55
ROCKFORD	724	988.8	1016.3	58	38	47.8	0.0	80	16	16	24	0	9	37	69	5.30	2.25	1.77	15	6	3.8	4	2.1	19	36	22	14	1	10	19	7.7	
SPRINGFIELD	588	994.2	1016.4	66	47	56.5	3.1	85	16+	32	24	0	1	44	65	2.11	- 1.48	0.53	17	9	0.1	T	3.8	17	50	S	16	8	4	18	6.8	54
INDIANA																																
EVANSVILLE	381	1003.7	1017.9	72	47	59.6	1.9	90	16	34	4	1	0	46	63	3.93	- 0.05	1.24	12	6	0.0	0	2.4	20	36	NW	3	9	5	16	6.4	61
FORT WAYNE	791	987.8	1018.0	61	39	50.2	0.9	79	16	24	25	0	11	39	68	2.60	- 0.54	0.64	18	8	0.7	T	3.3	24	43	SW	9	6	9	15	7.1	55

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
INDIANAPOLIS	792	988.8	1018.0	65	42	53.6	2.8	82	9	29	24+	0	7	43	69	3.00	- 0.74	0.78	12	7	0.0	0	2.2	22	37	W	22	5	9	16	6.8	51
SOUTH BEND	773	989.2	1017.2	58	40	48.9	1.4	74	9+	26	25	0	12	39	69	4.96	1.38	1.47	16	5	2.9	3	3.2	23	29	25	17	5	7	18	7.2	
IOWA																																
BURLINGTON	692			62	43	52.5	1.7	80	16	25	24	0	3	44	74	5.88	2.44		13	8	1.6		2.6	18	35	29	21+	7	7	16	6.9	
DES MOINES	938	980.0	1015.1	62	40	51.1	2.4	87	16	24	24	0	5	41	71	2.25	- 0.28	0.79	10	5	0.9	1	1.8	14	50	NW	17	5	8	17	7.1	43
DUBUQUE	1056	976.3		58	39	48.3	1.5	78	16	26	23+	0	6			5.53	2.45	1.74	15		1.0	1						7	3	20	7.6	
SIOUX CITY	1095	973.6	1013.7	62	37	49.6	0.7	87	30+	26	24+	0	8	37	66	2.02	- 0.23	0.78	10	5	T	T	2.4	16	49	NW	17	5	12	13	6.6	61
WATERLOO	868	983.1	1015.0	58	37	47.7	0.4	82	16	22	23	0	9	39	73	4.49	1.79	1.21	10	5	0.4	T	2.7	17	37	28	17	5	7	18	7.3	
KANSAS																																
CONCORDIA	1470	959.7	1012.5	67	42	54.7	1.9	87	29	25	24	0	3	44	69	3.56	1.44	1.29	11	12	0.1	T	4.3	14	40	W	30	7	11	12	6.1	62
DODGE CITY	2582	920.8	1010.8	70	44	57.1	3.5	92	5	26	24+	2	3	38	55	1.54	- 0.30	1.24	5	4	0.0	0	6.4	16	42	S	13	6	10	14	6.3	63
GOODLAND	3650	883.8	1011.1	66	35	50.3	2.2	88	29	23	3	0	13	31	56	0.74	- 0.85	0.65	7	2	0.4	T	4.7	17	48	32	16	9	10	11	5.6	
TOPEKA	876	982.1	1013.8	68	46	57.4	3.0	84	16	28	24	0	3	46	66	8.12	4.83	3.59	11	9	0.0	0	4.4	17	40	SW	30	5	8	17	7.0	57
WICHITA	1321	965.1	1012.6	73	50	61.5	4.8	89	16	31	27+	0	2	44	56	1.30	- 1.00	1.01	4	3	0.0	0	7.2	17	42	SW	29	5	7	18	7.1	56
KENTUCKY																																
COVINGTON	869	986.8	1018.4	67	44	55.4	3.2	83	9	27	4	0	3	41	60	3.66	0.44	1.12	11	4	0.0	0	2.6	24	31	26	22	5	12	13	6.9	
LEXINGTON	966	983.4	1018.8	70	48	58.8	4.4	82	16+	31	4	0	2	44	60	3.61	- 0.43	1.14	11	4	0.0	0	3.3	20	27	22	9	7	11	12	6.3	
LOUISVILLE	477	1000.3	1018.1	71	48	59.7	4.9	85	9	34	4	0	0	45	60	4.39	0.57	1.24	12	5	0.0	0	1.9	22	34	NW	17	8	12	10	6.1	67
LOUISIANA																																
ALEXANDRIA	92	1013.2	1017.4	81	61	70.9	5.1	86	25+	50	29	0	0	63	78	8.89	3.19	5.38	7	6	0.0	0	4.0	17	22	16	13	1	12	17	7.6	
BATON ROUGE	64	1015.6	1018.1	84	62	73.0	4.8	89	25	51	29	0	0	62	73	12.64	7.87	12.08	3	2	0.0	0	4.4	16	28	16	13	4	14	12	6.4	
LAKE CHARLES	9	1016.3	1017.4	83	66	74.7	6.8	87	24+	56	8	0	0	66	78	5.63	1.26	3.60	6	6	0.0	0	7.6	16	35	15	13	2	13	15	7.0	
NEW ORLEANS	3	1017.3	1018.2	83	61	72.2	4.3	88	26+	49	29	0	0	64	75	2.18	- 2.37	2.18	2	1	0.0	0	5.1	15	28	14	13	7	15	8	5.4	
SHREVEPORT	254	1006.8	1016.0	81	61	71.0	5.7	87	16+	49	27	0	0	62	77	2.11	- 2.46	1.11	5	4	0.0	0	5.7	16	22	19	16	2	11	17	7.6	49
MAINE																																
CARIBOU	624	991.9		44	25	34.4	- 2.0	57	30	8	4	0	26			0.54	- 2.09	0.22	7		2.2	12						9	5	16	6.3	
PORTLAND	47	1013.2	1015.4	51	32	41.5	- 1.0	70	2	22	13+	0	13	28	64	4.74	1.01	2.33	11	2	15.7	11	2.2	34	36	NW	3	10	7	13	5.8	58
MARYLAND																																
BALTIMORE	148	1011.9	1017.4	66	43	54.0	- 0.2	86	2	29	12	0	1	36	55	1.73	- 1.87	0.66	10	2	0.0	0	4.5	30	36	NW	10+	7	9	14	6.4	58
MASSACHUSETTS																																
BLUE HILL OBS R	629			53	34	43.3	- 2.4	77	2	22	12	0	11			5.36	1.36	1.65	12		7.2	5			53	WNW	10					54
BOSTON	15	1014.2	1015.1	53	37	44.9	- 3.0	75	2	27	12	0	6	29	60	4.83	1.06	1.51	11	3	3.3	3	4.6	34	43	NE	28	11	5	14	5.9	55
NANTUCKET	43	1014.2	1014.7	48	33	40.8	- 3.5	69	2	23	9	0	11	33	77	5.06	1.30	1.67	13	3	1.2	T	5.0	35	63	N	28	9	6	15	6.1	52
PITTSFIELD	1170			52	30	41.1	- 1.9	73	1	18	13	0	19			4.09	0.22	0.93	13		5.6	3										
WORCESTER	986	978.0	1015.6	51	32	41.7	- 2.9	69	2+	21	12	[illegible]	18	25	57	5.10	1.17	2.07	11	2	7.3	3	5.8	32	39	30	3	12	3	15	5.9	
MICHIGAN																																
ALPENA	689	991.5	1017.2	51	29	40.2	1.1	66	14	14	3	0	21	28	65	3.08	0.45	0.64	13	4	0.6	1	0.7	25	30	W	10	7	9	14	6.4	57
DETROIT	619			58	40	48.7	1.1	78	2	24	12	0	7	37	64	2.64	- 0.36	0.86	14	4	0.2		2.4	26	37	29	22					
DETROIT M WAYNE CO	633	992.6	1017.1	58	38	48.0	0.8	77	2	23	12	0	9	39	72	3.67	0.62	1.30	16	5	1.7	1	2.5	25	39	W	22+	6	5	19	7.2	47
DETROIT WILLOW RUN	711	989.2	1017.6	58	37	47.2	- 0.5	78	2	19	12	0	11	34	60	3.14	0.09	1.16	13	6	0.8	1	3.7	25	44	27	17+	6	5	19	7.3	
FLINT	770	988.8	1017.1	56	38	47.3	2.0	72	2	22	12	0	9	36	66	5.63	2.97	2.00	12	5	T	T	2.7	23	40	27	14	5	5	20	7.4	
GRAND RAPIDS	784	987.5	1017.0	57	36	46.4	0.7	71	14+	22	25	0	12	37	72	4.27	1.33	1.71	13	6	T	T	1.5	23	54	N	16	6	7	17	7.1	43
HOUGHTON LAKE	1149	974.6	1017.3	53	31	42.1		70	14	15	4+	0	18	31	68	4.56		1.20	11	5	4.5	5	2.0	25	28	29	22	6	7	17	7.0	
LANSING	841	984.8	1016.8	58	37	47.8	2.1	74	2	23	12	0	11	36	66	3.81	0.94	0.83	13	5	T	T	2.9	24	38	W	17	5	6	19	7.3	43
MARQUETTE U	677			48	30	39.2	- 0.1	70	21	15	3	0	20			3.06	0.36	1.46	12		2.4	6			37	SW	4	8	8	14	6.3	56
MUSKEGON	627	993.9	1017.1	55	36	45.4	0.2	69	14	24	25	0	12	35	69	6.11	3.53	2.12	13	5	2.0	T	1.5	24	30	20	14	6	7	17	6.8	
SAULT STE MARIE	721	989.8	1017.1	45	27	36.0	- 2.0	59	28	11	4+	0	23	26	67	3.29	1.13	0.75	13	2	1.9	T	1.5	31	32	SW	4	9	6	15	6.5	53
MINNESOTA																																
DULUTH	1428	963.8	1016.3	46	28	37.0	0.0	67	4	5	3	0	24	25	65	1.99	- 0.37	0.50	13	4	1.6	2	1.6	5	63	E	30	7	9	14	6.7	46
INTERNATIONAL FALLS	1179	972.6	1016.7	45	26	35.9	- 1.5	64	8	0	3	0	24	23	61	3.12	1.56	0.88	13	1	5.4	3	0.4	36	30	31	2	8	5	17	6.8	
MINNEAPOLIS	834	984.4	1015.3	54	36	44.7	0.4	69	28+	23	10	0	13	32	64	4.07	2.22	1.45	11	7	0.2	T	1.3	11	39	E	30	5	9	16	7.0	55

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ROCHESTER	1297	967.2	1015.5	54	35	44.5	0.5	71	16	24	10	0	14	35	72	3.36	1.17	1.51	9	6	T	T	2.0	18	38	18	14	6	7	17	7.1	
ST CLOUD	1034	976.6	1014.9	52	33	42.1	- 0.7	70	4	17	3	0	15		65	1.05	- 0.97	0.39	11		0.2	T						4	9	17	7.2	
MISSISSIPPI																																
JACKSON	310	1006.4	1018.3	82	57	69.3	4.4	89	8	43	28	0	0	60	76	1.66	- 3.25	1.30	5	3	0.0	0	4.8	18	33	SE	13	7	10	13	6.0	71
MERIDIAN	290	1007.8	1018.8	83	58	70.4	6.0	88	12+	44	29+	0	0	56	64	2.22	- 3.11	1.60	4	4	0.0	0	2.6	18	21	36	26	6	15	9	6.0	
MISSOURI																																
COLUMBIA	778	987.1	1015.3	68	48	57.9	3.3	84	30+	28	24	0	2	45	64	3.12	- 0.18	0.78	14	13	0.0	0	4.0	16	37	NW	16	6	9	15	6.6	64
KANSAS CITY	742	987.1	1014.2	69	49	58.9	3.2	86	16	27	24	0	2	47	66	6.86	3.30	3.10	9	10	T	T	3.9	16	34	SW	30	6	10	14	6.7	57
SAINT JOSEPH	811			72	48	59.8	6.2	91	16	27	24	2	2	45	69	5.48	2.33	1.95	13	8	1.4	T	3.9	15	30	18	5	7	9	14	6.3	
ST LOUIS	535	996.3	1016.9	69	48	58.5	3.6	89	5	30	24	0	1	47	68	3.40	- 0.31	0.62	12	9	0.0	0	3.5	16	35	SW	21	9	6	15	6.5	59
SPRINGFIELD	1268	970.2	1015.6	70	47	58.5	2.9	81	16+	33	27+	0	0	48	71	5.30	1.21	1.02	12	11	0.0	0	5.9	17	47	N	23	6	7	17	7.1	55
MONTANA																																
BILLINGS	3567	887.2	1012.5	50	29	39.7	- 6.3	65	10	15	1	0	23	26	66	1.63	0.32	0.87	10	1	11.4	8	3.4	1	33	SW	14	3	12	15	7.0	63
GLASGOW	2284	931.3		47	27	37.0	- 6.4	66	14	- 3	1	0	20			0.84	- 0.17	0.39	8		12.1	5						8	8	14	6.1	
GREAT FALLS	3662	885.5	1015.5	44	27	35.5	- 8.1	64	10	8	22	0	20	23	66	3.69	2.71	0.91	13	0	35.4	15	3.2	28	32	SW	3	5	4	21	7.7	
HAVRE	2582	921.4	1015.3	45	23	33.6	- 9.5	66	10	-14	22	0	26	25	75	2.59	1.62	1.19	9	0	31.1	15	1.5	1	33	NE	18+	8	9	13	6.2	68
HELENA	3828	877.4	1014.5	49	26	37.8	- 5.5	64	10	17	22	0	28	23	59	2.38	1.55	0.66	10	1	20.6	6	4.0	30	36	S	10	3	9	18	7.4	46
KALISPELL	2965	907.9	1013.8	51	28	39.2	- 4.5	61	3	20	22	0	27	25	61	0.59	- 0.45	0.20	8	1	2.1	1	3.4	1	29	36	27+	5	9	16	7.1	
MILES CITY	2629	918.7	1012.6	53	29	41.1	- 4.6	72	14	8	22	0	18	30	68	2.11	1.05		11	3	16.6		3.4	3								
MISSOULA	3190	900.8	1013.8	53	29	40.9	- 3.4	62	24+	20	15	0	21	25	60	0.93	- 0.04	0.33	13	1	5.7	3	1.6	35	29	N	18	5	5	20	7.6	56
NEBRASKA																																
GRAND ISLAND	1841	946.5	1012.8	66	38	52.2	2.6	91	29	26	7	1	7	37	61	0.99	- 1.29	0.48	11	4	4.1	4	3.1	18	44	28	30	10	6	14	5.9	
LINCOLN U	1150			66	42	54.1	2.3	85	29	28	24	0	4			1.63	- 0.82	0.55	11		3.7	2			42	S	28+	10	8	12	5.6	67
NORFOLK	1544			63	36	49.6	1.2	89	29	23	24	0	12			1.37	- 0.81	0.70	8		T	T						7	12	11	5.9	
NORTH PLATTE	2775	913.6	1011.4	63	35	49.3	1.6	82	28	20	22	0	11	31	55	1.03	- 0.98	0.37	6	2	4.5	4	2.2	14	45	NW	30	9	12	9	5.4	64
OMAHA	977	978.3	1013.9	68	43	55.6	3.9	87	30+	29	24	0	2	40	59	2.61	0.05	0.70	10	2	0.7	1	2.7	17	41	W	17	9	8	13	6.1	65
SCOTTSBLUFF	3957	874.4	1009.8	63	35	48.7	2.1	80	19	20	22	0	12	31	56	2.42	0.61	1.01	8	0	3.3	3	1.3	12	49	32	30	13	10	7	5.0	
VALENTINE	2587			60	35	47.7	2.0	83	28	18	1	0	11			0.25	- 1.73	0.21	4		T	T			49	W	30	7	12	11	5.8	69
NEVADA																																
ELKO	5050	839.1	1010.6	51	29	40.1	- 4.2	62	4	20	1	0	25	27	65	0.87	0.05	0.24	13	0	11.1	4	4.0	22	23	20	18+	0	11	19	8.0	
ELY	6253	802.9	1010.9	47	22	34.7	- 7.9	60	4	7	30	0	29	23	66	1.38	0.43	0.28	15	0	12.8	3	7.6	19	42	S	18	1	16	13	7.0	52
LAS VEGAS	2162	935.7	1012.1	69	44	56.2	- 8.3	81	26	32	12	0	1	24	32	0.09	- 0.14	0.06	2	0	0.0	0	8.8	21	43	SW	15	16	8	6	3.6	87
RENO	4404	861.5	1012.3	52	29	40.3	- 7.7	62	13+	20	28+	0	23	24	56	0.95	0.41	0.32	11	1	6.8	1	3.7	27	42	SW	17	1	10	19	7.7	79
WINNEMUCCA	4299	863.2	1012.1	50	29	39.4	- 6.5	61	13	20	21	0	21	27	66	1.86	1.04	0.51	13	1	6.3	2	2.4	24	29	SW	29	0	5	25	8.7	19
NEW HAMPSHIRE																																
CONCORD	342	1003.1	1015.8	54	30	42.0	- 1.8	73	2	17	13	0	15	28	64	3.52	0.21	0.96	11	1	6.0	5	3.8	33	36	W	10	11	6	13	5.8	59
MT WASHINGTON OBS	6262			28	13	20.4	- 2.6	43	2+	-11	12	0	29			6.23	0.34	1.71	17	1	30.1	7			110Y	W	23	4	10	16	6.9	44
NEW JERSEY																																
ATLANTIC CITY	64	1014.9	1017.2	64	39	51.4	0.4	90	15	24	4	1	6	37	64	2.76	- 0.65	1.53	9	3	T	0	3.3	31	28	36	28	7	6	17	6.6	52
ATLANTIC CITY U	11			60	43	51.2	1.3	84	3	31	12	0	1			2.78	- 0.60	1.38	9						41	NE	27					
NEWARK	7	1015.9	1016.8	61	41	50.9	- 0.4	83	2	31	12	0	1	34	57	2.84	- 0.67	1.24	11	1	T	T	4.3	31	32	30	23+	6	8	16	6.6	
TRENTON U	56			62	41	51.4	- 0.3	83	2	32	12	0	1			2.47	- 0.74	1.18	9		0.5	T			35	NW	22	8	10	12	6.2	50
NEW MEXICO																																
ALBUQUERQUE	5311	835.1	1010.0	73	43	57.8	2.1	81	29+	30	13	0	4	11	18	T	- 0.47	T	0	0	T	0	5.5	23	49	W	22	10	10	10	5.3	73
CLAYTON	4969			70	39	54.7	4.0	87	4	24	24	0	8			0.97	- 0.22	0.88	3		0.0	0						13	5	12	5.2	
RATON	6379			67	34	50.4	3.5	79	4	24	22	0	13			0.26	- 0.80	0.15	3		1.6	1						11	10	9	5.1	
ROSWELL	3617	888.3		85	46	65.5	6.5	95	4	31	22	7	1	27	27	T	- 0.73	T	0	1	0.0	0	5.9	19	37	W	13	11	6	13	5.3	76
SILVER CITY	5373			70	40	55.1	- 1.3	83	3	28	13	0	5			T	- 0.29	T	0		T	T						12	13	5	4.3	
NEW YORK																																
ALBANY	275	1005.8	1016.6	54	33	43.5	- 2.7	71	1	20	13	0	15	30	64	3.69	0.92	0.88	10	6	3.1	1	2.9	30	45	NW	23	7	8	15	6.6	53
BINGHAMTON	1590	957.3	1016.8	54	34	43.6	0.1	73	2+	20	12+	0	15	31	65	2.09	- 0.85	0.52	14	4	3.9	2	5.6	29	36	W	22	8	4	18	6.9	56

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	991.2	1017.2	56	36	46.1	2.6	75	30	23	12+	0	13	33	65	2.60	- 0.41	0.75	14	5	0.6	T	5.4	26	38	SW	9+	5	9	16	7.0	50
NEW YORK U	132	1012.9	1016.0	59	40	49.6	- 1.8	81	2	29	12	0	3	31	56	3.45	0.02	1.36	11	1	T	0	3.4	34	42	NE	27					55
J.F. KENNEDY	13	1015.9	1016.6	54	39	46.4	- 2.6	75	3	30	12	0	4	34	66	3.67	0.19	1.48	13	0	T	0	3.8	34	38	4	27	7	8	15	6.3	
NEW YORK LA GUARDIA	11	1014.9	1016.7	58	41	49.7	- 1.5	79	2	32	12	0	1	32	56	2.91	- 0.66	1.12	11	1	T	0	4.5	34	48	NW	3	7	7	16	6.5	
ROCHESTER	547	997.3	1017.9	56	37	46.4	1.3	74	30+	25	12	0	11	34	65	1.69	- 0.98	0.38	13	5	T	T	5.1	28	42	SW	22	6	8	16	6.7	57
SYRACUSE	410	1001.7	1016.8	55	34	44.9	- 1.1	75	1	19	12	0	13	31	61	2.11	- 0.97	0.49	13	2	0.3	T	5.1	30	43	NW	10	10	3	17	6.2	59
NORTH CAROLINA																																
ASHEVILLE	2140	943.1	1019.0	72	43	57.6	3.0	88	6	28	29	0	3	43	64	1.11	- 2.91	0.55	6	0	0.0	0	1.8	33	40	34	27	9	11	10	5.5	75
CAPE HATTERAS R	7	1018.6	1018.8	67	47	56.8	- 2.5	85	7	36	30+	0	0	47	71	1.20	- 1.79	0.41	6	4	0.0	0	2.1	30	33	NW	7	8	11	11	5.4	72
CHARLOTTE	736	991.5	1018.9	75	51	62.7	2.4	90	17	34	29	1	0	45	58	1.57	- 1.92	0.90	6	1	0.0	0	3.0	25	26	S	22	12	9	9	5.2	79
GREENSBORO	897	987.1	1018.7	76	50	63.3	5.9	91	7	37	29+	3	0	46	58	2.03	- 1.40	1.14	5	2	0.0	0	3.4	24	26	NW	27	12	4	14	5.6	70
RALEIGH	434	1002.7	1018.5	77	49	62.5	3.2	93	6	35	29+	4	0	45	58	3.02	- 0.50	1.30	5	2	0.0	0	3.4	26	24	33	27	12	8	10	5.0	73
WILMINGTON	28	1018.0	1019.5	79	53	66.0	3.5	95	7	42	29	3	0	49	58	1.15	- 1.71	0.95	3	3	0.0	0	2.3	23	28	NW	27	12	10	8	4.6	86
NORTH DAKOTA																																
BISMARCK	1647	953.6	1014.5	49	28	38.3	- 5.2	67	8	9	1	0	23	26	65	2.79	1.57	0.76	12	0	14.8	6	3.8	6	46	NE	30	5	7	18	7.2	48
FARGO	896	981.7	1015.1	47	29	38.3	- 3.7	65	4	13	3	0	19	29	71	4.14	2.42	1.36	12	5	5.0	2	3.2	4	49	NE	16	7	3	20	7.2	52
WILLISTON	1899	944.8	1014.6	50	28	38.9	- 3.4	73	11	3	1	0	21	28	70	3.31	2.37	2.04	8	2	12.4	4	3.6	4	42	E	29+	9	8	13	6.4	56
OHIO																																
AKRON	1208	973.2	1018.0	62	40	50.6	1.9	78	17+	22	12	0	10	39	68	3.76	0.42	1.24	15	6	0.8	1	3.4	25	32	28	22	5	8	17	7.0	
CINCINNATI OBS	761			68	46	56.7	2.5	84	16+	30	25+	0	3			3.20	- 0.43	1.06	12		0.0	0			29	SW	17					58
CLEVELAND	777	988.8	1018.2	60	40	49.7	2.7	79	17+	23	4	0	9	38	67	3.12	- 0.29	0.90	15	3	0.1	T	3.3	25	36	W	17	5	7	18	7.3	56
COLUMBUS	812	988.5	1018.6	64	41	52.6	1.8	79	16	26	4	0	7	41	66	3.29	- 0.20	0.95	13	6	0.0	0	2.2	24	45	W	22+	4	13	13	6.7	61
DAYTON	1002	982.1	1018.3	63	42	52.3	1.6	80	9	24	4	0	6	41	67	4.24	0.92	1.91	13	5	T	0	3.3	22	38	W	22	5	11	14	6.8	53
MANSFIELD	1295			61	40	50.2	3.3	77	17+	22	12	0	9	39	69	2.61	- 0.70	0.67	15	6	T	T	4.0	24				5	10	15	6.8	
TOLEDO	676	992.6	1018.1	60	38	49.0	2.1	80	9	20	4	0	13	38	66	2.77	0.00	0.72	17	6	0.8	T	3.1	26	38	W	17+	5	10	15	7.1	48
YOUNGSTOWN	1178	974.9	1018.1	59	37	48.0	1.0	77	2	19	12	0	12	36	66	2.52	- 1.18	0.69	11	4	2.4	2	3.7	27	37	24	22	5	5	20	7.3	
OKLAHOMA																																
OKLAHOMA CITY	1285	967.2	1013.0	75	56	65.4	5.5	86	15+	40	27	0	0	53	67	5.71	2.59	3.11	8	7	0.0	0	7.2	15	36	SE	12	5	5	20	7.5	65
TULSA	650	989.8	1013.9	75	54	64.3	5.4	90	6	38	27	1	0	52	67	5.09	1.07	1.73	9	8	0.0	0	6.8	17	39	SW	13	2	8	20	7.5	50
OREGON																																
ASTORIA	8	1014.6	1015.2	53	35	44.0	- 5.0	63	6	30	19+	0	9	39	84	5.52	0.34	1.28	20	1	T	0	2.2	21	21	18	12+	4	8	18	7.3	
BURNS U	4151	868.6	1012.8	49	27	37.9	- 8.1	57	7	21	29+	0	29	27	69	1.31	0.56	0.60	14		3.6	1	2.8	30				3	7	20	7.9	
EUGENE	359	1002.0	1015.6	56	36	45.9	- 4.9	64	24+	30	28	0	4	38	77	3.02	0.64	0.68	12	0	T	T	2.9	20	26	18	16	3	10	17	7.5	
MEACHAM	4050	872.3	1014.0	40	26	33.3	- 7.5	49	3	19	15	0	30	26	79	2.48	- 0.32	0.40	17		21.6	8	1.5	27				1	7	22	8.5	
MEDFORD	1298	967.5	1015.7	56	35	45.8	- 4.8	65	2	26	28	0	8	35	72	1.72	0.66	0.54	15	2	1.6	1	0.9	29	23	14	3	1	10	19	7.7	
PENDLETON	1482	960.0	1014.1	56	36	45.8	- 6.2	65	3	29	15+	0	4	34	67	1.05	- 0.04	0.22	11	0	T	0	2.8	25	38	26	13	5	8	17	7.0	
PORTLAND	21	1014.2	1015.4	56	38	46.9	- 4.9	66	7	31	15	0	2	39	76	2.17	0.08	0.59	15	2	T	T	2.2	20	25	S	18+	3	7	20	7.6	45
SALEM	196	1008.1	1015.4	56	33	44.6	- 6.5	66	7+	26	19+	0	14	36	74	2.02	- 0.31	0.43	17	3	T	0	3.9	20	26	18	16	4	7	19	7.4	
SEXTON SUMMIT R	3836	879.8	1014.9	42	27	34.7	-10.0	53	3+	23	28+	0	28			1.74	- 0.11	0.44	16		12.5	6			40	18	16	1	8	21	8.1	
PACIFIC AREA																																
CANTON ISLAND	9			88	78	82.9	- 0.7	90	29	75	21	1	0			0.79	- 2.83	0.54	4		0.0	0						5	17	8	5.9	
ENIWETOK	13	1009.5	1010.3	87	78	82.6	0.5	90	13	72	30	1	0	74	75	5.96	4.68	4.63	9		0.0	0	14.2	6								
TAGUAC GUAM R	361			83	73	78.0	- 1.9	85	30+	70	14+	0	0			8.97	5.94	1.42	25		0.0	0			28	E	2					51
JOHNSTON	7	1013.2	1013.8	82	74	78.0	0.0	84	30+	70	18	0	0	69	76	0.51	- 1.77	0.28	7	0	0.0	0	13.7	8	31	E	12	9	9	12	5.8	49
KOROR R	94	1005.8	1009.5	88	76	82.4	1.1	90	16+	75	28+	3	0	75	82	4.63	- 5.76	1.10	17	1	0.0	0	3.7	8	21	NW	3	1	6	23	8.3	73
KWAJALEIN	8	1009.1	1009.9	87	77	81.9	1.1	90	13	75	27+	1	0	73	77	4.61	- 0.41	1.26	15	0	0.0	0	13.4	7	29	5	4	4	8	18	7.3	
MAJURO	10	1009.5	1009.9	85	77	81.2	0.6	87	29+	73	28	0	0	74	77	7.64	- 4.67	2.54	21	0	0.0	0	9.1	7	29	E	25	4	6	20	7.7	54
MARCUS ISLAND	20	1015.9	1017.8	79	68	73.6	- 2.1	84	30	62	11	0	0	64	74	0.56	- 1.35	0.22	7	0	0.0	0	9.0	9	31	NE	8	12	11	7	4.4	67
PAGO PAGO	12	1010.2	1010.2	86	74	80.0		91	13	69	19	1	0	75	85	24.46		4.80	26	3	0.0	0	2.9	4	33	NW	6	1	12	17	7.9	49
PONAPE R	123	1004.1	1009.5	87	73	80.0	- 0.5	89	19+	69	13	0	0	74	84	20.90	0.86	4.18	22	3	0.0	0	5.5	9	20	NE	28	2	7	21	8.2	59
TRUK MOEN ISLAND	5	1009.1	1009.6	85	76	80.5	- 0.3	88	29+	71	3	0	0	74	82	17.21	4.89	6.51	20	0	0.0	0	7.9	7	25	S	1	0	8	22	8.8	78
WAKE	11	1013.9	1014.3	82	73	77.4	- 1.0	85	30	69	6	0	0	68	74	3.80	1.93	1.85	14	0	0.0	0	12.9	6	20	7	6	14	11	5	4.5	
YAP R	62	1007.5	1009.3	87	75	80.7	- 1.1	89	26+	70	3	0	0	75	83	11.76	5.38	6.27	20	1	0.0	0	5.5	6	20	SW	4	0	4	26	9.3	62

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb	F.	F.	F.	F.	F.		F.				F.	%	In	In	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1003.1	1017.2	60	37	48.8	- 0.5	84	15	26	12+	0	6	32	57	2.61	- 1.15	1.17	10	1	1.0	1	5.0	30	36	28	22	7	9	14	6.4	
ERIE	731	990.9	1017.8	57	38	47.6	2.1	80	2	22	4	0	9	34	64	4.21	0.65	1.48	17	5	1.7	1	3.4	25	28	24	22	5	8	17	7.1	
HARRISBURG	338	1004.4	1017.3	64	42	53.0	1.2	85	2	30	12	0	2	37	58	2.58	- 0.44	0.98	12	3	T	T	4.1	33	43	W	22	6	10	14	6.5	60
PHILADELPHIA	5	1015.9	1017.0	63	41	51.7	- 0.3	84	15+	29	12	0	2	36	60	2.17	- 1.23	1.23	9	1	0.1	0	3.5	32	34	W	22+	6	6	18	6.9	54
PITTSBURGH	1137	973.6	1018.0	63	41	52.2	3.2	80	2	25	12+	0	7	38	61	4.41	1.33	1.24	13	4	0.5	0	5.0	28	37	25	22	4	9	17	7.2	48
READING U	266			63	42	52.3	- 0.3	84	15+	30	12	0	2			3.05	- 0.37	1.52	10		0.1	T			48	W	22	8	10	12	6.0	59
SCRANTON	930	982.7	1017.3	60	38	49.1	0.7	81	15	26	12+	0	7	34	60	2.09	- 1.18	0.65	12	3	4.8	4	3.7	29	35	SW	22	8	8	14	6.4	52
WILLIAMSPORT	524	998.0	1017.2	62	39	50.4	1.0	83	15	28	4	0	6	34	58	2.88	- 0.67	0.82	14	2	2.7	1	3.8	31	29	25	22	8	9	13	6.2	
RHODE ISLAND																																
BLOCK ISLAND	110			48	36	42.2	- 2.4	68	2	27	9	0	6			3.46	- 0.15	1.31	11		T	0						10	8	12	5.8	
PROVIDENCE	51	1013.2	1015.7	54	35	44.8	- 2.4	78	3	27	13	0	10	29	60	4.19	0.44	1.30	9	4	1.6	2	4.5	33	44	?	28	13	4	13	5.6	54
SOUTH CAROLINA																																
CHARLESTON	40	1018.0	1019.4	80	55	67.1	2.3	92	18+	36	29	6	0	53	66	0.84	- 2.04	0.42	6	3	0.0	0	2.5	19	39Y	W	18	12	11	7	5.0	74
CHARLESTON U	9			76	61	68.7	3.1	92	18	51	29+	2	0			0.92	- 1.62	0.38	5		0.0	0			31	NE	8+					
COLUMBIA	213	1011.2	1019.4	79	53	65.6	2.0	90	7	35	29	1	0	49	62	3.72	- 0.29	2.30	4	4	0.0	0	2.0	25	25	32	27	12	11	7	5.1	75
GNVLE-SPARTANBURG	957	984.8	1019.2	77	52	64.6	3.7	89	18+	38	29	0	0	47	58	2.36	- 1.58	0.91	6	1	0.0	0	2.8	26	29	SW	6	7	12	11	5.7	67
SOUTH DAKOTA																																
ABERDEEN	1296	966.1	1013.6	55	31	43.2	- 1.6	76	28+	15	1	0	14	31	66	3.38	1.34	1.11	12	7	1.3	T	4.6	7	48	36	16	4	8	18	7.3	
HURON	1282	966.1	1013.0	59	34	46.3	1.3	81	16	20	3	0	14	34	67	0.87	- 0.97	0.25	10	6	0.6	T	3.5	11	47	NE	30	4	12	14	6.8	68
RAPID CITY	3162	899.8	1011.3	56	32	44.1	- 0.4	75	28	18	22	0	17	30	62	5.16	3.49	2.06	12	5	14.0	13	4.1	35	61	NW	30	8	8	14	6.2	54
SIOUX FALLS	1418	961.7	1013.6	59	33	46.0	0.1	84	16	20	24+	0	14	35	68	3.90	1.59	2.50	8	4	T	T	2.1	16	46	32	17	5	6	19	7.3	
TENNESSEE																																
BRISTOL	1507	965.1	1019.3	71	44	57.7	1.1	81	16	30	29	0	2	43	61	2.80	- 0.36	1.26	7	2	0.0	0	3.0	28	25	25	17+	9	14	7	5.3	
CHATTANOOGA	665	994.2	1019.0	77	50	63.5	2.6	87	5	34	28	0	0	49	63	3.39	- 0.90	1.87	6	4	0.0	0	1.6	22	36	N	24	7	11	12	5.8	58
KNOXVILLE	980	983.4	1018.4	75	50	62.7	3.8	85	16	36	28	0	0	48	61	2.00	- 1.70	0.94	8	2	0.0	0	2.6	26	32	W	22	7	12	11	5.8	70
MEMPHIS	258	1007.8	1018.1	77	56	66.5	5.1	84	16+	42	28	0	0	53	65	4.46	- 0.17	1.13	9	6	0.0	0	3.8	18	33	S	25	2	13	15	6.8	66
NASHVILLE	590	996.6	1018.1	76	52	63.9	4.3	87	16+	37	28	0	0	48	58	3.40	- 0.34	0.94	9	6	0.0	0	3.1	20	28	SE	14	5	13	12	6.4	65
OAK RIDGE R	905			75	48	61.3	3.5	86	6	32	28	0	1			2.62	- 1.58	1.34	9		0.0	0			29Y		14+	8	10	12	5.8	
TEXAS																																
ABILENE	1762	951.2	1011.6	84	60	71.9	7.6	97	16	42	27	8	0	49	48	0.49	- 1.78	0.21	7	7	0.0	0	7.9	18	40	W	12	6	10	14	6.6	66
AMARILLO	3604	887.9	1009.6	74	47	60.6	3.1	88	29	33	24	0	0	36	50	1.95	0.63	0.89	6	7	0.0	0	8.2	20	45	SW	13	9	6	15	5.7	74
AUSTIN	597	992.2	1013.8	86	66	75.9	8.2	90	30+	52	14	6	0	62	65	4.44	0.89	1.49	8	6	0.0	0	7.9	17	42	N	23	1	10	19	7.6	49
BROWNSVILLE	19	1012.5	1013.2	88	72	80.1	6.2	93	23	58	4	7	0	70	75	T	- 1.55	T	0	1	0.0	0	15.0	14	30	SE	21+	5	17	8	5.9	77
CORPUS CHRISTI	41	1012.2	1013.8	85	70	77.3	5.6	89	23+	55	4	0	0	69	78	0.23	- 1.91	0.12	2	1	0.0	0	15.6	15	38	SE	29	1	15	14	7.3	41
DALLAS	481	997.0	1013.9	82	63	72.5	7.5	91	6	46	27	2	0	59	66	4.05	0.05	2.27	9	7	0.0	0	9.3	15	40	W	13	3	10	17	7.5	51
DEL RIO	1026	976.0	1011.5	87	66	76.1	4.5	98	30	53	14	9	0	58	61	1.11	- 0.25	0.95	6	5	0.0	0	8.9	14	29	28	17	2	5	23	7.9	
EL PASO	3918	879.8	1009.8	80	50	65.1	1.7	90	27	35	13	1	0	22	21	0.03	- 0.26	0.03	1	0	T	0	7.1	26	61	W	13	12	8	10	4.5	85
FORT WORTH	537	993.6	1013.9	81	61	71.1	6.3	88	16+	46	27+	0	0	59	68	3.84	0.24	2.47	8	9	0.0	0	7.5	17	39	18	13	2	11	17	7.6	
GALVESTON U	7			78	72	75.0	6.5	83	24	64	27+	0	0			1.69	- 0.90	1.49	4		0.0	0			30	NW	13					60
HOUSTON U	41			81	69	75.0	5.7	90	23	56	13	1	0			1.97	- 1.45	1.46	6		0.0	0										
HOUSTON	50	1013.5	1015.7	85	67	75.7	7.2	91	23	57	4	1	0	67	79	4.42	1.18	2.23	7	2	0.0	0	9.2	15	31	32	13	1	13	16	7.4	64
LUBBOCK	3254	900.8	1010.6	77	51	64.1	4.6	88	29	35	24	0	0	40	48	0.95	- 0.20	0.94	3	5	0.0	0	7.3	21	41	31	30	6	12	12	6.0	
MIDLAND	2851	913.0	1009.9	82	55	68.7	3.8	90	29+	45	26+	4	0	41	47	0.44	- 0.39	0.23	4	4	0.0	0	7.3	19	43	24	13	6	9	15	6.5	
PORT ARTHUR	16			81	65	73.2	5.0	86	25+	54	4	0	0	66	80	5.86	1.92	3.63	5	4	0.0	0	9.6	15	45	SE	13	4	15	11	6.7	64
SAN ANGELO	1903	945.8	1011.1	86	59	72.5	5.4	96	16	48	22	11	0	48	47	0.10	- 1.91	0.07	3	5	0.0	0	6.8	19	40	29	12	4	11	15	6.6	
SAN ANTONIO	788	986.1	1013.6	86	67	76.6	8.4	93	25	49	14	4	0	62	66	0.94	- 1.88	0.65	7	6	0.0	0	9.2	15	33	N	17+	0	10	20	7.8	40
VICTORIA	104	1010.2	1014.4	85	67	76.1	6.1	89	24	55	13+	0	0	67	76	1.72	- 0.90	1.50	4	2	0.0	0	10.3	15	39Y	SSE	12	0	11	19	7.9	
WACO	501	995.9	1013.9	83	65	74.0	7.4	93	6	53	27	3	0	61	69	8.80	4.92	3.42	7	7	0.0	0	10.6	15	35	4	10	1	11	18	7.5	
WICHITA FALLS	994	976.3	1012.4	82	58	69.8	5.8	97	16	41	24	8	0	54	63	5.84	3.31	4.09	6	8	0.0	0	8.1	16	43	23	13	5	7	18	7.4	
UTAH																																
MILFORD	5028	841.5		57	29	42.8	- 4.9	70	27	18	21	0	22			0.41	- 0.31	0.22	8		5.9	1						7	9	14	6.1	
SALT LAKE CITY	4220	866.6	1010.5	58	34	46.1	- 3.8	73	18+	28	2	0	14	28	57	2.08	0.32	0.71	15	2	11.4	4	4.2	18	47	SW	5	2	11	17	7.5	72
WENDOVER	4237			55	36	45.4	- 6.2	70	4	24	1	0	8			0.66	0.15	0.20	9		2.5	2										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1003.1	1015.8	51	31	40.7	- 0.5	69	1	17	4	0	19	27	62	3.77	1.14	1.17	13	2	4.7	3	2.2	31	37	S	10+	9	4	17	6.6	59
VIRGINIA																																
LYNCHBURG	916	984.4		70	45	57.7	1.5	85	16+	33	29+	0	0	38	53	1.45	- 1.69	0.70	5	1	0.0	0	3.4	27	29	SW	6	13	8	9	5.2	69
NORFOLK	22	1016.9	1018.1	69	47	58.0	0.0	88	3	34	13+	0	0	42	58	1.31	- 1.85	0.57	6	1	0.0	0	2.6	28	31	NW	24+	9	5	16	6.2	72
RICHMOND	164	1012.2	1018.1	72	45	58.8	0.7	89	16+	33	12	0	0	41	57	1.32	- 1.83	0.71	6	1	0.0	0	1.8	29	27	N	28	9	7	14	5.8	69
ROANOKE	1149	976.0	1017.8	72	46	59.0	2.6	85	7+	32	12	0	1	38	49	1.67	- 1.43	0.78	8	1	0.0	0	3.2	29	37	29	22	13	6	11	5.4	
WALLOPS ISLAND	9	1018.0	1018.4	63	42	52.5		87	3	30	12	0	1	41	73	1.77		1.28	7	2	0.0	0	3.3	28	60Y	NW	24	7	12	11	5.9	
WASHINGTON																																
OLYMPIA	195	1007.8	1015.0	56	34	44.8	- 5.2	67	22	26	15+	0	16	35	73	2.88	- 0.08	0.68	17	1	T	0	3.3	20	23	22	22	5	7	18	7.3	
QUILLAYUTE	179	1007.1	1014.6	52	34	42.9	- 4.3	63	6	29	17+	0	9	38	84	5.90	- 1.49	1.34	17	1	T	0	0.5	13	18	W	13+	4	8	18	7.2	58
SEATTLE TACOMA	400	998.3	1015.0	54	39	46.6	- 2.6	62	3	33	15	0	0	38	76	2.50	0.10	0.58	17	1	T	0	2.1	21	23	22	12	5	6	19	7.3	61
SPOKANE	2356	928.2	1012.7	53	32	42.3	- 5.0	61	24	26	21	0	18	30	65	1.71	0.80	0.42	11	0	0.8	T	2.6	18	26	S	4	5	7	18	7.1	50
STAMPEDE PASS R	3958	875.0		37	27	32.2	- 4.3	52	3	20	14	0	30			4.28	- 1.32	1.33	19		38.2	39						5	3	22	7.9	
WALLA WALLA U	949			56	40	48.0	- 5.8	68	3	33	15	0	0			1.66	0.26	0.50	12		T	T			30	W	13	8	3	19	6.9	51
YAKIMA	1052	974.9	1013.6	58	32	44.9	- 5.6	68	7	24	14	0	15	31	59	1.03	0.56	0.29	9	0	T	0	3.2	25	23	28	7	6	7	17	6.8	
WEST INDIES																																
SAN JUAN P.R.	13	1014.2	1016.7	83	73	78.0	1.4	85	28+	68	17	0	0	66	67	0.85	- 2.87	0.24	10	0	0.0	0	9.9	7	35	E	2	6	16	8	5.5	75
SWAN ISLAND	28			85	76	80.6	- 0.9	87	29	73	30+	0	0			1.02	0.18	0.45	8		0.0	0						16	9	5	4.3	
WEST VIRGINIA																																
BECKLEY	2504	930.2	1018.5	66	42	53.8		80	6	26	12+	0	7	37	56	2.84		1.03	11	2	T	T	5.0	26	36	29	22	7	8	15	6.7	
CHARLESTON	939	984.1	1018.2	69	44	56.3	1.0	84	14+	27	4	0	5	42	61	3.21	- 0.47	1.03	11	3	0.0	0	2.9	26	30	24	22	7	9	14	6.4	
ELKINS	1970	947.2	1018.8	64	37	50.5	0.3	81	14	19	12	0	7	38	66	3.24	- 0.24	0.76	13	3	0.5	T	5.4	29	46	27	22	3	11	16	7.3	
HUNTINGTON	827	988.5	1018.5	69	44	56.3	0.6	82	14+	28	25+	0	6	42	63	3.48	- 0.19	0.87	12	5	0.0	0	1.8	25	23	25	22+	6	10	14	6.6	
PARKERSBURG U	615			67	44	55.5	1.4	83	16+	29	12	0	4			2.92	- 0.33	1.09	13		0.0	0			38	W	22					49
WISCONSIN																																
GREEN BAY	682	990.5	1016.5	54	34	44.2	1.0	73	14	23	11	0	16	33	68	2.77	0.31	0.85	13	9	0.2	T	0.8	23	40	S	14	4	11	15	6.9	36
LA CROSSE	651	990.9	1015.6	58	39	48.4	1.4	73	15	28	11	0	8	36	67	2.43	- 0.32	0.81	9	5	T	T	1.0	19	33	14	20	5	6	19	7.3	
MADISON	858	984.4	1016.3	57	34	45.6	1.2	76	17	19	11	0	17	35	68	2.57	0.00	0.75	17	9	T	0	1.9	19	42	SW	14	2	9	19	7.6	43
MILWAUKEE	672	991.2	1017.0	54	36	44.9	1.3	74	15	25	4	0	12	35	72	2.70	0.17	1.20	13	9	T	T	1.0	19	42	SW	14	4	8	18	7.3	47
WYOMING																																
CASPER	5338	831.7	1009.7	58	28	42.7	- 0.4	73	28+	12	22	0	24	22	53	1.24	- 0.45	0.66	9	2	7.5	3	5.3	25	54	25	5	7	12	11	6.2	
CHEYENNE	6126	806.6	1009.2	57	31	44.1	1.5	73	29+	20	22	0	18	23	50	2.15	0.27	1.63	9	1	15.9	7	4.8	26	68	NW	30	12	10	8	4.9	70
LANDER	5563	823.2	1009.7	54	29	41.4	- 1.8	69	27+	17	22	0	21	24	56	2.42	- 0.03	1.22	7	2	37.0	12	3.8	24	57	SW	5	9	11	11	6.1	61
SHERIDAN	3964	874.4	1012.4	54	28	41.1	- 2.5	73	28	21	30+	0	25	25	55	2.51	0.35	1.14	11	1	23.0	14	4.1	30	37	NW	30	3	12	15	7.1	49

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station **Pressure**" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C		C.				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
ALABAMA																																
BIRMINGHAM	189	997.0	1019.2	27.2	12.2	19.6	2.3	31.1	6+	3.3	28	0	0	12.2	66	34	- 79	21	6	3	0	0	0.8	21	13.0	SW	26	5	11	14	6.1	70
HUNTSVILLE	183	995.9	1018.9	26.7	12.2	19.5	3.1	33.3	16	2.2	28	1	0	10.0	56	99	- 2	53	6	5	0	0	0.8	17	11.2	11	23	4	14	12	6.2	
MOBILE	64	1011.2	1018.9	29.4	17.8	23.7	3.9	32.2	8+	10.0	28	2	0	17.2	72	57	-104	54	3	1	0	0	1.8	19	10.3	2	27+	8	16	6	5.5	
MONTGOMERY	59	1012.2	1019.3	27.8	15.0	21.4	3.6	31.1	23	7.8	29+	0	0	14.4	67	27	- 98	16	6	4	0	0	0.8	20	11.2	NW	26	6	15	9	6.0	69
ALASKA																																
ANCHORAGE	35	1014.2	1019.1	5.6	- 2.2	1.7	-1.0	13.9	30	- 6.1	13	0	27	- 6.1	58	12	2	5	9	0	102	178	0.2	22	13.0	33	11	10	5	15	6.2	59
ANNETTE	34	1011.5	1015.7	12.2	1.7	6.7	0.4	21.7	30	- 1.1	13+	2	8	- 1.1	65	59	-172	17	9	0	10	T	0.5	1	11.6	15	11	11	6	13	5.8	
BARROW	9	1014.9	1015.6	-10.0	-18.9	-14.4	3.2	3.3	29	-32.2	1	0	29	-16.7	81	3	1	1	8	0	43	356	2.2	15	15.6	9	16	7	8	15	6.3	
BARTER ISLAND	12	1016.3	1018.4	-10.0	-21.1	-15.7	1.6	4.4	29+	-36.7	8	0	30	-18.9	72	9	5	4	8	0	124	330	1.0	23	19.7	27	18	10	8	12	5.6	
BETHEL	38	1011.5	1017.4	2.2	- 3.3	- 0.6	2.8	11.7	30	-15.6	15	0	23	- 2.2	88	39	24	11	16	0	130	457	4.2	20	17.0	18	18+	1	3	26	9.0	
COLD BAY	29	1017.3	1021.3	6.1	0.6	3.4	2.7	10.0	18+	- 3.3	21+	0	12	0.0	81	78	41	32	19	0	25	T	3.6	19	25.0	17	3	0	3	27	9.2	
FAIRBANKS	133	1000.3	1017.8	4.4	- 4.4	- 0.2	1.3	15.6	30+	-16.1	16	0	29	- 4.4	72	21	15	5	10	0	282	940	1.0	25	9.4	24	20+	2	6	22	7.9	
JUNEAU	4	1015.9	1016.8	8.9	- 3.3	2.9	-0.4	17.2	26	- 6.7	14+	0	29	- 2.2	74	28	- 44	11	10	0	76	25	1.2	14	16.5	12	11	9	6	15	6.1	66
KING SALMON	15	1018.0	1020.1	4.4	- 1.7	1.4	1.0	9.4	29	- 8.3	12	0	21	- 3.9	69	34	18	18	13	0	74	25	2.2	20	16.5	13	27+	2	8	20	8.0	
KOTZEBUE	3	1013.5	1014.1	- 2.2	-11.7	- 6.9	3.5	3.9	30+	-26.1	15	0	29	- 8.3	86	22	14	4	19	0	460	1194	3.3	15	21.0	11	16	1	3	26	8.8	
MC GRATH	105	1005.4	1018.4	3.3	- 3.9	- 0.1	2.3	14.4	30	-16.7	12	0	25	- 5.0	71	63	51	20	15	0	617	813	2.0	21	13.4	19	5	2	5	23	8.5	
NOME	4	1012.2	1012.9	- 1.7	- 8.3	- 5.0	1.0	3.9	30+	-25.0	15	0	30	- 7.8	79	25	5	7	17	0	302	940	1.0	13	15.6	3	1	2	4	24	8.9	11
ST. PAUL ISLAND	7	1013.5	1014.7	3.9	0.0	2.0	4.0	5.0	28+	- 3.9	23	0	13	- 0.6	84	79	54	16	26	0	74	T	4.6	21	21.5	19	18	0	5	25	9.2	
SHEMYA	37	1008.8	1012.6	3.3	- 0.6	1.4	-0.6	4.4	30+	- 3.3	14	0	21	- 0.6	87	39	- 13	17	19	0	36	T	3.7	24	21.5	20	11	0	8	22	8.8	
YAKUTAT	9	1015.6	1016.7	5.6	- 4.4	0.7	-2.1	13.9	30	-10.6	17	0	30	- 2.8	79	85	- 99	31	11	0	732	1118	0.4	12	15.6	12	11	11	4	15	6.0	
ARIZONA																																
FLAGSTAFF	2131	784.0	1013.1	11.1	- 5.0	3.1	-3.2	17.8	26+	-12.2	30	0	28	- 7.2	50	48	18	34	6	0	450	406	4.1	21	11.2	20	22	12	13	5	4.4	
PHOENIX	340	974.3	1013.0	25.0	8.9	16.9	-2.7	30.6	27	3.9	30	0	0	- 0.6	34	2	- 6	2	2	0	0	0	0.9	24	17.4Y	WSW	11	20	2	8	3.4	87
TUCSON	788	924.8	1012.4	25.0	8.3	16.7	-2.1	31.1	26+	1.1	12	0	0	- 3.3	30	7	1	7	1	0	T	0	1.7	24	14.8	SW	11	14	8	8	4.3	88
WINSLOW	1492	848.6	1012.7	20.0	0.0	10.1	-3.0	26.1	3	- 5.6	20	0	22	- 8.9	29	3	- 9	1	3	0	10	T	4.5	20	23.2	18	12	20	4	6	3.2	
YUMA	59	1007.1	1014.3	24.4	10.0	17.3	-4.1	30.6	27	5.6	12	0	0	0.0	34	T	- 2	T	0	0	0	0	2.4	28	19.2	NW	11	18	6	6	3.2	86
ARKANSAS																																
FORT SMITH	136	999.0	1015.4	24.4	12.8	18.8	2.3	30.0	16+	3.3	27	0	0	11.7	66	173	65	42	14	10	0	0	1.5	13	17.9	W	16	6	4	20	7.2	50
LITTLE ROCK	78	1007.8	1017.1	25.0	13.3	19.3	2.4	30.0	16	5.6	28	0	0	12.8	67	193	67	60	13	7	0	0	1.2	15	13.4	S	13	3	13	14	7.1	41
TEXARKANA	119	1003.4	1016.3	25.6	15.0	20.3	2.6	30.6	23+	6.7	27	0	0			142	7	69	11	7	0	0	2.5	16				5	9	16	7.4	
CALIFORNIA																																
BAKERSFIELD	145	999.7	1017.4	16.1	6.7	11.5	-5.7	21.1	6	4.4	30+	0	0	5.0	68	67	47	15	13	1	0	0	1.4	35	11.2	32	15	3	12	15	6.9	
BISHOP	1252	868.6		14.4	- 0.6	7.2	-5.7	20.6	26	- 6.1	16	0	18			12	0	8	4		56	25						8	16	6	5.1	
BLUE CANYON	1609			1.7	- 3.9	- 1.3	-8.9	7.8	12	- 7.8	20	0	30			281	159	43	25		1976	1626			13.0	18	17	0	5	25	8.7	
EUREKA U	13			11.1	4.4	7.9	-2.3	14.4	2	1.1	1	0	0			134	67	26	19		0	0			11.6	W	13	2	7	21	8.1	48
FRESNO	100	1005.8	1017.5	16.7	6.1	11.4	-4.8	20.6	26	2.8	16	0	0	6.7	77	112	83	31	16	4	0	0	0.2	19	11.6	W	15	3	12	15	6.9	64
LONG BEACH	10	1016.6	1018.0	18.3	6.7	12.6	-3.0	22.8	26	3.9	16	0	0	5.0	62	58	39	15	8	0	0	0	1.4	23	10.3	22	29+	11	12	7	4.7	
LOS ANGELES	30	1013.9	1017.4	17.2	9.4	13.3	-1.9	21.1	26	7.2	16	0	0	6.7	66	68	41	21	10	1	0	0	2.3	26	17.0Y	W	11	12	10	8	4.5	
LOS ANGELES U	82			17.8	8.9	13.4	-3.2	23.3	26	6.7	19	0	0			96	66	25	11		0	0			11.2	W	11	12	10	8	5.1	87
MT SHASTA R	1080			7.2	- 2.2	2.6	-6.0	13.9	12	- 6.1	28+	0	27			169	99	57	20		1275	533										
OAKLAND	2	1017.3	1017.7	13.3	8.3	10.8	-2.8	15.6	3	5.0	11+	0	0	5.0	69	113	78	29	17	2	0	0	2.0	24	11.2	21	17	4	9	17	7.2	
RED BLUFF	104	1003.7	1016.5	14.4	5.0	9.7	-6.1	20.0	12	- 0.6	28	0	1	4.4	72	66	20	13	20	3	0	0	2.1	17	15.6	SE	17	0	11	19	8.3	43
SACRAMENTO	5	1016.3	1017.0	15.0	5.0	9.8	-4.9	18.3	12	1.1	1	0	0	5.6	79	86	51	23	15	3	0	0	1.9	19	10.7	SW	17+	3	8	19	7.5	59
SANDBERG R	1377	860.1		5.6	- 2.2	1.6	-8.9	14.4	26	- 5.6	19	0	28	- 1.7	83	104	80	22	13		556	127	1.5	23	19.2	32	12	8	6	16	6.5	
SAN DIEGO	4	1016.9	1017.9	17.2	10.0	13.6	-2.8	19.4	26	7.8	17+	0	0	7.2	66	57	37	15	12	0	0	0	1.5	28	12.5	SW	11	12	12	6	4.9	68
SAN FRANCISCO	2	1016.9	1017.6	13.9	6.7	10.5	-2.7	15.6	30+	3.3	20+	0	0	4.4	69	135	102	45	20	0	0	0	2.8	26	15.2	SSW	17	3	11	16	7.4	
SAN FRANCISCO U	16			12.8	7.8	10.4	-2.7	15.0	12+	4.4	11	0	0			124	88	37	17		0	0			12.5	SW	17					72
SANTA CATALINA	478			11.7	6.1	8.7	-5.0	15.6	9	3.9	1	0	0			64	33	15	12	0	0	0						9	12	9	5.1	
SANTA MARIA	72			15.0	3.3	9.1	-4.0	18.3	26	0.6	30+	0	0			92	62	20	16		0	0						7	12	11	5.7	
STOCKTON	7	1016.6	1017.7	15.0	5.0	10.1	-5.3	18.3	12	1.1	1	0	0	5.0	73	71	42	19	16	4	T	0	1.4	23	11.6	27	18	3	6	21	7.5	
COLORADO																																
ALAMOSA	2297	767.7		15.0	- 3.9	5.4	0.0	21.1	3	-12.8	14	0	29			15	- 3	14	2		163	127						11	13	6	4.6	
COLORADO SPRINGS	1873	806.0	1009.3	16.7	1.1	9.0	1.4	25.0	4	- 5.0	24	0	16	- 7.2	39	52	19	46	2	1	353	102	2.1	19	17.9	22	29	10	11	9	5.1	
DENVER	1610	830.7	1007.5	17.8	0.6	9.0	1.0	26.7	29	- 4.4	22+	0	19	- 4.4	48	100	47	83	4	1	91	102	1.2	19	18.8	W	30	10	12	8	4.9	75
GRAND JUNCTION	1480	847.3	1009.4	18.9	2.8	10.9	-0.4	26.7	27	- 4.4	21	0	9	- 9.4	27	2	- 17	1	4	0	10	T	1.5	20	21.9	SW	29	9	12	9	5.6	64
PUEBLO	1428	850.3	1007.8	21.1	3.9	12.5	2.1	28.9	29	0.6	12+	0	0	- 6.7	31	52	22	52	2	1	13	T	1.3	22	20.1	W	30	12	12	6	4.8	85

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%
CONNECTICUT															
BRIDGEPORT	2	1015.6	1016.3	11.7	2.8	7.1	-1.8	23.9	3	- 2.2	13+	0	6	- 0.6	64
HARTFORD	52	1009.1	1015.9	14.4	2.8	8.4	-0.8	25.6	1	- 3.3	13	0	7	- 1.7	56
NEW HAVEN	2	1015.9		12.2	2.8	7.4	-0.8	23.9	3	- 3.3	13	0	7		
DELAWARE															
WILMINGTON	24	1014.2	1017.3	17.2	5.0	10.8	-0.3	28.3	15+	- 3.9	12	0	2	2.8	62
DIST.OF COLUMBIA															
WASH NATL AP	4	1015.6	1018.0	20.6	7.8	14.2	1.1	31.1	15	0.0	12	0	1	3.3	53
FLORIDA															
APALACHICOLA U	4			26.1	18.9	22.6	2.8	32.2	18	11.1	28	1	0		
DAYTONA BEACH	9	1019.3	1020.5	28.3	16.1	22.4	1.9	33.9	26+	8.9	29	5	0	15.0	66
FORT MYERS	5	1019.3	1019.7	28.9	16.7	22.8	0.1	31.7	25	12.8	30+	0	0	15.0	66
JACKSONVILLE	6	1019.3	1020.2	28.9	16.7	22.8	2.4	34.4	18	7.8	29	5	0	14.4	65
KEY WEST	1	1018.0	1018.6	28.3	23.9	26.2	1.8	30.0	28+	21.1	2	0	0	18.9	65
LAKELAND U	65			28.9	17.2	23.1	1.2	31.7	19	13.3	30+	0	0		
MIAMI	2	1019.0	1019.2	27.8	19.4	23.7	0.3	31.7	19+	16.1	5+	0	0	16.7	67
ORLANDO	33	1015.9	1020.3	30.6	15.7	23.5	1.7	33.9	27+	11.7	29	12	0	15.0	65
PENSACOLA	34	1015.6	1019.7	27.2	17.8	22.5	2.6	30.6	18	11.1	28	0	0	16.7	73
TALLAHASSEE	17	1017.6	1019.9	30.0	14.4	22.3	2.6	32.8	23+	5.0	29	4	0	15.0	68
TAMPA	6	1019.3	1019.7	29.4	16.1	22.9	1.0	33.3	25	8.3	29	3	0	15.6	68
WEST PALM BEACH	5	1019.0	1019.6	28.3	17.8	23.2	-0.1	33.9	27+	11.7	4	3	0	16.1	67
GEORGIA															
ATHENS	244	990.5	1019.3	25.0	11.7	18.2	2.0	31.1	7	3.3	28	0	0	9.4	61
ATLANTA	308	982.7	1019.4	24.4	12.2	18.3	2.7	29.4	16+	3.9	28	0	0	9.4	61
AUGUSTA	44	1013.9	1019.3	27.2	11.1	19.1	1.7	33.3	7	3.3	29	2	0	10.0	61
COLUMBUS	117			28.9	13.3	21.0	3.4	31.7	23+	6.1	29	0	0	12.2	63
MACON	108	1007.1	1019.9	27.8	12.2	20.1	1.4	32.8	16+	3.3	29	3	0	10.6	58
ROME	194			26.1	9.4	17.6	2.2	31.7	16	0.6	28	0	0		
SAVANNAH	14	1018.3	1020.1	27.9	13.3	20.6	1.8	35.0	17	3.9	29	5	0	12.2	64
HAWAII															
HILO	8	1013.9	1015.1	27.8	19.4	23.5	1.5	30.0	27+	16.7	12+	0	0	18.9	79
HONOLULU	2	1014.2	1014.7	28.3	19.4	23.7	0.3	31.1	24+	16.7	10	0	0	17.2	69
KAHULUI	15	1011.9	1014.2	26.7	18.3	22.6	-0.4	30.6	26+	15.6	21	0	0	17.2	73
LIHUE	31	1010.5	1015.8	25.6	18.3	22.2	-0.3	28.3	20	14.4	17	0	0	17.8	77
IDAHO															
BOISE	865	911.6	1012.1	12.2	0.6	6.6	-3.6	17.8	3	- 3.9	16	0	15	- 0.6	67
IDAHO FALLS 46W R	1504			10.0	- 3.3	3.2	-3.1	17.8	18	- 8.3	22+	0	29		
LEWISTON	431			13.9	2.2	8.1	-2.4	20.0	3	- 1.7	15	0	5		
POCATELLO	1358	857.8	1011.5	10.6	- 1.1	4.8	-3.2	19.4	18	- 6.1	3	0	20	- 3.3	62
ILLINOIS															
CAIRO U	96			22.8	12.2	17.4	2.2	29.4	5	4.4	24	0	0		
CHICAGO O HARE	201	992.2	1017.0	14.4	3.9	9.1	0.7	23.9	9	- 3.9	24	0	11	3.9	73
CHICAGO MIDWAY	185	994.2		15.6	5.0	10.2	0.8	25.6	16	- 1.1	24	0	3	3.3	66
MOLINE	177	994.2	1016.0	16.1	5.6	10.9	0.9	28.9	16	- 3.9	24	0	3	6.1	77
PEORIA	199	992.6	1016.7	16.7	6.1	11.5	1.1	28.3	16	- 3.3	24	0	3	5.0	67
ROCKFORD	221	988.8	1016.3	14.4	3.3	8.8	0.0	26.7	16	- 8.9	24	0	9	2.8	69
SPRINGFIELD	179	994.2	1016.4	18.9	8.3	13.6	1.7	29.4	16+	0.0	24	0	1	6.7	65
INDIANA															
EVANSVILLE	116	1003.7	1017.9	22.2	8.3	15.3	1.1	32.2	16	1.1	4	1	0	7.8	63
FORT WAYNE	241	987.9	1018.0	16.1	3.9	10.1	0.5	26.1	16	- 4.4	25	0	11	3.9	68
INDIANAPOLIS	241	988.8	1018.0	18.3	5.6	12.0	1.6	27.8	9	- 1.7	24+	0	7	6.1	69
SOUTH BEND	236	989.2	1017.2	14.4	4.4	9.4	0.8	23.3	9+	- 3.3	25	0	12	3.9	69
IOWA															
BURLINGTON	211			16.7	6.1	11.4	0.9	26.7	16	- 3.9	24	0	3	6.7	74
DES MOINES	286	980.0	1015.1	16.7	4.4	10.6	1.3	30.6	16	- 4.4	24	0	5	5.0	71

State and Station	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																	
BRIDGEPORT	88	- 9	29	12	3	T	T	2.6	33	21.5	2	28	8	7	15	6.4	
HARTFORD	106	11	35	10	3	36	25	2.3	35	16.5	NE	28+	7	7	16	6.6	55
NEW HAVEN	83	- 16	24	12		T	T			14.3	N	28	7	10	13	6.1	58
DELAWARE																	
WILMINGTON	68	- 16	25	9	2	T	0	1.7	31	12.1	30	22	7	7	16	6.7	
DIST.OF COLUMBIA																	
WASH NATL AP	20	- 60	9	6	2	0	0	1.4	30	16.1	NW	7	6	9	15	6.8	60
FLORIDA																	
APALACHICOLA U	6	-103	5	3	1	0	0			13.4	E	8	15	13	2	4.0	76
DAYTONA BEACH	T	- 75	T	0	0	0	0	1.2	11	11.2	10	21	14	12	4	4.1	
FORT MYERS	T	- 67	T	0	1	0	0	0.7	10	11.6	8	1	20	9	1	3.0	
JACKSONVILLE	51	- 30	27	2	1	0	0	0.5	17	21.0	NW	24	10	18	2	4.4	72
KEY WEST	1	- 62	T	2	0	0	0	4.5	9	14.8	E	13	13	13	4	4.4	85
LAKELAND U	0	- 89	0	0		0	0						17	12	1	2.9	87
MIAMI	4	- 95	4	1	0	0	0	3.2	10	12.5	7	1	10	15	5	4.7	
ORLANDO	7	- 80	7	1	0	0	0	0.9	10	10.3	29	27+	19	9	2	2.9	
PENSACOLA	40	- 93	40	2		0	0	1.7	16	17.9	N	14	8	12	10	5.5	71
TALLAHASSEE	37	- 81	33	4	2	0	0	0.8	18	9.4	32	27+	9	19	2	4.8	
TAMPA	T	- 72	T	0	0	0	0	0.1	23	9.4	28	27+	18	11	1	2.6	81
WEST PALM BEACH	1	-109	1	1	1	0	0	2.9	11	11.6	7	1	14	13	3	4.0	
GEORGIA																	
ATHENS	124	12	74	7	5	0	0	0.9	29	9.4	28	22	9	13	8	5.3	
ATLANTA	71	- 42	28	7	4	0	0	0.7	26	13.4	NW	27	7	14	9	5.4	76
AUGUSTA	49	- 42	34	6	4	0	0	0.8	22	11.2	32	24+	11	10	9	5.2	
COLUMBUS	22	- 95	15	5		0	0	0.5	24	9.8	24	23	9	10	11	5.4	
MACON	35	- 60	31	5	3	0	0	0.4	22	11.6	NW	27	10	12	8	5.2	77
ROME	86	- 31	62	5		0	0										
SAVANNAH	35	- 59	32	5	3	0	0	0.9	17	13.0	N	23	11	11	8	5.0	80
HAWAII																	
HILO	540	237	114	21	6	0	0	0.4	25	8.0	E	24+	1	11	18	8.0	34
HONOLULU	33	- 1	19	7	1	0	0	2.1	5	13.4	NE	10	9	11	10	5.5	65
KAHULUI	30	- 6	20	6	3	0	0	2.7	6	13.0	NE	5	6	10	14	6.2	64
LIHUE	41	- 44	14	15	0	0	0	3.1	4	13.4	NE	11	5	15	10	6.1	61
IDAHO																	
BOISE	37	8	16	10	2	203	51	0.5	26	13.4	NW	20	1	6	23	8.4	56
IDAHO FALLS 46W R	22	9	10	7		152	51	2.0	24	17.4	WSW	5					
LEWISTON	45	16	10	13		T	T						5	6	19	7.4	
POCATELLO	46	19	17	11	0	353	152	2.6	21	19.2	S	18	2	6	22	7.8	56
ILLINOIS																	
CAIRO U	55	- 48	15	11		0	0			18.8	SW	13	9	6	15	6.1	62
CHICAGO O HARE	101	26	40	16	6	86	76	0.7	19	20.1	24	14	5	6	19	7.4	
CHICAGO MIDWAY	136	59	54	14	5	79	76	1.3	19	17.9	W	17	4	8	18	7.3	40
MOLINE	125	44	34	14	7	28	25	1.3	19	21.9	SW	14	4	8	18	7.5	44
PEORIA	139	38	60	14	6	36	25	1.4	18	17.9	W	17	5	8	17	7.3	55
ROCKFORD	135	57	45	15	6	97	102	0.9	19	16.1	22	14	1	10	19	7.7	
SPRINGFIELD	54	- 38	13	17	9	T	T	1.7	17	22.4	S	16	8	4	18	6.8	54
INDIANA																	
EVANSVILLE	100	- 1	31	12	6	0	0	1.1	20	16.1	NW	3	9	5	16	6.4	61
FORT WAYNE	66	- 14	16	18	8	18	T	1.5	24	19.2	SW	9	6	9	15	7.1	55
INDIANAPOLIS	76	- 19	20	12	7	0	0	1.0	22	16.5	W	22	5	9	16	6.8	51
SOUTH BEND	126	35	37	16	5	74	76	1.4	23	13.0	25	17	5	7	18	7.2	
IOWA																	
BURLINGTON	149	62		13	8	41		1.2	18	15.6	29	21+	7	7	16	6.9	
DES MOINES	57	- 7	20	10	5	23	25	0.8	14	22.4	NW	17	5	8	17	7.1	43

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max 32 2 °C or above	Temperature: No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1 6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days: Partly cloudy, 4-7	No of days: Cloudy, 8 10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb	Mb	C.	C	C.	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p.s		M.p s							%
IOWA																																
DUBUQUE	322	976.3		14.4	3.9	9.1	0.8	25.6	16	- 3.3	23+	0	6			140	62	44	15		25	25						7	3	20	7.6	
SIOUX CITY	334	973.6	1013.7	16.7	2.8	9.8	0.4	30.6	30+	- 3.3	24+	0	8	2.8	66	51	- 6	20	10	5	T	T	1.1	16	21.9	NW	17	5	12	13	6.6	61
WATERLOO	265	983.1	1015.0	14.4	2.8	8.7	0.2	27.8	16	- 5.6	23	0	9	3.9	73	114	45	31	10	5	10	T	1.2	17	16.5	28	17	5	7	18	7.3	
KANSAS																																
CONCORDIA	448	959.7	1012.5	19.4	5.6	12.6	1.1	30.6	29	- 3.9	24	0	3	6.7	69	90	37	33	11	12	T	T	1.9	14	17.9	W	30	7	11	12	6.1	62
DODGE CITY	787	920.8	1010.8	21.1	6.7	13.9	1.9	33.3	5	- 3.3	24+	2	3	3.3	55	30	- 8	31	5	4	0	0	2.9	16	18.8	S	13	6	10	14	6.3	63
GOODLAND	1113	883.8	1011.1	18.9	1.7	10.2	1.2	31.1	29	- 5.0	3	0	13	- 0.6	56	19	- 22	17	7	2	10	T	2.1	17	21.5	32	16	9	10	11	5.6	
TOPEKA	267	982.1	1013.8	20.0	7.8	14.1	1.7	28.9	16	- 2.2	24	0	3	7.8	66	206	123	91	11	9	0	0	2.0	17	17.9	SW	30	5	8	17	7.0	57
WICHITA	403	965.1	1012.6	22.8	10.0	16.4	2.7	31.7	16	- 0.6	27+	0	2	6.7	56	33	- 25	26	4	2	0	0	3.2	17	18.8	SW	29	5	7	18	7.1	56
KENTUCKY																																
COVINGTON	265	986.8	1018.4	19.4	6.7	13.0	1.8	28.3	9	- 2.8	4	0	3	5.0	60	93	11	28	11	4	0	0	1.2	24	13.9	26	22	5	12	13	6.9	
LEXINGTON	294	983.4	1018.8	21.1	8.9	14.9	2.4	27.8	16+	- 0.6	4	0	2	6.7	60	92	- 11	29	11	4	0	0	1.5	20	12.1	22	9	7	11	12	6.3	
LOUISVILLE	145	1000.3	1018.1	21.7	8.9	15.4	2.7	29.4	9	1.1	4	0	0	7.2	60	112	14	31	12	5	0	0	0.8	22	15.2	NW	17	8	12	10	6.1	67
LOUISIANA																																
ALEXANDRIA	28	1013.2	1017.4	27.2	16.1	21.6	2.8	30.0	25+	10.0	29	0	0	17.2	78	226	81	137	7	6	0	0	1.8	17	9.8	16	13	1	12	17	7.6	
BATON ROUGE	20	1015.6	1018.1	28.9	16.7	22.8	2.7	31.7	25	10.6	29	0	0	16.7	73	321	200	307	3	2	0	0	2.0	16	12.5	16	13	4	14	12	6.4	
LAKE CHARLES	3	1016.3	1017.4	28.3	18.9	23.7	3.8	30.6	24+	13.3	8	0	0	18.9	78	143	32	91	6	6	0	0	3.4	16	15.6	15	13	2	13	15	7.0	
NEW ORLEANS	1	1017.3	1018.2	28.3	16.1	22.3	2.4	31.1	26+	9.4	29	0	0	17.8	75	55	- 60	55	2	1	0	0	2.3	15	12.5	14	13	7	15	8	5.4	
SHREVEPORT	77	1006.8	1016.0	27.2	16.1	21.7	3.2	30.6	16+	9.4	27	0	0	16.7	77	54	- 62	28	5	4	0	0	2.5	16	9.8	19	16	2	11	17	7.6	49
MAINE																																
CARIBOU	190	991.9		6.7	- 3.9	1.3	-1.1	13.9	30	-13.3	4	0	26			14	- 53	6	7		56	305						9	5	16	6.3	
PORTLAND	14	1013.2	1015.4	10.6	0.0	5.3	-0.6	21.1	2	- 5.6	13+	0	13	- 2.2	64	120	26	59	11	2	399	279	1.0	34	16.1	NW	3	10	7	13	5.8	58
MARYLAND																																
BALTIMORE	45	1011.9	1017.4	18.9	6.1	12.2	-0.1	30.0	2	- 1.7	12	0	1	2.2	55	44	- 47	17	10	2	0	0	2.0	30	16.1	NW	10+	7	9	14	6.4	58
MASSACHUSETTS																																
BLUE HILL OBS R	192			11.7	1.1	6.3	-1.3	25.0	2	- 5.6	12	0	11			136	35	42	12		183	127			23.7	WNW	1[illegible]					54
BOSTON	5	1014.2	1015.1	11.7	2.8	7.2	-1.7	23.9	2	- 2.8	12	0	6	- 1.7	60	123	27	38	11	3	84	76	2.1	34	19.2	NE	28	11	5	14	5.9	55
NANTUCKET	13	1014.2	1014.7	8.9	0.6	4.9	-1.9	20.6	2	- 5.0	9	0	11	0.6	77	129	33	42	13	3	30	T	2.2	35	28.2	N	28	9	6	15	6.1	52
PITTSFIELD	357			11.1	- 1.1	5.1	-1.1	22.8	1	- 7.8	13	0	19			104	6	24	13		142	76										
WORCESTER	301	978.0	1015.6	10.6	0.0	5.4	-1.6	20.6	2+	- 6.1	12	0	18	- 3.9	57	130	30	53	11	2	185	76	2.6	32	17.4	30	3	12	3	15	5.9	
MICHIGAN																																
ALPENA	210	991.5	1017.2	10.6	- 1.7	4.6	0.6	18.9	14	-10.0	3	0	21	- 2.2	65	78	11	16	13	4	15	25	0.3	25	13.4	W	10	7	9	14	6.4	57
DETROIT	189			14.4	4.4	9.3	0.6	25.6	2	- 4.4	12	0	7	2.8	64	67	- 9	22	14	4	5		1.1	26	16.5	29	22					
DETROIT M WAYNE CO	193	992.6	1017.1	14.4	3.3	8.9	0.4	25.0	2	- 5.0	12	0	9	3.9	72	93	16	33	16	5	43	25	1.1	25	17.4	W	22+	6	5	19	7.2	47
DETROIT WILLOW RUN	217	989.2	1017.6	14.4	2.8	8.4	-0.3	25.6	2	- 7.2	12	0	11	1.1	60	80	2	29	13	6	20	25	1.7	25	19.7	27	17+	6	5	19	7.3	
FLINT	235	988.8	1017.1	13.3	3.3	8.5	1.1	22.2	2	- 5.6	12	0	9	2.2	66	143	75	51	12	5	T	T	1.2	23	17.9	27	14	5	5	20	7.4	
GRAND RAPIDS	239	987.5	1017.0	13.9	2.2	8.0	0.4	21.7	14+	- 5.6	25	0	12	2.8	72	108	34	43	13	6	T	T	0.7	23	24.1	N	16	6	7	17	7.1	43
HOUGHTON LAKE	350	974.6	1017.3	11.7	- 0.6	5.6		21.1	14	- 9.4	4+	0	18	- 0.6	63	116		30	11	5	114	127	0.9	25	12.5	29	22	6	7	17	7.0	
LANSING	256	984.8	1016.8	14.4	2.8	8.8	1.2	23.3	2	- 5.0	12	0	11	2.2	66	97	24	21	13	5	T	T	1.3	24	17.0	W	17	5	6	19	7.3	43
MARQUETTE U	206			8.9	- 1.1	4.0	-0.1	21.1	21	- 9.4	3	0	20			78	9	37	12		61	152			16.5	SW	4	8	8	14	6.3	56
MUSKEGON	191	993.9	1017.1	12.8	2.2	7.4	0.1	20.6	14	- 4.4	25	0	12	1.7	69	155	90	54	13	5	51	T	0.7	24	13.4	20	14	6	7	17	6.8	
SAULT STE MARIE	220	989.8	1017.1	7.2	- 2.8	2.2	-1.1	15.0	28	-11.7	4+	0	23	- 3.3	67	84	29	19	13	2	48	T	0.7	31	14.3	SW	4	9	6	15	6.5	53
MINNESOTA																																
DULUTH	435	963.8	1016.3	7.8	- 2.2	2.8	0.0	19.4	4	-15.0	3	0	24	- 3.9	65	51	- 9	13	13	4	41	51	0.7	5	28.2	E	30	7	9	14	6.7	46
INTERNATIONAL FALLS	359	972.6	1016.7	7.2	- 3.3	2.2	-0.8	17.8	8	-17.8	3	0	24	- 5.0	61	79	40	22	13	1	137	76	0.2	36	13.4	31	2	8	5	17	6.8	
MINNEAPOLIS	254	984.4	1015.3	12.2	2.2	7.1	0.2	20.6	28+	- 5.0	10	0	13	0.0	64	103	56	37	11	7	5	T	0.6	11	17.4	E	30	5	9	16	7.0	55
ROCHESTER	395	967.2	1015.5	12.2	1.7	6.9	0.3	21.7	16	- 4.4	10	0	14	1.7	72	85	30	38	9	6	T	T	0.9	18	17.0	18	14	6	7	17	7.1	
ST CLOUD	315	976.6	1014.9	11.1	0.6	5.6	-0.4	21.1	4	- 8.3	3	0	15		65	27	- 25	10	11		5	T						4	9	17	7.2	
MISSISSIPPI																																
JACKSON	94	1006.4	1018.3	27.8	13.9	20.7	2.4	31.7	8	6.1	28	0	0	15.6	76	42	- 83	33	5	3	0	0	2.1	18	14.8	SE	13	7	10	13	6.0	71
MERIDIAN	88	1007.8	1018.8	28.3	14.4	21.3	3.3	31.1	12+	6.7	29+	0	0	13.3	64	56	- 79	41	4	4	0	0	1.2	18	9.4	36	26	6	15	9	6.0	
MISSOURI																																
COLUMBIA	237	987.1	1015.3	20.0	8.9	14.4	1.8	28.9	30+	- 2.2	24	0	2	7.2	64	79	- 5	20	14	13	0	0	1.8	16	16.5	NW	16	6	9	15	6.6	64

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C				C.	%	Mm	Mm.	Mm.			Mm.	Mm.	M p.s.		M.p.s							%
MISSOURI																																
KANSAS CITY	226	987.1	1014.2	20.6	9.4	14.9	1.8	30.0	16	-2.8	24	0	2	8.3	66	174	84	79	9	10	T	T	1.7	16	15.2	SW	30	6	10	14	6.7	57
SAINT JOSEPH	247			22.2	8.9	15.4	3.4	32.8	16	-2.8	24	2	2	7.2	69	139	59	50	13	8	36	T	1.7	15	13.4	18	5	7	9	14	6.3	
ST LOUIS	163	996.3	1016.9	20.6	8.9	14.7	2.0	31.7	5	-1.1	24	0	1	8.3	68	86	-8	16	12	9	0	0	1.6	16	15.6	SW	21	9	6	15	6.5	59
SPRINGFIELD	386	970.2	1015.6	21.1	8.3	14.7	1.6	27.2	16+	0.6	27+	0	0	8.9	71	135	31	26	12	11	0	0	2.6	17	21.0	N	23	6	7	17	7.1	55
MONTANA																																
BILLINGS	1087	987.2	1012.5	10.0	-1.7	4.3	-3.5	18.3	10	-9.4	1	0	23	-3.3	66	41	8	22	10	1	290	203	1.5	1	14.8	SW	14	3	12	15	7.0	63
GLASGOW	696	931.3		8.3	-2.8	2.8	-3.6	18.9	14	-19.4	1	0	20			21	-4	10	8		307	127						9	8	14	6.1	
GREAT FALLS	1116	885.5	1015.5	6.7	-2.8	1.9	-4.5	17.8	10	-13.3	22	0	20	-5.0	66	94	69	23	13	0	899	381	1.4	28	14.3	SW	3	5	4	21	7.7	
HAVRE	787	921.4	1015.3	7.2	-5.0	0.9	-5.3	18.9	10	-25.6	22	0	26	-3.9	75	66	41	30	9	0	790	381	0.7	1	14.8	NE	18+	8	9	13	6.2	68
HELENA	1167	877.4	1014.5	9.4	-3.3	3.2	-3.1	17.8	10	-8.3	22	0	28	-5.0	59	60	39	17	10	1	523	152	1.8	30	16.1	S	10	3	9	18	7.4	46
KALISPELL	904	907.9	1013.8	10.6	-2.2	4.0	-2.5	16.1	3	-6.7	22	0	27	-3.9	61	15	-11	5	8	1	53	25	1.5	1	13.0	36	27+	5	9	16	7.1	
MILES CITY	801	918.7	1012.6	11.7	-1.7	5.1	-2.6	22.2	14	-13.3	22	0	18	-1.1	68	54	27		11	3	422		1.5	3								
MISSOULA	972	900.8	1013.8	11.7	-1.7	4.9	-1.9	16.7	24+	-6.7	15	0	21	-3.9	60	24	-1	8	13	1	145	76	0.7	35	13.0	N	18	5	5	20	7.6	56
NEBRASKA																																
GRAND ISLAND	561	946.5	1012.8	18.9	3.3	11.2	1.4	32.8	29	-3.3	7	1	7	2.8	61	25	-33	12	11	4	104	102	1.4	18	19.7	28	30	10	6	14	5.9	
LINCOLN U	351			18.9	5.6	12.3	1.3	29.4	29	-2.2	24	0	4			41	-21	14	11		94	51			18.8	S	28+	10	8	12	5.6	67
NORFOLK	471			17.2	2.2	9.8	0.7	31.7	29	-5.0	24	0	12			35	-21	18	8		T	T						7	12	11	5.9	
NORTH PLATTE	846	913.6	1011.4	17.2	1.7	9.6	0.9	27.8	28	-6.7	22	0	11	-0.6	55	26	-25	9	6	2	114	102	1.0	14	20.1	NW	30	9	12	9	5.4	64
OMAHA	308	978.3	1013.9	20.0	6.1	13.1	2.2	30.6	30+	-1.7	24	0	2	4.4	59	66	1	18	10	2	18	25	1.2	17	18.3	W	17	9	8	13	6.1	65
SCOTTSBLUFF	1206	874.4	1009.8	17.2	1.7	9.3	1.2	26.7	19	-6.7	22	0	12	-0.6	56	61	15	26	8	0	84	76	0.6	12	21.9	32	30	13	10	7	5.0	
VALENTINE	789			15.6	1.7	8.7	1.1	28.3	28	-7.8	1	0	11			6	-44	5	4		T	T			21.9	W	30	7	12	11	5.8	69
NEVADA																																
ELKO	1539	839.1	1010.6	10.6	-1.7	4.5	-2.3	16.7	4	-6.7	1	0	25	-2.8	65	22	1	6	13	0	282	102	1.8	22	10.3	20	18+	0	11	19	8.0	
ELY	1906	802.9	1010.3	8.3	-5.6	1.5	-4.4	15.6	4	-13.9	30	0	29	-5.0	66	35	11	7	15	0	325	76	3.4	19	18.8	S	18	1	16	13	7.0	52
LAS VEGAS	659	935.7	1012.1	20.6	6.7	13.4	-4.6	27.2	26	0.0	12	0	1	-4.4	32	2	-4	2	2	0	0	0	3.9	21	19.2	SW	15	16	8	6	3.6	87
RENO	1342	861.5	1012.3	11.1	-1.7	4.6	-4.3	16.7	13+	-6.7	28+	0	23	-4.4	56	24	10	8	11	1	173	25	1.7	27	18.8	SW	17	1	10	19	7.7	79
WINNEMUCCA	1310	863.2	1012.1	10.0	-1.7	4.1	-3.6	16.1	13	-6.7	21	0	21	-2.8	66	47	26	13	13	1	160	51	1.1	24	13.0	SW	29	[illegible]	5	25	8.7	19
NEW HAMPSHIRE																																
CONCORD	104	1003.1	1015.8	12.2	-1.1	5.6	-1.0	22.8	2	-8.3	13	0	15	-2.2	64	89	5	24	11	1	152	127	1.7	33	16.1	W	10	11	6	13	5.8	59
MT WASHINGTON OBS	1909			-2.2	-10.6	-6.4	-1.4	6.1	2+	-23.9	12	0	29			158	9	43	17	1	765	178			49.2Y	W	23	4	10	16	6.9	44
NEW JERSEY																																
ATLANTIC CITY	20	1014.9	1017.2	17.8	3.9	10.8	0.2	32.2	15	-4.4	4	1	6	2.8	64	70	-17	39	9	3	T	0	1.5	31	12.5	36	28	7	6	17	6.6	52
ATLANTIC CITY U	3			15.6	6.1	10.7	0.7	28.9	3	-0.6	12	0	1			71	-15	35	9						18.3	NE	27					
NEWARK	2	1015.9	1016.8	16.1	5.0	10.5	-0.2	28.3	2	-0.6	12	0	1	1.1	57	72	-17	31	11	1	T	T	1.9	31	14.3	30	23+	6	8	16	6.6	
TRENTON U	17			16.7	5.0	10.9	-0.2	28.3	2	0.0	12	0	1			63	-19	30	9		13	T			15.6	NW	22	8	10	12	6.2	50
NEW MEXICO																																
ALBUQUERQUE	1619	835.1	1010.0	22.8	6.1	14.3	1.2	27.2	29+	-1.1	13	0	4	-11.7	18	T	-12	T	0	0	T	0	2.5	23	21.9	W	22	10	10	10	5.3	73
CLAYTON	1515			21.1	3.9	12.6	2.2	30.6	4	-4.4	24	0	8			25	-6	22	3		0	0						13	5	12	5.2	
RATON	1944			19.4	1.1	10.2	1.9	26.1	4	-4.4	22	0	13			7	-20	4	3		41	25						11	10	9	5.1	
ROSWELL	1102	888.3		29.4	7.8	18.6	3.6	35.0	4	-0.6	22	7	1	-2.8	27	T	-19	T	0	1	0	0	2.6	19	16.5	W	13	11	6	13	5.3	76
SILVER CITY	1638			21.1	4.4	12.8	-0.7	28.3	3	-2.2	13	0	5			T	-7	T	0		T	T						12	13	5	4.3	
NEW YORK																																
ALBANY	84	1005.8	1016.6	12.2	0.6	6.4	-1.5	21.7	1	-6.7	13	0	15	-1.1	64	94	23	22	10	6	79	25	1.3	30	20.1	NW	23	7	8	15	6.6	53
BINGHAMTON	485	957.3	1016.8	12.2	1.1	6.4	0.1	22.8	2+	-6.7	12+	0	15	-0.6	65	53	-22	13	14	4	99	51	2.5	29	16.1	W	22	8	4	18	6.9	56
BUFFALO	215	991.2	1017.2	13.3	2.2	7.8	1.4	23.9	30	-5.0	12+	0	13	0.6	65	66	-10	19	14	5	15	T	2.4	26	17.0	SW	9+	5	9	16	7.0	50
NEW YORK U	40	1012.9	1016.0	15.0	4.4	9.8	-1.0	27.2	2	-1.7	12	0	3	-0.6	56	88	1	35	11	1	T	0	1.5	34	18.8	NE	27					55
J.F. KENNEDY	4	1015.9	1016.6	12.2	3.9	8.0	-1.4	23.9	3	-1.1	12	0	4	1.1	66	93	5	38	13	0	T	0	1.7	34	17.0	4	27	7	8	15	6.3	
NEW YORK LA GUARDIA	3	1014.9	1016.7	14.4	5.0	9.8	-0.8	26.1	2	0.0	12	0	1	0.0	56	74	-17	28	11	1	T	0	2.0	34	21.5	NW	3	7	7	16	6.5	
ROCHESTER	167	997.3	1017.9	13.3	2.8	8.0	0.7	23.3	30+	-3.9	12	0	11	1.1	65	43	-25	10	13	5	T	T	2.3	28	18.8	SW	22	6	8	16	6.7	57
SYRACUSE	125	1001.7	1016.8	12.8	1.1	7.2	-0.6	23.9	1	-7.2	12	0	13	-0.6	61	54	-25	12	13	2	8	T	2.3	30	19.2	NW	10	10	3	17	6.2	59
NORTH CAROLINA																																
ASHEVILLE	652	943.1	1019.0	22.2	6.1	14.2	1.7	31.1	6	-2.2	29	0	3	6.1	64	28	-74	14	6	0	0	0	0.8	33	17.9	34	27	9	11	10	5.5	75
CAPE HATTERAS R	2	1018.6	1018.8	19.4	8.3	13.8	-1.4	29.4	7	2.2	30+	0	0	8.3	71	30	-45	10	6	4	0	0	0.9	30	14.8	NW	7	8	11	11	5.4	72
CHARLOTTE	224	991.5	1018.9	23.9	10.6	17.1	1.3	32.2	17	1.1	29	1	0	7.2	58	40	-49	23	6	1	0	0	1.3	25	11.6	S	22	12	9	9	5.2	79
GREENSBORO	273	987.1	1018.7	24.4	10.0	17.4	3.3	32.8	7	2.8	29+	3	0	7.8	58	52	-36	29	5	2	0	0	1.5	24	11.6	NW	27	12	4	14	5.6	70

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p.s							%
NORTH CAROLINA																																
RALEIGH	132	1002.7	1018.5	25.0	9.4	16.9	1.8	33.9	6	1.7	29+	4	0	7.2	58	77	- 13	33	5	2	0	0	1.5	26	10.7	33	27	12	8	10	5.0	73
WILMINGTON	9	1018.0	1019.5	26.1	11.7	18.9	1.9	35.0	7	5.6	29	3	0	9.4	58	29	- 43	24	3	3	0	0	1.0	23	12.5	NW	27	12	10	8	4.6	86
NORTH DAKOTA																																
BISMARCK	502	953.6	1014.5	9.4	- 2.2	3.5	-2.9	19.4	8	-12.8	1	0	23	- 3.3	65	71	40	19	12	0	376	152	1.7	6	20.6	NE	30	5	7	18	7.2	48
FARGO	273	981.7	1015.1	8.3	- 1.7	3.5	-2.1	18.3	4	-10.6	3	0	19	- 1.7	71	105	61	35	12	5	127	51	1.4	4	21.9	NE	16	7	3	20	7.2	52
WILLISTON	579	944.8	1014.6	10.0	- 2.2	3.8	-1.9	22.8	11	-16.1	1	0	21	- 2.2	70	84	60	52	8	2	315	102	1.6	4	18.8	E	29+	9	8	13	6.4	56
OHIO																																
AKRON	368	973.2	1018.0	16.7	4.4	10.3	1.1	25.6	17+	- 5.6	12	0	10	3.9	68	96	11	31	15	6	20	25	1.5	25	14.3	28	22	5	8	17	7.0	
CINCINNATI OBS	232			20.0	7.8	13.7	1.4	28.9	16+	- 1.1	25+	0	3			81	- 11	27	12		0	0			13.0	SW	17					58
CLEVELAND	237	988.9	1019.2	15.6	4.4	9.8	1.5	26.1	17+	- 6.0	4	0	9	3.3	67	79	- 7	23	15	3	T	T	1.5	25	16.1	W	17	5	7	18	7.3	56
COLUMBUS	247	988.5	1018.6	17.9	5.0	11.4	1.9	26.1	16	- 3.3	4	0	7	5.0	66	84	- 5	24	13	6	0	0	1.0	24	20.1	W	22+	4	13	13	6.7	61
DAYTON	305	982.1	1019.3	17.2	5.6	11.3	0.9	26.7	9	- 4.4	4	0	6	5.0	67	108	23	49	13	5	T	0	1.5	22	17.0	W	22	5	11	14	6.8	53
MANSFIELD	395			16.1	4.4	10.1	1.8	25.0	17+	- 5.6	12	0	9	3.9	69	66	- 18	17	15	6	T	T	1.8	24				5	10	15	6.8	
TOLEDO	205	992.6	1018.1	15.6	3.3	9.4	1.2	26.7	9	- 6.7	4	0	13	3.3	66	70	0	18	17	6	20	T	1.4	26	17.0	W	17+	5	10	15	7.1	48
YOUNGSTOWN	359	974.9	1018.1	15.0	2.8	8.9	0.6	25.0	2	- 7.2	12	0	12	2.2	66	64	- 30	18	11	4	61	51	1.7	27	16.5	24	22	5	5	20	7.3	
OKLAHOMA																																
OKLAHOMA CITY	392	967.2	1013.0	23.9	13.3	18.6	3.1	30.0	15+	4.4	27	0	0	11.7	67	145	66	79	8	7	0	0	3.2	15	16.1	SE	12	5	5	20	7.5	65
TULSA	198	989.8	1013.9	23.9	12.2	17.9	3.0	32.2	6	3.3	27	1	0	11.1	67	129	27	44	9	8	0	0	3.0	17	17.4	SW	13	2	8	20	7.5	50
OREGON																																
ASTORIA	2	1014.6	1015.2	11.7	1.7	6.7	-2.8	17.2	6	- 1.1	19+	0	9	3.9	84	140	9	33	20	1	T	0	1.0	21	9.4	18	12+	4	8	18	7.3	
BURNS U	1265	868.6	1012.8	9.4	- 2.8	3.3	-4.5	13.9	7	- 6.1	29+	0	29	- 2.8	69	33	14	15	14		91	25	1.3	30				3	7	20	7.9	
EUGENE	102	1002.0	1015.6	13.3	2.2	7.7	-2.7	17.8	24+	- 1.1	28	0	4	3.3	77	77	16	17	12	0	T	T	1.3	20	11.6	18	16	3	10	17	7.5	
MEACHAM	1234	872.3	1014.0	4.4	- 3.3	0.7	-4.2	9.4	3	- 7.2	15	0	30	- 3.3	79	63	- 8	10	17		549	203	0.7	27				1	7	22	8.5	
MEDFORD	396	967.5	1015.7	13.3	1.7	7.7	-2.7	18.3	2	- 3.3	28	0	8	1.7	72	44	17	14	15	2	41	25	0.4	29	10.3	14	3	1	10	19	7.7	
PENDLETON	452	960.0	1014.1	13.3	2.2	7.7	-3.4	18.3	3	- 1.7	15+	0	4	1.1	67	27	- 1	6	11	0	T	0	1.3	25	17.0	26	13	5	8	17	7.0	
PORTLAND	6	1014.2	1015.4	13.3	3.3	8.3	-2.7	18.9	7	- 0.6	15	0	2	3.9	76	55	2	15	15	2	T	T	1.0	20	11.2	S	18+	3	7	20	7.6	45
SALEM	60	1008.1	1015.4	13.3	0.6	7.0	-3.6	18.9	7+	- 3.3	19+	0	14	2.2	74	51	- 8	11	17	3	T	0	1.7	20	11.6	18	16	4	7	19	7.4	
SEXTON SUMMIT R	1169	879.8	1014.9	5.6	- 2.8	1.5	-5.6	11.7	3+	- 5.0	28+	0	28			44	- 3	11	16		318	152			17.9	18	16	1	8	21	8.1	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.6	28.3	-0.4	32.2	29	23.9	21	1	0			20	- 72	14	4		0	0						5	17	8	5.9	
ENIWETOK	4	1009.5	1010.3	30.6	25.6	28.1	0.3	32.2	13	22.2	30	1	0	23.3	75	151	119	118	9		0	0	6.3	6								
TAGUAC GUAM R	110			28.3	22.8	25.6	-1.1	29.4	30+	21.1	14+	0	0			228	151	36	25		0	0			12.5	E	2					51
JOHNSTON	2	1013.2	1013.8	27.9	23.3	25.6	0.0	28.9	30+	21.1	18	0	0	20.6	76	13	- 45	7	7	0	0	0	6.1	8	13.9	E	12	9	9	12	5.8	49
KOROR R	29	1005.8	1009.5	31.1	24.4	28.0	0.6	32.2	16+	23.9	28+	3	0	23.9	82	118	-146	28	17	1	0	0	1.7	8	9.4	NW	3	1	6	23	8.3	73
KWAJALEIN	2	1009.1	1009.9	30.6	25.0	27.7	0.6	32.2	13	23.9	27+	1	0	22.8	77	117	- 10	32	15	0	0	0	6.0	7	13.0	5	4	4	8	18	7.3	
MAJURO	3	1009.5	1009.9	29.4	25.0	27.3	0.3	30.6	29+	22.8	28	0	0	23.3	77	194	-119	65	21	0	0	0	4.1	7	13.0	E	25	4	6	20	7.7	54
MARCUS ISLAND	6	1015.9	1017.8	26.1	20.0	23.1	-1.2	28.9	30	16.7	11	0	0	17.8	74	14	- 34	6	7	0	0	0	4.0	9	13.9	NE	8	12	11	7	4.4	67
PAGO PAGO	4	1010.2	1010.2	30.0	23.3	26.7		32.8	13	20.6	19	1	0	23.9	85	621		122	26	3	0	0	1.3	4	14.8	NW	6	1	12	17	7.9	49
PONAPE R	37	1004.1	1009.5	30.6	22.8	26.7	-0.3	31.7	19+	20.6	13	0	0	23.3	84	531	22	106	22	3	0	0	2.5	9	8.9	NE	28	2	7	21	8.2	59
TRUK MOEN ISLAND	2	1009.1	1009.6	29.4	24.4	26.9	-0.2	31.1	29+	21.7	3	0	0	23.3	82	437	124	165	20	0	0	0	3.5	7	11.2	S	1	0	8	22	8.8	78
WAKE	3	1013.9	1014.3	27.8	22.8	25.2	-0.6	29.4	30	20.6	6	0	0	20.0	74	97	49	47	14	0	0	0	5.8	6	13.0	7	6	14	11	5	4.5	
YAP R	19	1007.5	1009.3	30.6	23.9	27.1	-0.6	31.7	26+	21.1	3	0	0	23.9	83	299	137	159	20	1	0	0	2.5	6	8.9	SW	4	0	4	26	9.3	62
PENNSYLVANIA																																
ALLENTOWN	118	1003.1	1017.2	15.6	2.8	9.3	-0.3	28.9	15	- 3.3	12+	0	6	0.0	57	66	- 29	30	10	1	25	25	2.2	30	16.1	28	22	7	9	14	6.4	
ERIE	223	990.9	1017.8	13.9	3.3	8.7	1.2	26.7	2	- 5.6	4	0	9	1.1	64	107	17	38	17	5	43	25	1.5	25	12.5	24	22	5	8	17	7.1	
HARRISBURG	103	1004.4	1017.3	17.8	5.6	11.7	0.7	29.4	2	- 1.1	12	0	2	2.8	58	66	- 11	25	12	3	T	T	1.8	33	19.2	W	22	6	10	14	6.5	60
PHILADELPHIA	2	1015.9	1017.0	17.2	5.0	10.9	-0.2	28.9	15+	- 1.7	12	0	2	2.2	60	55	- 31	31	9	1	T	0	1.6	32	15.2	W	22+	6	6	18	6.9	54
PITTSBURGH	347	973.6	1018.0	17.2	5.0	11.2	1.8	26.7	2	- 3.9	12+	0	7	3.3	61	112	34	31	13	4	13	0	2.2	28	16.5	25	22	4	9	17	7.2	48
READING U	81			17.2	5.6	11.3	-0.2	28.9	15+	- 1.1	12	0	2			77	- 9	39	10		T	T			21.5	W	22	8	10	12	6.0	59
SCRANTON	283	982.7	1017.3	15.6	3.3	9.5	0.4	27.2	15	- 3.3	12+	0	7	1.1	60	53	- 30	17	12	3	122	102	1.7	29	15.6	SW	22	8	8	14	6.4	52
WILLIAMSPORT	160	998.0	1017.2	16.7	3.9	10.2	0.6	28.3	15	- 2.2	4	0	6	1.1	58	73	- 17	21	14	2	69	25	1.7	31	13.0	25	22	8	9	13	6.2	
RHODE ISLAND																																
BLOCK ISLAND	34			8.9	2.2	5.7	-1.3	20.0	2	- 2.8	9	0	6			88	- 4	33	11		T	0						10	8	12	5.8	
PROVIDENCE	16	1013.2	1015.7	12.2	1.7	7.1	-1.3	25.6	3	- 2.8	13	0	10	- 1.7	60	106	11	33	9	4	41	51	2.0	33	19.7	2	28	13	4	13	5.6	54

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
SOUTH CAROLINA																																
CHARLESTON	12	1018.0	1019.4	26.7	12.8	19.5	1.3	33.3	18+	2.2	29	6	0	11.7	66	21	- 52	11	6	3	0	0	1.1	19	17.4Y	W	18	12	11	7	5.0	74
CHARLESTON U	3			24.4	16.1	20.4	1.7	33.3	18	10.6	29+	2	0			23	- 41	10	5		0	0			13.9	NE	8+					
COLUMBIA	65	1011.2	1019.4	26.1	11.7	18.7	1.1	32.2	7	1.7	29	1	0	9.4	62	94	- 7	58	4	4	0	0	0.9	25	11.2	32	27	12	11	7	5.1	75
GNVLE SPARTANBURG	292	984.8	1019.2	25.0	11.1	18.1	2.1	31.7	18+	3.3	29	0	0	8.3	58	60	- 40	23	6	1	0	0	1.3	26	13.0	SW	6	7	12	11	5.7	67
SOUTH DAKOTA																																
ABERDEEN	395	966.1	1013.5	12.8	- 0.6	6.2	-0.9	24.4	28+	- 9.4	1	0	14	- 0.6	66	86	34	28	12	7	33	T	2.1	7	21.5	36	16	4	8	18	7.3	
HURON	391	966.1	1013.0	15.0	1.1	7.9	0.7	27.2	16	- 6.7	3	0	14	1.1	67	22	- 25	6	10	6	15	T	1.6	11	21.0	NE	30	4	12	14	6.8	68
RAPID CITY	964	899.8	1011.3	13.3	0.0	6.7	-0.2	23.9	28	- 7.8	22	0	17	- 1.1	62	131	89	52	12	5	356	330	1.8	35	27.3	NW	30	8	8	14	6.2	54
SIOUX FALLS	432	961.7	1013.6	15.0	0.6	7.8	0.1	28.9	16	- 6.7	24+	0	14	1.7	68	99	40	64	8	4	T	T	0.9	16	20.6	32	17	5	6	19	7.3	
TENNESSEE																																
BRISTOL	459	965.1	1019.3	21.7	6.7	14.3	0.6	27.2	16	- 1.1	29	0	2	6.1	61	71	- 9	32	7	2	0	0	1.3	28	11.2	25	17+	9	14	7	5.3	
CHATTANOOGA	203	994.2	1019.0	25.0	10.0	17.5	1.4	30.6	5	1.1	28	0	0	9.4	63	86	- 23	47	6	4	0	0	0.7	22	16.1	N	24	7	11	12	5.8	58
KNOXVILLE	299	983.4	1018.4	23.9	10.0	17.1	2.1	29.4	16	2.2	28	0	0	8.9	61	51	- 43	24	8	2	0	0	1.2	26	14.3	W	22	7	12	11	5.8	70
MEMPHIS	79	1007.8	1018.1	25.0	13.3	19.2	2.8	28.9	16+	5.6	28	0	0	11.7	65	113	- 4	29	9	6	0	0	1.7	18	14.8	S	25	2	13	15	6.8	66
NASHVILLE	180	996.6	1018.1	24.4	11.1	17.7	2.4	30.6	16+	2.8	28	0	0	8.9	58	86	- 9	24	9	6	0	0	1.4	20	12.5	SE	14	5	13	12	6.4	65
OAK RIDGE R	276			23.9	8.9	16.3	1.9	30.0	6	0.0	28	0	1			67	- 40	34	9		0	0			13.0Y		14+	8	10	12	5.8	
TEXAS																																
ABILENE	537	951.2	1011.6	28.9	15.6	22.2	4.2	36.1	16	5.6	27	8	0	9.4	48	12	- 45	5	7	7	0	0	3.5	18	17.9	W	12	6	10	14	6.6	66
AMARILLO	1098	887.9	1009.6	23.3	8.3	15.9	1.7	31.1	29	0.6	24	0	0	2.2	50	50	16	23	6	7	0	0	3.7	20	20.1	SW	13	9	6	15	5.7	74
AUSTIN	182	992.2	1013.8	30.0	18.9	24.4	4.6	32.2	30+	11.1	14	6	0	16.7	65	113	23	38	8	6	0	0	3.5	17	18.8	N	23	1	10	19	7.6	49
BROWNSVILLE	6	1012.5	1013.2	31.1	22.2	26.7	3.4	33.9	23	14.4	4	7	0	21.1	75	T	- 39	T	0	1	0	0	6.7	14	13.4	SE	21+	5	17	8	5.9	77
CORPUS CHRISTI	12	1012.2	1013.8	29.4	21.1	25.2	3.1	31.7	23+	12.8	4	0	0	20.6	78	6	- 49	3	2	1	0	0	7.0	15	17.0	SE	29	1	15	14	7.3	41
DALLAS	147	997.0	1013.9	27.8	17.2	22.5	4.2	32.8	6	7.8	27	2	0	15.0	66	103	1	58	9	7	0	0	4.2	15	17.9	W	13	3	10	17	7.5	51
DEL RIO	313	976.0	1011.5	30.6	18.9	24.5	2.5	36.7	30	11.7	14	9	0	14.4	61	28	- 6	24	6	5	0	0	4.0	14	13.0	28	17	2	5	23	7.9	
EL PASO	1194	979.8	1009.8	26.7	10.0	18.4	0.9	32.2	27	1.7	13	1	0	- 5.6	21	1	- 7	1	1	0	T	0	3.2	26	27.3	W	13	12	8	10	4.5	85
FORT WORTH	164	993.6	1013.9	27.2	16.1	21.7	3.5	31.1	16+	7.8	27+	0	0	15.0	68	98	6	63	8	9	0	0	3.4	17	17.4	18	13	2	11	17	7.6	
GALVESTON U	2			25.6	22.2	23.9	3.6	28.3	24	17.8	27+	0	0			43	- 23	38	4		0	0			13.4	NW	13					60
HOUSTON U	12			27.2	20.6	23.9	3.2	32.2	23	13.3	13	1	0			50	- 37	37	6		0	0										
HOUSTON	15	1013.5	1015.7	29.4	19.4	24.3	4.0	32.8	23	13.9	4	1	0	19.4	79	112	30	57	7	2	0	0	4.1	15	13.9	32	13	1	13	16	7.4	64
LUBBOCK	992	900.8	1010.6	25.0	10.6	17.8	2.6	31.1	29	1.7	24	0	0	4.4	48	24	- 5	24	3	5	0	0	3.3	21	18.3	31	30	6	12	12	6.0	
MIDLAND	869	913.0	1009.9	27.8	12.8	20.4	2.1	32.2	29+	7.2	26+	4	0	5.0	47	11	- 10	6	4	4	0	0	3.3	19	19.2	24	13	6	9	15	6.5	
PORT ARTHUR	5			27.2	18.3	22.9	2.8	30.0	25+	12.2	4	0	0	18.9	80	149	49	92	5	4	0	0	4.3	15	20.1	SE	13	4	15	11	6.7	64
SAN ANGELO	580	945.8	1011.1	30.0	15.0	22.5	3.0	35.6	16	8.9	22	11	0	8.9	47	3	- 49	2	3	5	0	0	3.0	19	17.9	29	12	4	11	15	6.6	
SAN ANTONIO	240	986.1	1013.6	30.0	19.4	24.8	4.7	33.9	25	9.4	14	4	0	16.7	66	24	- 48	17	7	6	0	0	4.1	15	14.8	N	17+	0	10	20	7.8	40
VICTORIA	32	1010.2	1014.4	29.4	19.4	24.5	3.4	31.7	24	12.8	13+	0	0	19.4	76	44	- 23	38	4	2	0	0	4.6	15	17.4Y	SSE	12	0	11	19	7.9	
WACO	153	995.9	1013.9	28.3	18.3	23.3	4.1	33.9	6	11.7	27	3	0	16.1	69	224	125	87	7	7	0	0	4.7	15	15.6	4	10	1	11	18	7.5	
WICHITA FALLS	303	976.3	1012.4	27.8	14.4	21.0	3.2	36.1	16	5.0	24	8	0	12.2	63	148	84	104	6	8	0	0	3.6	16	19.2	23	13	5	7	18	7.4	
UTAH																																
MILFORD	1533	841.5		13.9	- 1.7	6.0	-2.7	21.1	27	- 7.8	21	0	22			10	- 8	6	8		150	25						7	9	14	6.1	
SALT LAKE CITY	1286	866.6	1010.5	14.4	1.1	7.8	-2.1	22.8	18+	- 2.2	2	0	14	- 2.2	57	53	8	18	15	2	290	102	1.9	18	21.0	SW	5	2	11	17	7.5	72
WENDOVER	1291			12.8	2.2	7.4	-3.4	21.1	4	- 4.4	1	0	8			17	4	5	9		64	51										
VERMONT																																
BURLINGTON	101	1003.1	1015.8	10.6	- 0.6	4.8	-0.3	20.6	1	- 8.3	4	0	19	- 2.8	62	96	29	30	13	2	119	76	1.0	31	16.5	S	10+	9	4	17	6.6	59
VIRGINIA																																
LYNCHBURG	279	984.4		21.1	7.2	14.3	0.8	29.4	16+	0.6	29+	0	0	3.3	53	37	- 43	18	5	1	0	0	1.5	27	13.0	SW	6	13	8	9	5.2	69
NORFOLK	7	1016.9	1018.1	20.6	8.3	14.4	0.0	31.1	3	1.1	13+	0	0	5.6	58	33	- 47	14	6	1	0	0	1.2	28	13.9	NW	24+	9	5	16	6.2	72
RICHMOND	50	1012.2	1018.1	22.2	7.2	14.9	0.4	31.7	16+	0.6	12	0	0	5.0	57	34	- 46	18	6	1	0	0	0.8	29	12.1	N	28	9	7	14	5.8	69
ROANOKE	350	976.0	1017.8	22.2	7.8	15.0	1.4	29.4	7+	0.0	12	0	1	3.3	49	42	- 36	20	8	1	0	0	1.4	29	16.5	29	22	13	6	11	5.4	
WALLOPS ISLAND	3	1018.0	1018.4	17.2	5.6	11.4		30.6	3	- 1.1	12	0	1	5.0	73	45		33	7	2	0	0	1.5	28	26.8Y	NW	24	7	12	11	5.9	
WASHINGTON																																
OLYMPIA	59	1007.8	1015.0	13.3	1.1	7.1	-2.9	19.4	22	- 3.3	15+	0	16	1.7	73	73	- 2	17	17	1	T	0	1.5	20	10.3	22	22	5	7	18	7.3	
QUILLAYUTE	55	1007.1	1014.6	11.1	1.1	6.1	-2.4	17.2	6	- 1.7	17+	0	9	3.3	84	150	- 38	34	17	1	T	0	0.2	13	8.0	W	13+	4	8	18	7.2	58
SEATTLE TACOMA	122	998.3	1015.0	12.2	3.9	8.1	-1.4	16.7	3	0.6	15	0	0	3.3	76	64	3	15	17	1	T	0	0.9	21	10.3	22	12	5	6	19	7.3	61
SPOKANE	718	928.2	1012.7	11.7	0.0	5.7	-2.8	16.1	24	- 3.3	21	0	18	- 1.1	65	43	20	11	11	0	20	T	1.2	18	11.6	S	4	5	7	18	7.1	50
STAMPEDE PASS R	1206	875.0		2.8	- 2.8	0.1	-2.4	11.1	3	- 6.7	14	0	30			109	- 34	34	19		970	991						5	3	22	7.9	
WALLA WALLA U	289			13.3	4.4	8.9	-3.2	20.0	3	0.6	15	0	0			42	7	13	12		T	T			13.4	W	13	8	3	19	6.9	51

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest*	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm. or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb	Mb.	C.	C.	C	C	C		C				C	%	Mm.	Mm	Mm			Mm.	Mm	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	974.9	1013.6	14.4	0.0	7.2	-3.1	20.0	7	- 4.4	14	0	15	- 0.6	59	26	14	7	9	0	T	0	1.4	25	10.3	28	7	6	7	17	6.8	
WEST INDIES																																
SAN JUAN P.R.	4	1014.2	1016.7	28.3	22.8	25.6	0.8	29.4	28+	20.0	17	0	0	18.9	67	22	- 73	6	10	0	0	0	4.4	7	15.6	E	2	6	16	8	5.5	75
SWAN ISLAND	9			29.4	24.4	27.0	-0.5	30.6	29	22.8	30+	0	0			26	5	11	8		0	0						16	9	5	4.3	
WEST VIRGINIA																																
BECKLEY	763	930.2	1018.5	18.9	5.6	12.1		26.7	6	- 3.3	12+	0	7	2.8	56	72		26	11	2	T	T	2.2	26	16.1	29	22	7	8	15	6.7	
CHARLESTON	286	984.1	1018.2	20.6	6.7	13.5	0.6	28.9	14+	- 2.8	4	0	5	5.6	61	82	- 12	26	11	3	0	0	1.3	26	13.4	24	22	7	9	14	6.4	
ELKINS	600	947.2	1019.8	17.8	2.8	10.3	0.2	27.2	14	- 7.2	12	0	7	3.3	66	82	- 6	19	13	3	13	T	2.4	29	20.6	27	22	3	11	16	7.3	
HUNTINGTON	252	988.5	1018.5	20.6	6.7	13.5	0.3	27.8	14+	- 2.2	25+	0	6	5.6	63	88	- 5	22	12	5	0	0	0.8	25	10.3	25	22+	6	10	14	6.6	
PARKERSBURG U	187			19.4	6.7	13.1	0.8	28.3	16+	- 1.7	12	0	4			74	- 8	28	13		0	0			17.0	W	22					49
WISCONSIN																																
GREEN BAY	208	990.5	1016.5	12.2	1.1	6.8	0.6	22.8	14	- 5.0	11	0	16	0.6	68	70	8	22	13	9	5	T	0.4	23	17.9	5	14	4	11	15	6.9	36
LA CROSSE	193	990.9	1015.6	14.4	3.9	9.1	0.8	22.8	15	- 2.2	11	0	8	2.2	67	62	- 8	21	9	5	T	T	0.4	19	14.8	14	20	5	6	19	7.3	
MADISON	262	984.4	1016.3	13.9	1.1	7.6	0.7	24.4	17	- 7.2	11	0	17	1.7	68	65	0	19	17	9	T	0	0.8	19	18.8	SW	14	2	9	19	7.6	43
MILWAUKEE	205	991.2	1017.0	12.2	2.2	7.2	0.7	23.3	15	- 3.9	4	0	12	1.7	72	69	4	30	13	9	T	T	0.4	19	18.8	SW	14	4	8	18	7.3	47
WYOMING																																
CASPER	1627	831.7	1009.7	14.4	- 2.2	5.9	-0.2	22.8	28+	-11.1	22	0	24	- 5.6	53	31	- 11	17	9	2	191	76	2.4	25	24.1	25	5	7	12	11	6.2	
CHEYENNE	1867	806.6	1009.2	13.9	- 0.6	6.7	0.8	22.8	29+	- 6.7	22	0	18	- 5.0	50	55	7	41	9	1	404	178	2.1	26	30.4	NW	30	12	10	8	4.9	70
LANDER	1696	822.2	1009.7	12.2	- 1.7	5.2	-1.0	20.6	27+	- 8.3	22	0	21	- 4.4	56	61	- 1	31	7	2	940	305	1.7	24	25.5	SW	5	8	11	11	6.1	61
SHERIDAN	1208	874.4	1012.4	12.2	- 2.2	5.1	-1.4	22.8	28	- 6.1	30+	0	25	- 3.9	55	64	9	29	11	1	584	356	1.8	30	16.5	NW	30	3	12	15	7.1	49

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

APRIL 1967

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	51	2759	2542
HUNTSVILLE	69	2959	3051
MOBILE	0	1412	156[illegible]
MONTGOMERY	21	2040	2291
ALASKA			
ANCHORAGE	890	10576	9820
ANNETTE	620	6019	6258
BARROW	1771	17109	17772
BARTER ISLAND	1840	16991	17565
BETHEL	1015	11479	11988
COLD BAY	798	8615	8498
FAIRBANKS	991	13812	13502
JUNEAU	824	8643	8093
KING SALMON	907	10859	10262
KOTZEBUE	1358	13427	14412
MC GRATH	987	13329	13377
NOME	1252	12239	12668
ST. PAUL ISLAND	876	8757	9537
SHEMYA	9[illegible]7	8127	8154
YAKUTAT	943	9555	8[illegible]25
ARIZONA			
FLAGSTAFF	816	6183	6535
PHOENIX	93	1432	1765
TUCSON	113	1432	1794
WINSLOW	440	4494	4686
YUMA	70	882	1217
ARKANSAS			
FORT SMITH	63	3075	3270
LITTLE ROCK	52	2880	32[illegible]
TEXARKANA	41	2301	2533
CALIFORNIA			
BAKERSFIELD	361	2447	2103
BISHOP	595	4053	4[illegible]48
BLUE CANYON	1056	524[illegible]	4915
EUREKA U	560	4080	3986
FRESNO	366	2621	2436
LONG BEACH	3[illegible]8	1434	1603
LOS ANGELES	263	1165	1624
LOS ANGELES U	260	886	1263
MT SHASTA R	842	5454	5216
OAKLAND	398	2468	2600
RED BLUFF	462	2640	2468
SACRAMENTO	456	2884	2665
SANDBERG U	896	4232	3888
SAN DIEGO	245	1280	1[illegible]9
SAN FRANCISCO	416	2877	2675
SAN FRANCISCO U	420	2723	2582
SANTA CATALINA	515	1800	1755
SANTA MARIA	490	2788	2569
STOCKTON	442	2762	2642
COLORADO			
ALAMOSA	690	7443	7921
COLORADO SPRINGS	496	5505	60[illegible]0
DENVER	498	5141	5929
GRAND JUNCTION	396	4961	5474
PUEBLO	310	4857	5273
CONNECTICUT			
BRIDGEPORT	597	5445	5382
HARTFORD	530	5694	5971
NEW HAVEN	584	5558	5607
DELAWARE			
WILMINGTON	402	4975	4812
DIST.OF COLUMBIA			
WASH NATL AP	249	4046	4150
FLORIDA			
APALACHICOLA U	2	1238	1308
DAYTONA BEACH	5	710	879
FORT MYERS	0	311	442
JACKSONVILLE	7	1212	1239
KEY WEST	0	25	108
LAKELAND U	0	545	661
MIAMI	0	137	214
ORLANDO	0	542	766
PENSACOLA	1	1521	1463
TALLAHASSEE	7	1446	1485
TAMPA	0	617	683
WEST PALM BEACH	0	247	253
GEORGIA			
ATHENS	77	2735	2907
ATLANTA	67	2848	2958
AUGUSTA	47	2437	2397
COLUMBUS	18	2020	2383
MACON	33	2166	2136
ROME	91	3180	3292
SAVANNAH	26	1815	1819
IDAHO			
BOISE	627	5223	5483
IDAHO FALLS 46W R	809	7629	7892
LEWISTON	550	4543	5213
POCATELLO	720	6396	6573
ILLINOIS			
CAIRO U	129	3644	3774
CHICAGO O HARE	491	6173	6307
CHICAGO MIDWAY	437	5781	5896
MOLINE	404	6037	618[illegible]
PEORIA	371	5797	58[illegible]9
ROCKFORD	513	6547	6534
SPRINGFIELD	289	5292	5275
INDIANA			
EVANSVILLE	218	4383	4367
FORT WAYNE	444	6254	5977
INDIANAPOLIS	353	5147	5483
SOUTH BEND	474	5995	6140
IOWA			
BURLINGTON	381	5732	5904
DES MOINES	421	6208	6558
DUBUQUE	501	6883	7048
SIOUX CITY	459	6555	6648
WATERLOO	52[illegible]	6945	7[illegible]37
KANSAS			
CONCORDIA	317	5183	531[illegible]
DODGE CITY	259	464[illegible]	4853
GOODLAND	433	5395	5863
TOPEKA	247	477[illegible]	5[illegible]46
WICHITA	160	414[illegible]	4527
KENTUCKY			
COVINGTON	3[illegible]5	4949	5[illegible]92
LEXINGTON	223	4392	4578
LOUISVILLE	2[illegible]9	4290	4546
LOUISIANA			
ALEXANDRIA	7	2088	1921
BATON ROUGE	2	1506	1560
LAKE CHARLES	0	1305	1459
NEW ORLEANS	2	1433	1385
SHREVEPORT	13	2067	2184
MAINE			
CARIBOU	912	9075	9116
PORTLAND	699	7222	7028
MARYLAND			
BALTIMORE	338	4735	4564
MASSACHUSETTS			
BLUE HILL OBS R	644	6083	[illegible]
BOSTON	596	5465	[illegible]
NANTUCKET	721	5713	5378
PITTSFIELD	710	7190	7147
WORCESTER	691	6665	6587
MICHIGAN			
ALPENA	739	7958	79[illegible]4
DETROIT	483	5952	597[illegible]
DETROIT M WAYNE CO	5[illegible]5	6027	5997
DETROIT WILLOW RUN	526	6520	5984
FLINT	526	6912	6524
GRAND RAPIDS	554	6232	66[illegible]4
HOUGHTON LAKE	678	7827	
LANSING	513	6709	6567
MARQUETTE U	767	7842	7748
MUSKEGON	582	6374	6308
SAULT STE MARIE	865	8784	8370
MINNESOTA			
DULUTH	832	9382	9312
INTERNATIONAL FALLS	866	10407	9989
MINNEAPOLIS	600	8063	8013
ROCHESTER	610	7896	79[illegible]1
ST CLOUD	681	8743	8448
MISSISSIPPI			
JACKSON	20	2362	2203
MERIDIAN	18	2202	2289
MISSOURI			
COLUMBIA	243	4519	4913
KANSAS CITY	213	4234	4602
ST JOSEPH	200	4802	5336
ST LOUIS	257	4538	4764
SPRINGFIELD	213	4323	4450
MONTANA			
BILLINGS	755	6312	6662
GLASGOW	835	8644	8511
GREAT FALLS	878	7096	7180
HAVRE	935	8359	8200
HELENA	807	6765	7553
KALISPELL	766	7182	7587
MILES CITY	711	7386	7348
MISSOULA	712	6383	7515
NEBRASKA			
GRAND ISLAND	391	5823	6274
LINCOLN U	338	5524	5663
NORFOLK	463	6504	6698
NORTH PLATTE	465	6151	6379
OMAHA	295	5493	6024
SCOTTSBLUFF	484	5782	6313
VALENTINE	512	6528	7053
NEVADA			
ELKO	737	6689	6832
ELY	7[illegible]4	6716	7[illegible]52
LAS VEGAS	261	2364	2703
RENO	737	5444	5786
WINNEMUCCA	760	5822	6245
NEW HAMPSHIRE			
CONCORD	683	7079	7[illegible]
MT WASHINGTON OBS	1328	12399	12284
NEW JERSEY			
ATLANTIC CITY	411	4680	4664
ATLANTIC CITY U	4[illegible]5	451[illegible]	4[illegible]28
NEWARK	425	4827	4931
TRENTON U	403	4759	4847
NEW MEXICO			
ALBUQUERQUE	211	4014	4267
CLAYTON	3[illegible]6	4497	4954
RATON	430	5399	5864
ROSWELL	59	3091	3762
SILVER CITY	290	35[illegible]1	3618
NEW YORK			
ALBANY	639	6793	6591
BINGHAMTON	634	6859	6874
BUFFALO	560	6476	6655
NEW YORK U	462	4862	4744
J.F. KENNEDY	554	517[illegible]	50[illegible]4
NEW YORK LA GUARDIA	454	4706	4681
ROCHESTER	551	6167	64[illegible]1
SYRACUSE	595	6387	64[illegible]3
NORTH CAROLINA			
ASHEVILLE	226	426[illegible]	4346
CAPE HATTERAS R	245	2685	2587
CHARLOTTE	[illegible]28	3224	3169
GREENSBORO	130	3364	3758
RALEIGH	151	3219	3359
WILMINGTON	79	2121	2347
NORTH DAKOTA			
BISMARCK	795	8885	8405
FARGO	795	9265	8795
WILLISTON	775	8863	8745
OHIO			
AKRON	433	572[illegible]	5796
CINCINNATI OBS	289	4747	4679
CLEVELAND	461	5759	5[illegible]5
COLUMBUS	374	5374	5462
DAYTON	378	5381	54[illegible]5
MANSFIELD	442	6029	5[illegible]98
TOLEDO	479	6176	6192
YOUNGSTOWN	5[illegible]8	6307	6109
OKLAHOMA			
OKLAHOMA CITY	71	3085	36[illegible]1
TULSA	100	3412	3813
OREGON			
ASTORIA	623	4559	4592
BURNS U	806	6322	6414
EUGENE	564	3966	4312
MEACHAM	943	7138	7008
MEDFORD	569	4424	4688
PENDLETON	571	4278	4859
PORTLAND	535	4038	4285
SALEM	604	4219	4337
SEXTON SUMMIT R	902	5875	5510
PENNSYLVANIA			
ALLENTOWN	484	5886	5619
ERIE	518	5825	61[illegible]3
HARRISBURG	364	5194	5115
PHILADELPHIA	396	4998	4974
PITTSBURGH	387	5549	5753
PITTSBURGH U	371	5070	5146
READING U	382	4893	484[illegible]
SCRANTON	475	5877	6026
WILLIAMSPORT	437	6089	5733
RHODE ISLAND			
BLOCK ISLAND	676	5441	5361
PROVIDENCE	598	5755	5667
SOUTH CAROLINA			
CHARLESTON	50	1975	2033
CHARLESTON U	23	1727	1794
COLUMBIA	67	2570	2484
GNVLE-SPARTANBURG	88	2947	3021
SOUTH DAKOTA			
ABERDEEN	647	8086	8088
HURON	556	7497	7848
RAPID CITY	622	6554	6893
SIOUX FALLS	563	7427	7491
TENNESSEE			
BRISTOL	218	4064	4075
CHATTANOOGA	94	3399	3229
KNOXVILLE	112	3379	3451
MEMPHIS	60	3095	3210
NASHVILLE	106	3320	3538
OAK RIDGE R	138	3701	3761
TEXAS			
ABILENE	14	[illegible]158	[illegible]
AMARILLO	[illegible]	[illegible]	[illegible]
AUSTIN	0	1496	17[illegible]1
BROWNSVILLE		658	6[illegible]
CORPUS CHRISTI	0	908	914
DALLAS	12	1975	2357
DEL RIO	0	1323	1504
EL PASO	56	2546	2700
FORT WORTH	15	2066	2405
GALVESTON U	0	1081	1235
HOUSTON U	0	1114	1278
HOUSTON	0	1143	1396
LUBBOCK	85	3065	3547
MIDLAND	[illegible]3	[illegible]440	2591
PORT ARTHUR	0	1397	1447
SAN ANGELO	2	2075	2255
SAN ANTONIO	0	1560	1546
VICTORIA	0	1094	1173
WACO	4	1814	2030
WICHITA FALLS	30	2419	2826
UTAH			
MILFORD	662	6041	6131
SALT LAKE CITY	564	5333	5735
WENDOVER	58[illegible]	5495	565[illegible]
VERMONT			
BURLINGTON	722	7590	7826
VIRGINIA			
LYNCHBURG	237	4107	4088
NORFOLK	244	3439	3384
RICHMOND	230	4008	3812
ROANOKE	2[illegible]	4017	4085
WALLOPS ISLAND	374	4423	
WASHINGTON			
OLYMPIA	599	4934	4752
QUILLAYUTE	655	5087	5066
SEATTLE TACOMA	548	4469	4691
SPOKANE	677	5787	6232
STAMPEDE PASS R	979	79[illegible]	8146
WALLA WALLA U	5[illegible]5	3878	4583
YAKIMA	593	4754	5652
WEST VIRGINIA			
BECKLEY	335	5163	
CHARLESTON	275	4316	4371
ELKINS	4[illegible]	5612	5429
HUNTINGTON	269	4362	4335
PARKERSBURG U	296	4647	4633
WISCONSIN			
GREEN BAY	620	7705	7595
LA CROSSE	494	7175	7275
MADISON	574	7268	7451
MILWAUKEE	596	6940	7128
WYOMING			
CASPER	664	6624	6900
CHEYENNE	622	5976	6795
LANDER	703	6834	7336
SHERIDAN	707	6982	7167

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

APRIL 1967

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS
Alabama						0	0	4	3	0	0	5	0													0	0	4	0
Alaska *																													
Arizona *																													
Arkansas	6	1	0	5	6	0	0	5	5	0	0	5	4																
California	4	3	0	0	3	0	0	0	6					0	0	4	0												
Colorado														0	0	4	0	2	2	4	0							5	
Connecticut *																													
Delaware *																													
Florida *																													
Georgia	3	1	0	0	4	0	0	?	?	0	0	3	0																
Hawaii																										0	0	°3	C
Idaho *																													
Illinois	17	1	58	1051	7	0	0	5	0	1	0	°7	C																
Indiana	3	2	0	2	4	0	0	2	0																				
Iowa	16	4	2	17	7	0	1	7	4	0	0	7	0	0	0	4	0									0	0	5	0
Kansas						0	0	5	5	0	0	5	0	0	1	4	0									0	0	0	Z 6
Kentucky						0	0	1		0	0	4		0	0	4													
Louisiana	7	3	0	0	5					0	0	3	?	1	0	3	0									0	20	7	?
Maine										0	0	4	0					0	0	4	0								
Maryland *																													
Massachusetts										0	8	5	0	0	0	5	0	0	0	4	0								
Michigan	14	3	0	51	7					1	9	6	0	0	0	4	0									0	1	2	0
Minnesota	10	2	13	65	7	0	0	3	2	4	2	5	2	0	0	5	0	0	0	4	0	0	0	4	0	0	0	6	0
Mississippi	5	3	0	0	4	0	0	4	4	0	3	5	0													0	1	3	4
Missouri	21	4	0	13	5	0	0	6	5	0	13	6	5																
Montana																		1	0	?	0								
Nebraska																		0	0	0	?								
Nevada *																													
New Hampshire										0	0	4	0	0	0	3	0	0	0	3	0								
New Jersey *																													
New Mexico										0	0	4	0																
New York											1	4																	
North Carolina	1	1	0	0	4	0	0	0	4	0	4	5	0	1	0	0	0											4	4
North Dakota														0	0	4	0	3	17	6	0	0	5	6	0				
Ohio *																													
Oklahoma	11	5	0	3	5	0	0	4	4	0	1	5	3	0	3	4	0									0	0	4	3
Oregon																		0	few	4	3								
Pacific Area *																													
Pennsylvania										0	2	5	0	0	0	4	0												
Puerto Rico *																													
Rhode Island										0	1	5	0																
South Carolina	1	1	0	0	3					0	0	4	0																
South Dakota	6	2	0	11	4	0	0	3	4																				
Tennessee	3	2	0	2	6	0	0	5	0	0	0	4	0	0	0	4	0												
Texas	17	5	0	0	5	0	0	6	5	0	5	6	3	0	0	4	0									0	0	4	0
Utah										0	0	5	4																
Vermont										0	0	3	0					0	0	3	0								
U. S. Virgin Is. *																													
Virginia										0	0	4	0																
Washington *																													
West Virginia	1	1	0	0	4					0	0	3	0																
Wisconsin	1	1	0	0	6	0	0	4	0	0	0	5	0													0	0	6	0
Wyoming	2	2	0	0	°4													0	0	°5	C								

° Includes crop damage
C Crop damage
Z Freeze

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

APRIL 1967

Elmer R. Nelson, Office of Hydrology

Near record flooding occurred on the Chippewa River in Wisconsin. The crest at Durand, Wis., was the highest since 1884. Crests along the Mississippi River in the reach from Wabasha, Minn., to Burlington, Iowa, a distance of 350 miles, were near those of the 1952 flood. Major local flooding occurred on the Comite and Amite Rivers in Louisiana.

HUDSON BAY DRAINAGE

Red River of the North Basin.--Flooding along the Red River of the North was minor this spring, as compared to 1965 and 1966.

Precipitation last fall was below normal for the 3-month period of September, October and November, thus providing for greater absorption of water by the ground surface during the spring runoff. Accumulation of snow over the Red River of the North Basin was less this winter than during the 1965-1966 season. Water content of the snow cover this spring ranged from less than 1 inch over the southern valley to 5 inches over the northern areas. This was 1 to 3 inches less than in 1966. Alternate freezing and thawing contributed to lower crests. Substantial precipitation over the valley on April 17-21 caused a second crest at most points during April.

The spring flood in the Red River of the North Basin began along the main stem at Fargo, N. Dak., on March 29. There was no flooding at Wahpeton, N. Dak., during March or April.

The Red Lake River at Crookston, Minn., rose out of its banks on March 31. It crested on April 1, 8.5 feet above flood stage. The crest of 23.5 feet was 0.8 foot lower than the 1966 crest. It rose above flood stage again on April 20-25. The crest on the 22d was 3.6 feet lower than on April 1. Minor flooding occurred during the first week of May.

Flooding along the mainstem spread downstream to Grand Forks, N. Dak., and Oslo, Minn., by April 1. It crested at Fargo on the 1st, 2.5 feet above flood stage. By the 4th, the crest had reached Grand Forks at a stage of 37.5 feet, 9.5 feet above flood stage. This was 8.1 feet lower than in 1966. The crest at Oslo, Minn., was 7.1 feet above flood stage. By the 8th, the overflow had spread downstream to Pembina, N. Dak. It crested at Drayton, N. Dak., 4.7 feet above flood stage on the same date. The crest reached Pembina, N. Dak., on the 10th at a stage of 42.4 feet (flood stage 42 feet). This was 8.9 feet lower than last year.

A secondary rise began in the headwaters shortly after the middle of the month. By the 19th, the Red River was again overflowing its banks at Fargo, N. Dak. The crest on the 22d was 0.1 foot higher than the first crest. By the 24th, the river was in flood as far downstream as Drayton, N. Dak. Crests at and below Grand Forks, N. Dak., were generally 1.5 feet lower than during the first rise. Flooding continued at Drayton, N. Dak., until May 11.

Damage from the flooding was minor in comparison to that of 1965 and 1966. Park areas were inundated at Grand Forks and to a small degree at Fargo-Moorhead. Spring seeding in the Drayton and Oslo areas was delayed due to the flooding of agricultural land.

ST. LAWRENCE DRAINAGE

Lake Michigan.--Heavy rain ranging from 1-1/4 to 3 inches within 1 hour during the evening of the 21st, caused minor flooding of creeks in the upper Grand Basin during the early morning hours of the 22d. No major flooding occurred with crests ranging from 1 to 2 feet below flood stage along the upper Grand River in Michigan. Low areas along the river to the north of Grand Rapids were flooded.

Lake Huron.--Minor flooding occurred on the Shiawassee River at Owosso, Mich., and on the Flint River at Flint, Mich., on the 17th. There were two rises along the Chippewa at Mt. Pleasant, Mich., and on the Tittabawassee River at Midland, Mich. The first occurred on the 17th-19th and the second on the 22d-23d. No damages were reported from the minor overflows.

Lake Erie.--Heavy rains in the upper half of the St. Marys Basin during the latter part of March caused minor flooding of low farm ground near Decatur, Ind., from March 28 to April 2. Minor flooding occurred along the St. Joseph River at Montpelier, Ohio, on the 4-6th. Little or no damage resulted from the light flooding.

ATLANTIC SLOPE DRAINAGE

Minor flooding occurred along small streams in New Hampshire and Massachussetts during the first part of the month. Temperatures averaged well above normal with some light rain the first few days of April. Extensive snowmelt caused streams to rise through central and southern New England. The Pemigewasset River at Plymouth, N. H., rose 0.1 foot above flood stage on the 3d. The Nashua River at East Pepperell, Mass., exceeded flood stage by 1.5 feet during the period from the 3d to the 6th. The Connecticut River remained near or below flood stage through Vermont, New Hampshire, and Massachusetts. It exceeded flood stage at Hartford, Conn., by 2.4 feet between the 4th and 8th. Minor lowland flooding occurred in the central and southern Connecticut valley from the 3d through the 23d. Rain and snow on the 6th and 7th and mild temperatures caused extensive runoff.

Minor flooding occurred in the Lake Champlain drainage in northwestern Vermont on Otter Creek and Missisquoi River on the 3d. No damage was reported.

EAST GULF OF MEXICO DRAINAGE

Minor flooding occurred on the Tombigbee River at Amory, Miss., on the 27th. No damage was reported.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Near record flooding occurred on the Chippewa River from Chippewa Falls, Wis., downstream through Durand, Wis., from March 31 through April 10. The crest of 17.0 feet at Durand on the 2d was the highest stage since 1884 when a stage of 18.4 feet was recorded. During the 1965 Spring Flood a stage of 13.7 feet was reached at Durand. Flooding along other streams in the Upper Mississippi Basin during March and April was mostly minor. The Crow River at Delano, Minn., crested 2 feet above flood stage on April 2 or 8.4 feet below the record crest of 18.4 feet recorded in 1965. It continued in flood from March 30 through April 12. The Rum River at St. Francis, Minn., reached bankfull stage on the 5th. There was up to 4 feet of flooding along the lower Minnesota River Valley and up to 3 feet of overflow on the Wisconsin River in the reach from Merrill to Muscoda, Wis. The Black River crested 2.5 feet above flood stage on March 31 and was out of its banks for 6 days. The Kickapoo River at Steuben, Wis., was in light flood from March 24 to April 1. The flooding

in the Upper Mississippi Basin was due to snowmelt and precipitation during the latter part of March and the first part of April. Unprecedented snowmelt resulted from the record 80° temperatures on March 30. The warmest temperatures of March 30 and the heaviest precipitation of April 1-2 fell over the Minnesota River Valley and the Chippewa River drainage downstream from Holcombe, Wis., eastward into and over the central Wisconsin River drainage.

Heavy precipitation on March 19-20 caused the Kaskaskia River at Carlyle Dam, Ill., to exceed bankfull stage on March 23. It crested on March 27, 2.6 feet above flood stage. It was back within its banks on April 1.

A general period of showers and thunderstorms on March 31 and April 1, caused the Illinois River to rise above flood stage on April 2 along its entire course, except at Peoria, Ill. It went out of its banks at Meredosia, Ill., on March 22 and continued in flood at this point through April. It rose above flood stage at Peoria, Ill., on April 4, and continued in flood until the 12th. Crests occurred between the 2d and 10th and ranged from 2 to 4.5 feet above flood stage. Additional rain towards the end of the month caused the Illinois to rise above flood stage at Havana, Ill., on the 30th.

Snowmelt in Minnesota and Wisconsin, augmented by 1-1/2 to 2-1/2 inch rains in eastern Minnesota and central Wisconsin on April 1, caused the Mississippi to rise above flood stage at Fort Ripley and Wabasha, Minn., on April 2. Additional rains on the 9th, 12th, and 13th, combined with the snowmelt crest moving down the Mississippi, produced flooding as far downstream as Grafton, Ill., by the 16th. The Chippewa River flood, together with the flow coming down the Mississippi from St. Paul and the additional water from the St. Croix River did produce Mississippi crests near those of the 1952 Spring Flood from the confluence of the Chippewa River downstream to Burlington, Iowa. There was no flooding in the reach below Grafton, Ill. By the 27th, the Mississippi had receded within its banks at all points.

Flood damage was limited to inundation of low-lying land, which in general had not been planted, and to flooding of country roads. Preliminary estimates of flood damage by the Corps of Engineers were placed at $550,000 in Iowa and $450,000 in Illinois. No estimates are available for Minnesota and Missouri.

Missouri Basin.--There were two periods of flooding in northwestern Missouri during April. The first was due to heavy rains on the 1st followed by intermittent rain through the nights of the 2d and 3d. Minor flooding resulted on the Little Blue, Grand, and Chariton Rivers. The second rise was due to general intermittent rains from the 11th through the 14th. The Blackwater River at Valley City, Mo., exceeded flood stage by 7 feet on the 13th. Minor flooding occurred on the Wakenda and the other streams in flood during the first part of the month.

Ohio Basin.--Some minor flooding occurred on Conowango Creek in the upper Allegheny Basin in New York due to heavy thundershowers on the evening of the 17th. Some basements in the Jamestown, N. Y., area were flooded.

The Muscatatuck River at Austin, Ind., exceeded flood stage by 3 feet on the 24th. The White River exceeded bankfull stage at Anderson, Ind., briefly on the 6th. The Wabash River, on April 1, was out of its banks, but receding at Wabash, Ind., and in the reach from LaFayette to Terre Haute, Ind. The flooding was minor and no damage was reported. Additional minor flooding occurred at Montezuma, Ind., on the 17th.

Arkansas Basin.--Heavy rains on the 11-13th caused local minor flooding in the Canadian Basin. Brief flooding occurred on the North Canadian in East Oklahoma City, Okla., on the 12th and near Wetumka on the 12th and 13th. Heavy thundershowers in central Oklahoma on the 19th resulted in minor flooding on the Deep Fork near Beggs, Okla., on the 20th. Flood damage, if any, was light.

Red Basin.--Minor flooding occurred in the upper Red River Basin on the Washita River at Durwood, Okla., late on the 12th. The heavy rains on the 11-13th caused widespread flash flooding of creeks and tributaries and local brief minor flooding of some residential areas. State Highway 12, west of Ravia, Okla., was flooded until the 14th. Damage, if any, is believed to be light.

There were five periods of flooding on the Sulphur River at Hagansport, Tex., during April. The crests from the 11th to the 26th, ranged from 5 to 8.3 feet above flood stage. At Naples, Tex., the Sulphur continued in flood from the 17th through the end of the month, with crests on the 20th and 30th. This flooding was due to a period of heavy showers from the 11th through the 26th. Approximately 50,000 acres of pastureland were flooded.

Lower Mississippi Basin.--Excessive precipitation on the 14th and 15th caused major local flooding on the Comite and Amite Rivers in Louisiana. The Comite River at Comite, La., reached a stage of 21.2 feet on April 15. Without channel improvements during the last few years, the crest at Comite would undoubtedly have been much higher. The Amite River at Denham Springs, La., crested at a stage of 30.8 feet on the night of April 15. As water from the upper basin flowed southward, a second crest of 31.4 feet was reached. This compares with a stage of 27.3 feet in February 1966 and 30.2 feet in October 1964 (during Hurricane Hilda). Flood stage at Denham Springs is 25 feet.

The excessive precipitation which caused this flooding set a new record for precipitation occurring in a short period at Baton Rouge, La. The 24-hour maximum amount for Baton Rouge for this period was 12.08 inches. The previous greatest 24-hour precipitation record was 8.38 inches, which occurred during Hurricane Hilda. At Stoney Point, La., a storm total of 15.79 inches was reported. Precipitation at other stations in the Amite and Comite Basins ranged from 8.11 inches at McComb to 10.75 inches at Centreville.

WEST GULF OF MEXICO DRAINAGE

Heavy rainfall during the period from the 11th to the 15th caused light to moderate flooding on the Mermentau and Calcasieu Rivers in Louisiana and on the Sabine River at Deweyville, Tex. Precipitation was excessive in the Mermentau Basin, with Mermentau, La., reporting 15 inches.

PACIFIC SLOPE DRAINAGE

Brief overflow occurred along the Sacramento River at Colusa Weir, Calif., on the 25-26th. Overflow continued at Tisdale Weir, Calif., from the 18th through the end of the month. The moderately high stages were caused mainly by releases from Shasta and Black Butte Reservoir to provide space for anticipated snowmelt runoff. April precipitation ranged from 125% to 250% of normal and fell as snow to low levels providing the greatest snowpack of record so late in the season.

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	To–	Crest * Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red River of the North Basin					
Red Lake: Crookston, Minn.	15	Mar. 31 20 May 2	5 25 May 5	23.5 19.9 17.0	1 22 May 2
Red River of the North: Fargo, N. Dak.	17	Mar. 29 19	3 26	19.5 19.65	1 22
Grand Forks, N. Dak.	28	1 21	9 30	37.5 36.0	4 25
Oslo, Minn.	28	1	10	35.1	4
Drayton, N. Dak.	32	4 24	14 May 11	36.7 35.4	8 29
Pembina, N. Dak.	42	8	12	42.4	10
ST. LAWRENCE DRAINAGE					
Lake Huron					
Shiawassee: Owosso, Mich.	7	17	17	7.2	17
Flint: Flint, Mich.	11	17	17	11.2	17
Chippewa: Mt. Pleasant, Mich.	13	17 22	19 23	13.5 13.5	17 22
Tittabawassee: Midland, Mich.	24	18 23	19 23	24.5 24.0	18 23
Lake Erie					
St. Marys: Decatur, Ind.	15	Mar. 28	2	18.7	Mar. 29
St. Joseph: Montpelier, Ohio	10	4	6	10.8	5
ATLANTIC SLOPE DRAINAGE					
Pemigewasset: Plymouth, N. H.	11	3	3	11.1	3
Nashua: East Pepperell, Mass.	8	3	6	9.5	4
Connecticut: Hartford, Conn.	16	4	8	18.4	5
Bodkin Rock, Conn.	9	5	6	9.3	5-6
EAST GULF OF MEXICO DRAINAGE					
Tombigbee: Amory, Miss.	20	27	27	20.1	27
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Crow: Delano, Minn.	8	Mar. 30	12	10.0	2
Rum: St. Francis (nr), Minn.	8	5	6	8.0	5
Minnesota: Jordan (nr), Minn.	20	4	14	22.8	8
Chaska, Minn.	18	5		19.4	8
Savage, Minn.	698	Mar. 31	17	702.1	8
Mendota, Minn.	699	4	8	699.9	7
Chippewa: Eau Claire, Wis.	773	Mar. 31	5	779.6	2
Durand, Wis.	11	Mar. 31	10	17.0	2
Trempeauleau: Dodge, Wis.	7	Mar. 26	3	10.4	Mar. 28
Black: Galesville, Wis.	12	Mar. 31	5	14.5	1
Kickapoo: Steuben, Wis.	8	Mar. 24	1	9.3	Mar. 28
Wisconsin: Merrill, Wis.	11	2	4	14.0	2
Wisconsin Rapids, Wis.	12	3	4	12.1	4
Portage, Wis.	17	3	8	18.8	5
Muscoda, Wis.	9	6	8	9.5	7
Illinois: Morris, Ill.	13	2	4	16.55	2
La Salle, Ill.	20	2	9	24.5	3
Peoria, Ill.	18	4	12	19.8	7
Havana, Ill.	14	2 30	27 1/	16.7	8
Beardstown, Ill.	14	2	23	16.3	8
Meredosia, Ill.	10	Mar. 22	1/	14.7	10
Chillicothe, Ill.	45	2	19	48.5	5
Kaskaskia: Carlyle Dam, Ill.	423.5	Mar. 23	1	426.1	Mar. 27
Mississippi: Fort Ripley, Minn.	10	2	5	10.5	4
Hastings, Minn.	15	5	7	15.1	6
Redwing, Minn.	14	5	7	14.3	5
Lake City, Minn.	16	3	9	17.4	6
Wabasha, Minn.	12	2	14	15.5	5
MISSISSIPPI SYSTEM	Ft.			Ft.	
Mississippi: Winona, Minn.	13	3	14	17.0	7
La Crosse, Wis.	12	3	15	14.6	6
McGregor, Iowa	18	7	16	20.7	10
Guttenborg, Iowa	15	7	18	19.0	10
Dubuque, Iowa	17	7	20	21.9	12
Clinton, Iowa	16	9	22	19.8	14
Davenport, Iowa	15	11	22	17.45	15
Muscatine, Iowa	16	11	23	19.5	16
Keithsburg, Ill.	12	9	26	15.6	16
Burlington, Iowa	15	13	24	17.0	17
Keokuk, Iowa	16	15	18	16.4	16
Gregory Landing, Mo.	15	14	24	16.9	16
Quincy, Ill.	17	15	24	19.3	16
Hannibal, Mo.	16	12	26	19.7	17
Louisiana, Mo.	15	4 14	4 27	15.3 18.4	4 17
Clarksville, Mo.	25	4 14	5 27	25.2 28.4	4 17
Winfield, Mo.	26	16	27	28.6	18
Grafton, Ill.	18	16	27	19.85	19
Missouri Basin					
Little Blue: Lake City (nr), Mo.	18	1 13	2 14	20.85 19.8	1 14
Crooked: Richmond (nr), Mo.	20	13	13	20.2	13
Wakenda: Carrollton, Mo.	20	14	14	21.4	14
Grand: Chillicothe, Mo.	24	1 14	1 14	24.0 25.1	1 14
Sumner, Mo.	26	1 13	4 17	30.6 31.7	3 15
Brunswick, Mo.	12	15	17	12.95	15
Chariton: Novinger, Mo.	20	1	1	20.8	1
Prairie Hill, Mo.	15	(1 (13	3 14	19.4 17.8	1 14
Ohio Basin					
Muscatuck: Austin, Ind.	16	24	24	E19.0	24
White: Anderson, Ind.	10	6	6	10.3	6
Wabash: Wabash, Ind.	12	1	1	12.4	1
Lafayette, Ind.	11	Mar. 29	3	13.7	Mar. 30
Covington, Ind.	16	Mar. 1	3	17.4	1
Montezuma, Ind.	14	Mar. 14 17	4 17	17.75 14.2	Mar. 26 17
Terre Haute, Ind.	14	Mar. 23	1	15.8	Mar. 29
Ohio: Dam 50, Fords Ferry, Ky.	34	Mar. 10	1	48.9	Mar. 20
Arkansas Basin					
Deep Fork: Beggs, Okla.	18	20	20	18.1	20
Red Basin					
Washita: Durwood, Okla.	27	12	12	27.3	12
Sulphur: Hagansport, Tex.	38	(11 (14 (18 (21 (26	12 15 19 24 29	44.3 44.1 43.0 44.9 45.3	11 14 18 22 26
Naples, Tex.	22	17	1/	(24.8 (27.8	20 30
WEST GULF OF MEXICO DRAINAGE					
Mermentau: Mermentau, La.	5	14	24	8.8	18
Calcasieu: Hineston, La.	12	15	21	18.5	16
Oakdale, La.	12	17	19	15.2	17
Kinder, La.	16	17	21	18.0	20
Old Town Bay, La.	4	16	23	5.7	17
Sabine: Deweyville, Tex.	14	16	20	14.1	19
PACIFIC SLOPE DRAINAGE					
Sacramento: Colusa Weir, Calif.	62	25	26	62.3	25
Tisdale Weir, Calif.	45	18	1/	47.5	25

* Provisional
1/ Continued at end of month
E Estimated

RAWINSONDE DATA

Average monthly values

APRIL 1967

ALBANY, N. Y. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	86	3.4	-1.1	29	.9
1000	30	141			31	1.1
950	30	556	3.1	-3.6	30	2.9
900	30	995	1.6	-5.0	32	5.4
850	30	1,454	.1	-7.5	32	7.6
800	30	1,939	-1.4	-10.0	31	10.4
750	30	2,450	-3.5	-12.1	31	12.5
700	30	2,995	-6.1	-16.0	30	13.8
650	30	3,570	-8.1	-20.0	30	14.9
600	30	4,192	-11.5	-23.[illegible]	30	15.8
550	30	4,851	-15.2	-27.3	30	16.8
500	30	5,569	-19.9	-32.2	30	21.0
450	30	6,338	-25.2	-37.3	30	21.8
400	30	7,189	-31.4	-42.9	30	22.4
350	30	8,121	-38.1	-46.8	30	26.2
300	30	9,167	-44.8		30	30.4
250	30	10,370	-51.0		30	33.5
200	30	11,810	-53.4		30	29.8
175	30	12,671	-52.3		30	26.2
150	30	13,667	-52.3		30	24.1
125	30	14,844	-53.1		30	19.5
100	30	16,275	-55.4		30	15.5
80	30	17,691	-56.8		29	10.4
70	30	18,536	-56.4		30	8.6
60	30	19,517	-55.7		31	6.4
50	30	20,682	-54.6		33	3.3
40	29	22,114	-53.6		03	3.0
30	28	23,963	-53.2		06	3.3
25	28	25,137	-53.0		08	3.6
20	28	26,581	-51.4		07	3.0
15	27	28,462	-49.4		08	2.1
10	23	31,138	-45.7		32	1.4
7	14	33,545	-41.1			
5						

ALBUQUERQUE, N. MEX. — 836 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	1,619	7.8	-11.3	14	.6
1000	30	105				
950	30	539				
900	30	996				
850	30	1,477				
800	30	1,980	8.9	-10.0	24	3.9
750	30	2,508	5.0	-12.0	24	7.3
700	30	3,068	.6	-14.5	24	10.5
650	30	3,652	-3.6	-18.7	24	14.6
600	30	4,286	-7.4	-23.2	24	18.8
550	30	4,951	-11.8	-26.2	24	22.3
500	30	5,682	-16.5	-30.5	24	25.9
450	30	6,457	-21.7	-34.8	24	29.2
400	30	7,324	-27.3	-39.6	24	31.1
350	30	8,271	-34.4	-45.6	24	34.8
300	29	9,325	-42.6		24	38.0
250	29	10,533	-51.3		24	42.5
200	29	11,961	-56.7		24	42.4
175	29	12,808	-56.1		24	36.3
150	29	13,787	-57.4		24	30.6
125	29	14,930	-60.9		24	26.5
100	29	16,309	-63.1		24	20.6
80	28	17,678	-63.2		24	12.9
70	28	18,497	-63.2		24	7.5
60	28	19,449	-61.4		21	2.5
50	28	20,584	-59.5		14	2.0
40	28	21,986	-57.6		11	3.2
30	28	23,809	-55.7		09	4.1
25	28	24,974	-54.3		10	3.3
20	25	26,417	-52.2		08	1.6
15	25	28,287	-49.9		28	1.9
10	23	30,979	-43.5		27	6.3
7	8	33,414	-39.2			
5						

AMARILLO, TEXAS — 888 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	1,095	10.3	3.5	20	3.5
1000	30	94				
950	30	529				
900	30	991				
850	30	1,464	12.1	.9	23	9.1
800	30	1,972	11.7	-3.4	24	12.8
750	30	2,506	8.9	-8.5	24	13.6
700	30	3,076	5.0	-12.2	24	14.4
650	30	3,677	.7	-15.7	24	16.6
600	30	4,313	-4.2	-18.6	24	19.3
550	30	4,988	-8.9	-23.7	24	21.4
500	30	5,724	-13.9	-28.2	24	23.2
450	30	6,508	-19.5	-32.4	24	25.8
400	30	7,381	-25.7	-37.1	24	27.9
350	30	8,335	-32.7	-43.7	24	31.1
300	30	9,402	-41.2	-49.4	24	34.0
250	30	10,616	-50.2		25	38.6
200	30	12,044	-58.5		25	40.5
175	30	12,880	-59.4		25	36.4
150	30	13,844	-59.8		25	33.3
125	30	14,980	-61.6		25	29.2
100	30	16,355	-63.5		25	21.6
80	28	17,719	-65.1		25	11.9
70	28	18,534	-64.0		25	4.3
60	28	19,482	-61.8		19	2.0
50	28	20,615	-59.7		11	2.5
40	28	22,016	-57.7		09	3.2
30	27	23,836	-55.6		09	2.1
25	26	25,002	-54.1		10	1.9
20	26	26,439	-52.0		11	1.3
15	23	28,316	-48.8		24	2.3
10	21	31,003	-43.3		25	6.5
7	8	33,347	-40.8			
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ANCHORAGE, ALASKA — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	45	-.2	-6.5	16	.7
1000	30	156	.8	-6.8	08	.4
950	30	567	-1.0	-8.9	16	.5
900	30	997	-3.5	-10.9	18	1.3
850	30	1,446	-6.1	-13.7	23	2.4
800	30	1,918	-8.6	-16.6	25	2.9
750	30	2,416	-10.7	-19.5	26	4.6
700	30	2,945	-13.0	-20.8	25	5.9
650	30	3,505	-16.0	-22.9	26	7.0
600	30	4,106	-19.6	-26.9	26	9.0
550	30	4,745	-23.5	-30.9	26	10.1
500	30	5,438	-28.0	-35.0	26	11.4
450	30	6,183	-33.0	-39.1	27	13.3
400	30	7,007	-38.3	-41.4	27	15.7
350	30	7,914	-43.6	-45.4	27	17.3
300	30	8,937	-49.3		27	17.0
250	30	10,121	-52.6		27	17.0
200	30	11,560	-52.8		26	14.5
175	30	12,423	-51.5		26	12.4
150	30	13,426	-50.8		26	12.7
125	30	14,611	-51.6		27	11.5
100	30	16,055	-52.4		26	10.5
80	30	17,501	-51.2		26	8.9
70	30	18,369	-50.9		26	8.0
60	30	19,373	-50.7		26	7.6
50	30	20,560	-50.9		25	6.7
40	30	22,013	-50.7		25	5.5
30	30	23,884	-51.2		24	4.2
25	28	25,058	-51.6		23	3.9
20	26	26,506	-51.4		23	3.2
15	23	28,360	-50.8		19	3.3
10	15	31,062	-48.2		13	5.4
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* ANNETTE, ALASKA — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	37	3.2	-3.0	35	1.0
1000	30	131	4.6	-3.8	36	1.8
950	30	545	2.4	-6.3	05	2.0
900	30	982	-.4	-9.2	07	2.0
850	30	1,437	-3.3	-11.5	11	1.2
800	30	1,914	-6.5	-14.2	13	.7
750	30	2,416	-9.7	-17.5	03	.8
700	30	2,946	-12.4	-21.9	02	2.2
650	30	3,506	-15.5	-25.1	01	3.3
600	30	4,110	-19.3	-29.4	35	4.3
550	30	4,750	-23.3	-34.6	35	4.8
500	30	5,445	-28.2	-38.6	35	5.3
450	30	6,191	-33.8	-41.5	35	5.5
400	30	7,010	-39.1	-44.8	33	4.1
350	30	7,915	-44.3		34	4.4
300	30	8,936	-49.5		34	5.7
250	30	10,121	-52.1		34	5.2
200	30	11,569	-51.0		34	5.7
175	30	12,439	-50.5		33	5.6
150	30	13,445	-50.3		32	4.9
125	30	14,632	-51.4		32	3.9
100	30	16,080	-51.5		29	2.6
80	30	17,528	-51.7		28	1.7
70	30	18,393	-51.9		28	1.1
60	30	19,392	-51.9		29	.6
50	30	20,574	-51.9		08	.9
40	30	22,019	-52.1		09	1.6
30	30	23,881	-52.2		09	3.2
25	30	25,060	-52.4		09	5.0
20	30	26,502	-52.3		10	6.4
15	30	28,367	-51.4		09	8.1
10	27	31,018	-49.5		10	10.4
7	24	33,382	-45.9		10	12.8
5	13	35,658	-42.7			

ATHENS, GEORGIA — 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	246	12.5	9.2	36	.4
1000	30	169				
950	30	605	15.3	7.2	25	2.2
900	30	1,061	13.4	4.5	26	4.9
850	30	1,540	11.3	1.5	28	7.3
800	30	2,045	9.5	-4.6	28	8.4
750	30	2,581	7.0	-8.8	28	9.4
700	30	3,143	4.0	-11.8	28	10.5
650	30	3,738	.5	-15.6	28	11.4
600	30	4,380	-3.5	-18.7	28	14.4
550	30	5,055	-7.7	-22.0	28	15.8
500	30	5,798	-12.5	-25.9	29	18.2
450	30	6,585	-18.1	-30.8	29	20.1
400	30	7,465	-24.3	-36.8	29	20.9
350	30	8,425	-31.4	-43.8	29	23.4
300	30	9,498	-39.8	-50.8	29	25.4
250	30	10,719	-49.5		29	28.7
200	30	12,147	-59.0		29	28.1
175	30	12,981	-60.4		29	26.4
150	30	13,940	-60.6		29	26.1
125	30	15,071	-62.2		29	21.6
100	30	16,441	-64.4		30	15.9
80	30	17,803	-64.8		30	9.1
70	30	18,618	-64.5		32	6.0
60	30	19,563	-63.6		35	4.2
50	30	20,690	-60.4		04	3.6
40	30	22,091	-57.4		06	5.2
30	30	23,922	-54.4		07	4.2
25	28	25,097	-52.7		07	3.3
20	26	26,548	-50.0		08	1.1
15	24	28,436	-47.2		29	1.3
10	22	31,151	-41.3		27	10.9
7	14	33,612	-35.1			
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* BARROW, ALASKA — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	8	-16.2	-18.7	14	2.3
1000	30	119	-14.8	-17.9	15	2.6
950	30	515	-12.2	-16.3	19	3.8
900	30	924	-11.9	-16.8	21	4.1
850	30	1,361	-13.0	-18.0	22	4.6
800	30	1,822	-14.3	-20.8	22	4.9
750	30	2,310	-16.1	-24.2	23	5.3
700	30	2,828	-18.2	-26.1	23	6.5
650	30	3,377	-21.1	-28.5	23	7.3
600	30	3,966	-24.6	-31.3	23	7.6
550	30	4,593	-28.4	-34.8	23	8.0
500	30	5,274	-32.7	-39.5	23	8.4
450	30	6,004	-37.9	-42.4	23	8.8
400	30	6,813	-43.7	-46.3	23	9.5
350	30	7,699	-49.4		23	11.5
300	30	8,697	-54.7		24	15.4
250	30	9,856	-56.4		24	17.7
200	30	11,279	-53.9		24	18.9
175	30	12,139	-52.6		24	19.2
150	30	13,135	-52.2		24	21.0
125	30	14,316	-51.5		24	21.0
100	30	15,770	-50.1		24	22.3
80	30	17,228	-49.9		24	22.0
70	30	18,102	-49.1		24	21.1
60	30	19,115	-48.1		24	20.6
50	30	20,316	-48.3		23	19.7
40	30	21,787	-48.0		24	18.6
30	29	23,675	-48.2		24	16.8
25	28	24,895	-48.0		23	14.5
20	21	26,374	-46.9		22	12.4
15	17	28,349	-43.4		19	12.4
10	6	31,228	-37.7			
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BARTER IS., ALASKA — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	15	-17.9	-22.0	23	2.0
1000	30	136	-14.1	-17.0	25	1.8
950	30	531	-9.6	-14.2	26	3.4
900	30	947	-9.3	-15.0	26	5.7
850	30	1,388	-10.9	-17.0	26	7.1
800	30	1,853	-13.2	-18.4	26	7.1
750	30	2,341	-15.7	-21.1	26	6.9
700	30	2,861	-17.9	-24.6	27	7.3
650	30	3,411	-20.4	-27.0	27	8.1
600	30	4,003	-23.6	-30.9	27	8.6
550	30	4,632	-27.2	-35.2	27	9.5
500	30	5,317	-31.5	-39.4	27	10.4
450	30	6,053	-36.4	-42.9	28	12.1
400	30	6,865	-42.2	-40.8	28	13.7
350	30	7,757	-47.7		28	14.6
300	30	8,764	-52.5		27	17.5
250	30	9,935	-54.6		27	19.6
200	30	11,368	-53.0		27	19.2
175	30	12,233	-51.2		27	19.0
150	30	13,236	-50.9		27	18.1
125	30	14,424	-50.3		27	19.1
100	29	15,875	-49.5		27	18.2
80	29	17,337	-49.1		26	17.1
70	29	18,213	-48.9		27	17.1
60	29	19,226	-48.3		27	17.2
50	29	20,429	-47.9		27	16.9
40	29	21,900	-48.1		26	14.4
30	27	23,816	-47.9		26	13.6
25	27	25,019	-47.8		25	12.1
20	26	26,522	-46.9		24	10.8
15	24	28,407	-46.2		24	10.7
10	19	31,190	-43.2		23	8.1
7	13	33,709	-39.5		20	10.8
5	11	36,182	-35.5			

BETHEL, ALASKA — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	39	-1.2	-2.4	19	4.3
1000	30	133			21	5.1
950	30	537	-3.1	-4.5	21	8.7
900	30	967	-5.0	-7.1	21	9.9
850	30	1,416	-6.9	-9.2	22	10.9
800	30	1,887	-9.3	-12.8	22	11.0
750	30	2,385	-11.3	-17.2	22	10.4
700	30	2,912	-13.4	-19.6	23	11.1
650	30	3,467	-16.6	-22.7	24	11.6
600	30	4,071	-19.9	-25.9	24	13.3
550	30	4,709	-24.0	-30.6	24	14.2
500	30	5,401	-28.4	-36.2	24	16.2
450	30	6,144	-33.0	-40.8	24	18.0
400	30	6,968	-38.6	-44.4	25	21.0
350	30	7,875	-43.9		25	22.6
300	30	8,897	-49.6		25	22.1
250	30	10,080	-53.0		24	17.7
200	30	11,521	-51.5		24	15.9
175	29	12,385	-50.7		24	16.0
150	29	13,389	-50.8		24	15.5
125	29	14,576	-50.8		24	14.1
100	29	16,026	-51.7		24	12.6
80	29	17,473	-51.6		24	11.7
70	29	18,341	-50.5		23	11.0
60	29	19,345	-50.8		23	10.3
50	29	20,533	-50.5		24	8.1
40	29	21,986	-51.2		23	7.2
30	29	23,855	-51.4		22	6.2
25	27	25,051	-51.3		21	5.8
20	26	26,497	-51.8		21	5.2
15	24	28,376	-50.6		18	5.1
10	18	31,025	-48.9		17	6.6
7	10	33,349	-46.8			
5	5	35,633	-46.9			

BISMARCK, N. DAK. — 954 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	505	-.3	-4.3	04	1.7
1000	30	124				
950	30	536			05	1.6
900	30	971	.2	-4.5	08	1.1
850	30	1,429	.6	-6.0	34	1.3
800	30	1,915	-.8	-8.2	31	3.3
750	30	2,426	-3.3	-10.9	28	5.2
700	30	2,972	-6.0	-13.9	26	7.3
650	30	3,545	-9.2	-18.0	27	10.0
600	30	4,164	-12.8	-22.3	26	12.6
550	30	4,815	-17.2	-26.8	26	14.2
500	30	5,530	-22.3	-31.3	26	16.5
450	30	6,290	-27.9	-36.6	26	18.0
400	30	7,132	-34.4	-43.2	26	19.3
350	30	8,052	-41.2	-46.9	26	19.7
300	30	9,084	-47.9		25	23.8
250	30	10,273	-52.1		25	26.8
200	30	11,713	-52.3		25	25.4
175	29	12,577	-51.6		25	23.7
150	29	13,578	-51.1		26	19.8
125	29	14,761	-51.9		26	17.1
100	29	16,202	-53.5		26	13.2
80	29	17,631	-55.1		27	10.2
70	29	18,484	-54.9		27	6.6
60	29	19,469	-54.8		26	3.7
50	29	20,635	-54.3		27	2.3
40	29	22,068	-53.5		03	1.1
30	26	23,915	-53.0		07	3.1
25	25	25,087	-52.6		07	4.5
20	25	26,531	-51.9		09	7.1
15	23	28,408	-50.6		[illegible]	8.0
10	21	31,062	-47.8		[illegible]	4.9
7	14	33,455	-44.6			
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BOISE, IDAHO — 912 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	868	2.6	-.3	19	.4
1000	30	110				
950	30	528				
900	30	971	3.6	-1.5	23	.5
850	30	1,434	1.8	-3.9	29	1.1
800	30	1,921	-1.4	-6.7	26	1.4
750	30	2,427	-5.2	-9.9	25	2.3
700	30	2,970	-9.1	-14.3	25	3.5
650	30	3,532	-13.1	-18.2	23	4.6
600	30	4,145	-17.5	-23.1	23	6.5
550	30	4,789	-22.2	-28.[illegible]	22	8.0
500	30	5,484	-27.2	-34.4	22	9.1
450	30	6,229	-33.0	-40.0	22	10.8
400	30	7,053	-39.4	-44.5	22	12.7
350	30	7,954	-46.2		22	14.2
300	30	8,966	-51.4		22	14.4
250	30	10,148	-51.6		23	15.7
200	29	11,602	-49.5		23	16.0
175	28	12,478	-49.6		23	14.2
150	28	13,486	-50.3		23	12.8
125	28	14,673	-51.3		22	12.0
100	28	16,119	-52.3		22	9.9
80	27	17,560	-54.4		22	7.2
70	26	18,414	-55.4		22	5.8
60	26	19,394	-56.2		21	3.5
50	26	20,552	-56.2		17	2.4
40	25	21,972	-56.2		11	2.4
30	24	23,802	-56.2		11	3.4
25	24	24,962	-55.6		09	4.1
20	22	26,389	-54.6		09	5.4
15	13	28,226	-53.7		10	5.3
10	8	30,795	-51.0			
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* BOOTHVILLE, LA. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	1	20.5	19.1	14	1.2
1000	30	153	20.7	18.2	14	3.0
950	30	596	17.8	14.3	17	5.6
900	30	1,057	15.8	8.1	18	6.1
850	30	1,542	14.4	1.3	18	5.2
800	30	2,052	12.4	-4.0	19	4.2
750	30	2,590	10.1	-8.0	22	4.6
700	30	3,162	6.9	-11.2	24	5.2
650	30	3,764	3.2	-13.3	26	5.0
600	30	4,410	-1.2	-16.8	27	5.3
550	30	5,093	-6.1	-21.1	29	6.0
500	30	5,838	-11.2	-26.8	28	6.7
450	30	6,636	-16.6	-31.6	28	7.6
400	30	7,514	-23.1	-37.9	28	9.8
350	30	8,478	-30.3	-43.9	28	10.5
300	30	9,555	-38.8	-50.4	29	12.5
250	30	10,781	-48.4		29	14.9
200	29	12,218	-58.2		29	15.4
175	29	13,053	-60.5		29	17.0
150	29	14,009	-62.4		28	19.2
125	29	15,125	-66.0		28	16.2
100	29	16,465	-69.4		28	12.0
80	29	17,795	-69.3		29	6.1
70	29	18,591	-68.9		33	2.1
60	29	19,517	-66.5		05	1.8
50	28	20,631	-62.7		08	4.7
40	28	22,019	-58.5		07	4.8
30	28	23,847	-53.9		07	5.2
25	28	25,025	-51.2		08	3.2
20	28	26,484	-48.6		30	.8
15	28	28,391	-44.6		27	5.6
10	26	31,140	-37.7		26	13.5
7	21	33,637	-32.0		26	17.5
5	9	35,990	-28.1			

* BROWNSVILLE, TEXAS — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	7	23.1	21.1	14	4.5
1000	30	113	22.8	21.3	14	6.8
950	30	557	19.8	18.2	16	12.1
900	30	1,025	17.7	12.4	17	13.5
850	30	1,514	16.9	4.3	18	11.7
800	30	2,030	15.4	-3.6	17	8.6
750	30	2,580	13.4	-8.3	17	6.0
700	30	3,152	9.8	-11.4	18	3.6
650	30	3,760	5.6	-14.5	22	1.5
600	30	4,412	.8	-18.1	27	2.8
550	30	5,098	-4.2	-21.9	27	3.1
500	30	5,849	-9.3	-26.3	28	3.2
450	30	6,652	-15.0	-31.0	27	4.3
400	30	7,537	-21.6	-37.4	27	6.3
350	30	8,506	-29.2	-43.6	27	8.1
300	30	9,589	-37.8	-50.9	27	9.8
250	30	10,818	-47.8		28	11.8
200	30	12,255	-58.0		28	14.1
175	30	13,088	-61.3		27	15.9
150	30	14,038	-64.4		26	17.1
125	30	15,142	-68.5		26	15.6
100	30	16,468	-72.1		26	9.8
80	30	17,777	-72.8		24	4.4
70	29	18,561	-71.0		17	1.3
60	29	19,480	-68.1		11	3.6
50	29	20,587	-63.4		09	3.9
40	29	21,974	-58.4		08	4.5
30	29	23,803	-53.7		07	3.6
25	27	24,981	-51.0		06	1.9
20	27	26,441	-48.6		33	.6
15	25	28,347	-44.4		26	6.5
10	25	31,102	-37.6		27	9.9
7	21	33,585	-32.9		25	11.8
5	8	35,972	-28.4			

BUFFALO, N. Y. — 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	218	4.4	.2	24	1.7
1000	30	145				
950	30	564	4.4	-3.1	26	3.9
900	30	1,002	2.5	-5.6	28	5.9
850	30	1,463	1.0	-8.1	29	7.9
800	30	1,949	-.6	-11.6	29	10.5
750	30	2,463	-2.9	-13.7	29	12.7
700	30	3,008	-5.0	-17.1	29	14.4
650	30	3,587	-7.3	-20.0	29	16.5
600	30	4,208	-10.9	-22.4	29	18.0
550	30	4,871	-14.9	-27.0	29	19.8
500	30	5,587	-19.7	-31.5	29	21.5
450	30	6,360	-25.2	-36.4	29	21.1
400	30	7,207	-31.3	-42.4	29	21.9
350	30	8,139	-38.2	-47.0	29	21.8
300	30	9,184	-45.1		29	27.0
250	30	10,386	-51.2		29	29.5
200	27	11,826	-53.9		29	27.1
175	26	12,684	-53.4		29	23.9
150	26	13,677	-53.4		29	22.0
125	26	14,849	-54.1		29	18.8
100	25	16,271	-56.0		28	13.8
80	25	17,686	-57.2		28	9.6
70	25	18,529	-57.1		29	7.7
60	24	19,510	-56.3		31	4.3
50	24	20,671	-55.0		34	1.6
40	24	22,100	-53.9		02	1.5
30	21	23,940	-53.5		08	3.9
25	18	25,113	-52.7		08	4.8
20	18	26,558	-51.4		09	4.4
15	17	28,444	-48.7		07	7.7
10	11	31,156	-45.3			
7	7	33,553	-40.6			
5						

* + CANTON IS. PACIFIC AREA — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Wind Direction	Wind Speed
SURFACE	30	4	29.9	23.2	06	5.6
1000	30	85	28.0	21.2	07	6.0
950	30	531	22.8	16.8	07	7.0
900	30	1,007	20.4	12.1	08	7.5
850	30	1,500	18.7	7.3	08	7.2
800	30	2,018	16.7	3.3	08	6.3
750	30	2,564	13.9	-.6	08	4.9
700	30	3,144	10.5	-3.2	08	3.7
650	30	3,753	6.9	-6.2	08	2.7
600	30	4,411	3.1	-10.3	10	1.4
550	30	5,109	-.5	-16.2	36	.6
500	30	5,867	-5.0	-20.9	12	.1
450	30	6,688	-9.9	-25.9	13	1.9
400	30	7,588	-15.4	-31.6	16	1.7
350	30	8,582	-22.4	-37.6	15	3.6
300	30	9,696	-30.9	-45.2	14	6.4
250	30	10,961	-41.2		16	9.5
200	30	12,438	-53.3		18	7.9
175	30	13,284	-60.2		22	7.2
150	30	14,230	-67.3		25	8.7
125	30	15,309	-74.8		25	9.1
100	30	16,587	-79.5		25	8.5
80	30	17,865	-74.0		26	7.5
70	29	18,653	-69.2		27	9.7
60	29	19,583	-64.3		27	12.4
50	29	20,709	-60.7		27	13.7
40	29	22,107	-57.7		27	14.0
30	29	23,937	-54.2		27	11.5
25	28	25,111	-51.7		28	5.9
20	27	26,571	-48.1		0[illegible]	5.5
15	26	28,480	-44.0		09	22.6
10	24	31,251	-36.6		09	30.7
7	17	33,767	-31.0		09	33.1
5	5	36,168	-27.4			

NOTE: Beginning with the January 1967 publication the Dew Point temperature replaces Relative Humidity in the above table; wind direction is in tens of degrees and wind speed in meters per second.

† Dew Point temperatures are b[illegible]d on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Also, see reference notes at end of table.

RAWINSONDE DATA

Average monthly values

APRIL 1967

*** CAPE HATTERAS, N. C. — 1018 MB**

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	4	12.2	8.7	32	1.7
1000	30	155	13.4	7.2	30	3.5
950	30	584	11.9	2.1	30	7.4
900	30	1,037	9.8	-2.1	31	8.9
850	30	1,511	8.0	-4.6	31	9.8
800	30	2,010	6.5	-8.0	30	10.8
750	30	2,535	3.8	-11.3	30	11.6
700	30	3,095	1.0	-14.2	30	13.4
650	30	3,683	-2.5	-18.1	30	15.3
600	30	4,319	-6.1	-22.6	30	17.5
550	30	4,985	-10.3	-24.3	30	18.8
500	30	5,723	-14.8	-29.1	30	21.7
450	30	6,506	-19.9	-33.5	30	24.3
400	30	7,378	-25.8	-39.3	30	27.4
350	30	8,332	-32.7	-45.6	30	29.3
300	30	9,400	-40.9	-52.4	30	32.9
250	30	10,616	-50.3		30	33.9
200	30	12,045	-57.7		31	32.8
175	30	12,886	-58.6		30	27.9
150	30	13,855	-58.2		30	25.8
125	30	14,998	-60.2		30	21.6
100	30	16,384	-61.8		30	15.4
80	30	17,760	-62.5		31	10.9
70	30	18,585	-61.6		33	8.5
60	30	19,542	-60.1		34	6.1
50	30	20,684	-58.4		01	5.2
40	30	22,094	-56.0		04	4.1
30	30	23,933	-53.1		07	4.7
25	30	25,111	-51.7		08	2.7
20	30	26,564	-49.8		10	1.1
15	29	28,459	-46.4		22	2.3
10	25	31,186	-40.3		27	11.5
7	16	33,671	-33.6		26	19.0
5	8	36,038	-29.3			

*** CARIBOU, MAINE — 993 MB**

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	191	-1.3	-6.2	34	1.2
1000	30			-8.0		
950	30	536	-2.9	-9.6	33	1.8
900	30	965	-4.2	-11.9	32	3.2
850	30	1,414	-5.7	-13.2	31	4.1
800	30	1,889	-6.9	-15.1	31	5.7
750	30	2,388	-8.9	-17.7	31	7.5
700	30	2,923	-11.0	-21.7	30	9.6
650	30	3,487	-13.2	-24.6	30	11.1
600	30	4,097	-16.3	-27.4	30	12.8
550	30	4,743	-19.9	-30.4	30	13.9
500	30	5,448	-24.0	-34.6	30	14.7
450	30	6,201	-29.1	-39.0	30	16.7
400	30	7,042	-34.6	-44.0	30	18.1
350	30	7,964	-40.6	-46.8	29	20.3
300	30	8,999	-47.1		29	22.0
250	30	10,193	-51.2		29	20.1
200	30	11,646	-49.9		29	19.5
175	30	12,520	-49.3		29	17.3
150	30	13,530	-49.6		29	16.0
125	30	14,721	-50.7		29	13.6
100	30	16,168	-52.5		28	11.7
80	30	17,606	-53.6		29	8.8
70	30	18,464	-53.1		29	8.1
60	30	19,459	-52.8		29	5.8
50	30	20,636	-52.5		29	3.5
40	30	22,078	-52.6		29	1.6
30	29	23,934	-52.8		05	.9
25	29	25,110	-52.6		07	2.2
20	28	26,549	-52.0		07	3.9
15	26	28,420	-50.2		08	3.9
10	26	31,085	-46.3		07	5.3
7	18	33,470	-40.8		35	2.5
5	6	35,782	-34.2			

CHARLESTON, S. C. — 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	13	14.2	11.4	29	.8
1000	30	167	16.3	11.5	26	.9
950	30	602	15.5	6.3	30	3.1
900	30	1,061	13.4	2.8	30	3.8
850	30	1,541	11.3	-1.3	29	5.5
800	30	2,045	9.0	-4.7	29	6.6
750	30	2,576	6.7	-8.5	29	7.5
700	30	3,142	3.9	-12.0	29	10.3
650	30	3,739	.6	-16.3	29	12.2
600	30	4,379	-3.4	-18.4	29	13.6
550	30	5,055	-7.8	-21.8	30	16.1
500	30	5,797	-12.5	-26.4	29	17.1
450	30	6,590	-18.0	-31.9	30	18.0
400	30	7,465	-24.4	-37.2	29	18.3
350	30	8,424	-31.7	-43.5	29	20.4
300	30	9,495	-40.4	-49.8	30	21.2
250	30	10,712	-50.0		30	24.4
200	30	12,135	-59.6		30	26.9
175	30	12,966	-61.1		30	27.6
150	30	13,922	-61.3		30	23.0
125	30	15,048	-63.2		30	20.3
100	30	16,411	-65.7		30	15.2
80	30	17,762	-66.2		31	11.3
70	30	18,573	-65.4		32	8.7
60	30	19,512	-64.0		34	6.1
50	30	20,635	-61.2		02	5.0
40	29	22,030	-57.8		05	4.7
30	29	23,859	-54.2		07	4.1
25	28	25,035	-52.7		07	3.1
20	28	26,484	-49.8		13	.6
15	26	28,381	-46.4		28	2.7
10	26	31,110	-39.9		27	9.8
7	9	33,574	-34.1			

CHIHUAHUA, MEXICO — 856 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,428	14.8	-2.3	23	2.4
1000	30	85				
950	30	525				
900	30	997				
850	30	1,483	15.4	-2.4	23	2.5
800	30	1,997	14.6	-3.2	24	5.3
750	30	2,532	11.3	-5.5	24	7.7
700	30	3,110	8.0	-8.1	24	10.9
650	30	3,711	3.9	-11.4	24	11.8
600	30	4,362	-.6	-15.0	24	12.7
550	30	5,042	-5.5	-19.0	24	15.1
500	30	5,791	-10.8	-23.1	24	17.2
450	30	6,581	-16.4	-27.8	24	19.1
400	30	7,468	-22.9	-33.4	24	21.5
350	30	8,432	-30.3	-39.5	24	22.8
300	30	9,507	-38.9	-46.6	24	24.6
250	30	10,731	-48.5		25	23.7
200	29	12,165	-58.4		25	26.1
175	28	12,998	-61.7		25	26.3
150	28	13,948	-63.5		25	25.6
125	27	15,063	-65.1		24	23.5
100	27	16,416	-67.3		23	15.1
80	26	17,753	-69.7		23	10.5
70	26	18,549	-68.8		22	6.3
60	26	19,479	-66.0		20	3.9
50	24	20,594	-61.8		16	1.5
40	22	21,983	-58.2		09	3.0
30	22	23,808	-54.8		10	2.1
25	21	24,978	-52.9		13	.7
20	20	26,421	-50.9		02	.4
15	16	28,300	-48.0		24	2.9
10	11	30,991	-44.3			

*** COLD BAY, ALASKA — 1018 MB**

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	30	2.1	-.4	19	3.7
1000	30	169	1.9	-1.1	21	4.8
950	30	578	-.2	-2.8	23	6.7
900	30	1,013	-2.2	-6.0	23	7.3
850	30	1,466	-4.0	-9.9	24	8.8
800	30	1,943	-5.7	-14.0	24	9.7
750	30	2,443	-8.1	-17.6	24	11.4
700	30	2,981	-10.7	-20.7	24	12.4
650	30	3,544	-13.5	-23.4	24	14.4
600	30	4,153	-16.9	-26.5	24	15.1
550	30	4,796	-20.9	-29.2	24	15.2
500	30	5,500	-25.0	-33.9	24	16.6
450	30	6,253	-30.0	-38.6	24	16.8
400	30	7,088	-35.8	-42.8	24	17.1
350	30	8,004	-41.8	-43.3	24	20.0
300	30	9,036	-47.6		24	22.2
250	30	10,226	-52.8		24	24.5
200	30	11,658	-54.3		23	23.4
175	30	12,518	-52.5		23	18.5
150	29	13,511	-52.2		23	15.1
125	29	14,688	-53.1		23	14.5
100	29	16,124	-53.5		23	10.3
80	29	17,559	-53.5		23	9.5
70	29	18,417	-53.2		23	7.7
60	29	19,411	-52.6		23	6.9
50	29	20,588	-52.5		22	5.6
40	28	22,032	-52.7		22	4.6
30	25	23,893	-52.4		17	3.8
25	25	25,071	-52.5		15	3.4
20	24	26,512	-52.5		12	4.6
15	19	28,383	-51.2		11	5.5
10	15	31,039	-47.8		11	8.9
7	11	33,424	-44.1			
5	8	35,698	-40.1			

COLUMBIA, MO. — 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	238	11.0	6.2	15	2.1
1000	30	130				
950	30	559	10.5	4.2	19	5.6
900	30	1,009	10.5	1.8	23	9.0
850	30	1,485	9.6	-1.2	25	11.1
800	30	1,987	7.8	-3.2	26	11.4
750	30	2,513	4.8	-6.1	26	12.3
700	30	3,077	1.6	-10.1	26	13.4
650	30	3,668	-2.1	-14.3	26	15.5
600	30	4,302	-6.5	-17.8	26	17.5
550	30	4,973	-11.1	-22.4	26	20.7
500	30	5,703	-15.6	-27.5	26	22.8
450	30	6,485	-20.8	-32.7	26	25.7
400	30	7,352	-26.7	-38.3	26	29.8
350	30	8,302	-33.8	-44.1	26	33.5
300	30	9,365	-41.8	-48.9	26	35.9
250	30	10,577	-50.7		26	38.7
200	30	12,003	-58.4		27	42.0
175	30	12,844	-57.8		27	36.8
150	30	13,818	-57.4		27	31.6
125	30	14,968	-58.9		27	24.3
100	30	16,361	-60.9		27	16.5
80	30	17,747	-61.5		27	10.1
70	30	18,574	-61.4		26	6.5
60	30	19,532	-60.0		26	3.2
50	29	20,672	-58.6		34	.3
40	29	22,079	-56.9		06	2.5
30	28	23,911	-55.1		08	4.2
25	24	25,074	-53.9		07	3.7
20	21	26,504	-52.4		08	4.4
15	19	28,371	-49.8		08	3.2
10	15	31,056	-45.5			
7						
5						

DAYTON, OHIO — 983 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	297	7.5	4.4	25	.7
1000	30	154				
950	30	576	8.2	1.8	23	3.5
900	30	1,024	6.9	-1.6	26	7.0
850	30	1,494	5.8	-4.3	28	9.8
800	30	1,989	4.3	-7.0	28	11.1
750	30	2,508	1.9	-9.8	28	12.5
700	30	3,067	-1.2	-14.6	28	14.3
650	30	3,648	-4.5	-17.4	28	16.4
600	30	4,281	-8.2	-20.8	28	18.2
550	30	4,946	-12.4	-22.4	28	19.9
500	30	5,674	-17.2	-28.2	28	21.6
450	30	6,449	-22.4	-34.3	28	25.6
400	30	7,312	-28.3	-39.3	28	28.6
350	30	8,256	-35.2	-45.3	28	31.1
300	30	9,313	-43.0		28	34.7
250	30	10,518	-51.6		28	36.2
200	30	11,943	-57.5		29	35.1
175	30	12,786	-56.9		29	32.6
150	30	13,763	-56.7		28	29.7
125	30	14,915	-58.4		29	23.4
100	30	16,312	-60.0		29	17.2
80	30	17,703	-60.6		29	10.9
70	30	18,533	-60.6		30	7.7
60	30	19,493	-59.8		32	4.8
50	29	20,639	-58.3		35	3.4
40	29	22,049	-56.3		05	2.6
30	29	23,886	-54.5		06	3.2
25	27	25,059	-53.6		05	3.6
20	24	26,508	-52.2		07	3.1
15	23	28,379	-49.0		08	.7
10	17	31,073	-44.5		27	2.8
7	8	33,514	-40.5			

DENVER, COLO. — 833 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,611	3.5	-2.8	24	.9
1000	30	92				
950	30	522				
900	30	972				
850	30	1,439				
800	30	1,935	5.2	-5.8	24	3.2
750	30	2,461	3.4	-9.9	24	5.1
700	30	3,017	-.1	-13.7	25	8.1
650	30	3,603	-4.4	-17.6	26	10.1
600	30	4,231	-9.2	-21.7	26	13.2
550	30	4,892	-13.6	-26.4	25	16.4
500	30	5,616	-18.5	-32.1	24	17.9
450	30	6,387	-24.0	-37.6	24	20.6
400	30	7,242	-30.5	-43.1	24	23.8
350	30	8,178	-37.3	-48.6	24	28.7
300	30	9,228	-44.3		24	32.3
250	30	10,429	-51.6		24	35.1
200	30	11,861	-55.3		24	35.5
175	30	12,713	-55.6		24	31.8
150	30	13,696	-55.2		24	30.9
125	30	14,859	-55.4		25	25.2
100	30	16,274	-58.3		24	16.3
80	30	17,673	-59.8		25	7.9
70	30	18,506	-60.0		24	5.1
60	29	19,473	-59.1		20	2.4
50	29	20,621	-57.5		17	1.5
40	29	22,036	-55.9		12	1.7
30	28	23,871	-55.1		09	4.4
25	27	25,038	-53.9		10	4.2
20	27	26,474	-52.7		10	4.5
15	26	28,338	-50.3		10	3.3
10	21	31,010	-45.9		10	3.1
7	8	33,383	-41.2			

DODGE CITY, KANS. — 921 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	791	9.0	3.4	17	2.0
1000	30	96				
950	30	527				
900	30	977	9.8	3.3	17	4.1
850	30	1,454	10.8	.0	22	7.8
800	30	1,959	9.6	-5.7	24	11.2
750	30	2,491	6.8	-10.5	25	13.1
700	30	3,055	3.7	-14.9	25	15.3
650	30	3,649	-.6	-18.0	24	16.9
600	30	4,287	-5.3	-21.8	24	18.6
550	30	4,960	-10.1	-25.7	24	19.7
500	30	5,693	-15.0	-30.5	25	22.7
450	30	6,476	-20.7	-35.8	25	26.0
400	30	7,342	-27.3	-40.5	25	28.5
350	30	8,290	-34.4	-45.9	25	33.1
300	30	9,351	-42.5		25	38.1
250	30	10,558	-51.5		25	42.1
200	30	11,981	-57.9		25	42.1
175	30	12,822	-58.4		25	37.7
150	30	13,794	-57.7		25	34.4
125	30	14,941	-59.2		25	28.3
100	30	16,331	-61.9		25	20.8
80	30	17,707	-62.4		25	12.7
70	30	18,531	-62.3		24	8.6
60	30	19,486	-60.4		22	4.7
50	30	20,626	-58.7		16	1.4
40	30	22,032	-56.8		11	2.4
30	30	23,862	-54.9		09	3.1
25	30	25,029	-54.2		10	3.4
20	28	26,463	-52.5		10	2.3
15	28	28,331	-50.0		20	.4
10	27	31,007	-44.8		26	6.0
7	21	33,412	-41.3		26	8.6
5	11	35,710	-37.5			

EL PASO, TEXAS — 880 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,193	12.8	-5.6	28	1.6
1000	30	97				
950	30	536				
900	30	1,001				
850	30	1,483	15.5	-3.7	27	3.6
800	30	1,994	11.9	-6.4	25	7.6
750	30	2,527	8.3	-8.9	24	11.8
700	30	3,096	4.6	-11.4	24	15.3
650	30	3,691	.8	-14.7	24	17.3
600	30	4,335	-3.4	-18.4	24	18.3
550	30	5,011	-7.9	-22.5	24	21.2
500	30	5,751	-13.2	-25.9	24	23.7
450	30	6,537	-18.7	-30.7	24	25.8
400	30	7,415	-24.9	-36.1	24	27.9
350	30	8,372	-32.0	-42.2	24	29.9
300	30	9,443	-40.2	-49.0	24	33.1
250	30	10,662	-49.6		24	35.6
200	30	12,091	-58.5		25	37.5
175	30	12,926	-60.4		25	35.6
150	30	13,886	-60.7		24	31.3
125	30	15,013	-63.3		24	28.8
100	30	16,378	-65.4		24	20.4
80	30	17,728	-67.7		24	13.1
70	30	18,532	-66.1		23	8.1
60	30	19,473	-63.8		21	2.6
50	30	20,598	-61.0		11	2.8
40	30	21,994	-57.9		10	2.6
30	30	23,818	-55.2		09	2.3
25	30	24,984	-53.7		09	1.8
20	29	26,425	-51.6		13	.6
15	27	28,307	-47.7		26	6.2
10	25	31,020	-41.5		27	12.3
7	9	33,429	-36.3			

ELY, NEV. — 802 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	26	1,908	-3.1	-6.5	19	3.1
1000	26	123				
950	26	541				
900	26	982				
850	26	1,444				
800	26	1,927			18	3.8
750	26	2,440	-3.5	-8.7	18	5.4
700	26	2,983	-7.6	-12.3	21	6.1
650	26	3,554	-11.6	-16.9	22	8.2
600	26	4,165	-15.6	-24.4	22	9.9
550	26	4,813	-20.1	-28.7	22	11.6
500	26	5,517	-25.2	-33.7	22	13.3
450	26	6,270	-31.1	-38.4	22	15.7
400	26	7,100	-37.0	-43.8	22	19.4
350	26	8,012	-42.4	-45.0	23	23.7
300	26	9,043	-47.2		23	29.2
250	26	10,239	-50.9		24	31.3
200	26	11,686	-51.6		24	26.2
175	26	12,552	-51.8		24	23.9
150	25	13,548	-51.9		24	22.6
125	25	14,726	-53.5		23	18.0
100	25	16,155	-55.4		22	14.0
80	23	17,583	-56.5		22	8.4
70	23	18,427	-57.6		21	5.5
60	22	19,391	-58.3		19	3.2
50	20	20,533	-57.5		15	1.3
40	19	21,945	-56.8		10	2.7
30	18	23,770	-56.0		10	4.7
25	17	24,929	-55.2		10	4.8
20	16	26,359	-53.5		09	4.7
15	15	28,221	-51.0		06	2.7
10	13	30,883	-45.8		11	1.3
7	6	33,341	-38.4			

EMPALME, MEXICO — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	12	15.8	2.7	31	1.3
1000	30	121	18.8	2.5	33	2.2
950	30	558	19.3	-.4	33	4.0
900	30	1,025	17.3	-3.0	30	2.8
850	30	1,510	15.0	-5.2	24	4.6
800	30	2,021	12.7	-8.6	23	7.0
750	30	2,560	9.7	-10.3	24	8.5
700	30	3,129	6.2	-12.7	24	11.9
650	30	3,729	2.5	-15.1	23	13.9
600	30	4,375	-1.7	-17.8	24	15.9
550	30	5,055	-6.2	-21.4	24	17.6
500	30	5,801	-11.4	-24.3	24	19.4
450	30	6,596	-17.1	-28.8	24	22.2
400	30	7,473	-23.7	-33.5	24	23.2
350	30	8,435	-30.9	-41.3	24	27.2
300	29	9,509	-39.4	-47.1	24	32.7
250	28	10,732	-49.1		25	34.4
200	28	12,160	-59.0		25	35.5
175	28	12,991	-61.6		25	31.7
150	28	13,943	-62.6		25	30.5
125	28	15,061	-65.0		24	25.0
100	27	16,411	-67.4		24	19.3
80	27	17,751	-68.5		23	12.7
70	27	18,550	-68.1		23	7.4
60	26	19,484	-65.5		23	3.8
50	25	20,605	-61.5		14	1.5
40	24	21,998	-58.2		12	1.7
30	23	23,826	-54.6		09	2.8
25	22	24,997	-53.2		11	2.4
20	22	26,444	-50.2		26	2.3
15	22	28,335	-47.1		26	6.5
10	17	31,047	-41.9		26	17.6
7	9	33,490	-37.3			

*** FAIRBANKS, ALASKA — 1001 MB**

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	135	-2.0	-5.2	26	.8
1000	30	139			25	.6
950	30	550	-2.2	-8.0	24	2.5
900	30	975	-4.8	-10.5	25	5.2
850	30	1,422	-7.6	-13.2	25	6.8
800	30	1,892	-10.3	-15.4	25	7.1
750	30	2,387	-12.7	-18.2	24	7.3
700	30	2,911	-15.5	-21.5	25	7.7
650	30	3,466	-18.5	-25.1	25	8.5
600	30	4,061	-21.9	-28.8	25	9.7
550	30	4,693	-26.1	-32.3	26	10.1
500	30	5,381	-30.2	-37.0	26	10.4
450	30	6,120	-35.3	-38.5	26	11.4
400	30	6,935	-40.9	-42.1	27	11.7
350	30	7,834	-45.8		27	13.6
300	30	8,850	-50.2		27	15.3
250	30	10,032	-52.9		26	16.1
200	30	11,470	-52.5		27	15.2
175	30	12,336	-50.9		27	14.6
150	30	13,341	-50.5		26	15.2
125	30	14,529	-51.1		27	13.4
100	30	15,979	-50.9		27	12.6
80	30	17,432	-50.7		26	11.5
70	29	18,306	-50.3		26	11.7
60	29	19,313	-50.0		26	10.8
50	29	20,505	-49.8		26	10.6
40	29	21,964	-50.0		26	9.4
30	29	23,843	-50.3		26	8.7
25	27	25,020	-50.2		25	6.0
20	24	26,504	-49.4		22	4.8
15	21	28,411	-48.0		19	3.3
10	11	31,149	-45.0			

FLINT, MICH. — 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	234	5.1	.5	23	.8
1000	30	143				
950	30	561	5.0	-1.6	25	2.9
900	30	1,003	3.8	-3.5	28	5.8
850	30	1,467	2.2	-6.1	28	8.1
800	30	1,955	.4	-7.8	28	9.6
750	30	2,472	-1.5	-11.0	28	11.8
700	30	3,019	-3.8	-14.9	28	13.9
650	30	3,595	-6.7	-18.8	28	15.1
600	30	4,223	-10.4	-22.2	28	17.2
550	30	4,881	-14.4	-26.7	28	19.9
500	30	5,604	-19.2	-31.9	28	22.3
450	30	6,370	-24.7	-37.2	28	24.1
400	30	7,226	-30.6	-41.3	28	28.0
350	29	8,161	-37.1	-45.7	28	32.7
300	29	9,210	-44.0		28	35.7
250	29	10,415	-50.6		28	38.8
200	29	11,853	-54.7		28	37.5
175	29	12,706	-54.4		28	32.5
150	29	13,695	-53.7		28	26.6
125	29	14,864	-54.6		28	23.0
100	29	16,286	-56.5		29	17.0
80	29	17,699	-57.2		29	12.2
70	29	18,542	-57.3		30	9.6
60	28	19,515	-57.0		30	7.4
50	28	20,672	-55.4		33	3.7
40	28	22,097	-54.7		01	1.7
30	28	23,943	-53.6		05	3.1
25	28	25,116	-53.0		07	4.0
20	28	26,558	-51.9		07	3.4
15	27	28,428	-49.3		07	3.3
10	22	31,115	-44.7		30	1.2
7	11	33,518	-41.2			

FORT WORTH, TEXAS — 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	180	17.9	14.6	17	2.6
1000	30	124				
950	30	566	16.2	13.5	19	8.5
900	30	1,024	16.0	8.6	20	10.8
850	30	1,509	14.7	4.6	22	10.6
800	30	2,021	12.8	.0	22	10.0
750	30	2,561	10.3	-6.6	23	9.2
700	30	3,132	7.0	-10.0	24	9.7
650	30	3,733	2.5	-12.2	25	11.0
600	30	4,379	-2.2	-16.1	25	12.8
550	30	5,061	-7.1	-19.5	25	14.6
500	30	5,801	-12.3	-23.8	25	16.7
450	30	6,596	-17.9	-29.1	25	19.0
400	30	7,470	-24.1	-35.1	25	20.3
350	30	8,431	-31.0	-42.5	26	23.2
300	30	9,506	-39.4	-49.3	26	25.3
250	30	10,727	-49.6		26	28.6
200	30	12,152	-59.9		26	30.5
175	30	12,981	-62.0		26	29.6
150	30	13,935	-62.3		26	27.0
125	30	15,056	-64.1		26	23.1
100	30	16,414	-66.2		26	17.0
80	30	17,762	-67.5		26	10.8
70	30	18,568	-66.3		25	4.6
60	30	19,505	-64.3		20	1.9
50	29	20,626	-60.8		12	2.6
40	29	22,024	-57.6		08	3.5
30	26	23,852	-54.4		09	3.6
25	25	25,024	-53.1		09	1.6
20	24	26,468	-51.0		27	1.3
15	21	28,357	-47.0		27	7.1
10	15	31,073	-41.4		27	12.6
7	5	33,548	-37.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT. 932 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	696	-1.8	-5.0	06	3.2
1000	30	132				
950	30	545				
900	30	976	.1	-5.9	09	2.8
850	30	1,433	-.8	-8.0	02	.6
800	30	1,916	-2.5	-10.8	32	1.9
750	30	2,425	-5.1	-13.9	30	2.1
700	30	2,965	-8.4	-17.2	29	4.2
650	30	3,533	-11.7	-20.4	28	6.7
600	30	4,145	-15.5	-24.6	27	7.6
550	30	4,794	-19.7	-28.8	26	8.4
500	30	5,497	-24.5	-34.2	25	9.4
450	30	6,250	-30.2	-39.3	25	11.8
400	30	7,083	-36.6	-43.9	25	13.7
350	30	7,994	-43.4		24	14.5
300	30	9,015	-50.1		24	15.0
250	30	10,193	-53.6		24	17.4
200	30	11,632	-51.7		24	17.0
175	30	12,501	-50.6		25	16.3
150	30	13,506	-50.4		25	14.0
125	30	14,694	-51.0		25	12.2
100	30	16,141	-52.6		25	10.3
80	30	17,575	-54.2		26	7.3
70	30	18,429	-54.7		26	6.5
60	29	19,413	-54.4		27	4.1
50	29	20,581	-53.9		26	2.2
40	29	22,014	-53.5		06	1.0
30	29	23,865	-52.9		08	3.7
25	29	25,040	-52.7		08	5.1
20	28	26,489	-51.7		09	6.7
15	27	28,367	-50.3		09	9.3
10	24	31,022	-47.9		09	8.8
7	20	33,396	-44.8		11	10.2
5	15	35,699	-40.4			

* GRAND JUNCTION, COLO. 848 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,474	6.1	-8.4	13	2.1
1000	30	96				
950	30	523				
900	30	972				
850	30	1,450			13	2.9
800	30	1,948	5.8	-9.1	18	4.7
750	30	2,469	2.0	-11.2	21	6.8
700	30	3,025	-2.5	-13.5	23	9.8
650	30	3,604	-7.1	-16.7	22	11.7
600	30	4,227	-11.8	-20.6	23	14.1
550	30	4,881	-16.5	-25.8	23	16.9
500	30	5,597	-21.5	-30.5	23	20.0
450	30	6,361	-26.9	-36.4	23	23.7
400	30	7,206	-32.5	-42.0	23	28.3
350	30	8,134	-39.3	-47.0	24	32.6
300	30	9,175	-45.7		24	36.7
250	30	10,373	-51.5		24	38.5
200	30	11,813	-53.2		24	34.5
175	30	12,673	-52.8		24	29.3
150	30	13,667	-53.5		24	25.8
125	30	14,835	-55.3		23	20.7
100	30	16,250	-58.2		23	15.6
80	30	17,646	-59.4		23	10.7
70	30	18,481	-60.0		22	4.7
60	30	19,444	-59.[illegible]		21	1.7
50	29	20,593	-57.7		14	1.9
40	29	22,004	-56.6		11	2.4
30	28	23,833	-55.7		09	4.3
25	26	24,995	-54.9		09	4.3
20	25	26,422	-53.7		09	3.9
15	23	28,290	-50.6		09	2.8
10	20	30,968	-44.9		26	2.4
7	13	33,358	-37.7			
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* GREAT FALLS, MONT. 884 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,123	-1.5	-5.3	27	1.5
1000	30	132				
950	30	552				
900	30	987				
850	30	1,439	-1.9	-7.8	27	3.4
800	30	1,920	-3.7	-9.4	26	3.3
750	30	2,434	-6.5	-11.3	26	3.8
700	30	2,965	-9.1	-14.7	25	4.1
650	30	3,538	-12.4	-18.8	24	4.3
600	30	4,142	-16.0	-24.2	24	6.0
550	30	4,794	-20.3	-28.8	24	7.3
500	30	5,491	-25.3	-32.8	24	8.3
450	30	6,247	-30.8	-38.8	23	9.8
400	30	7,074	-37.3	-43.6	23	10.4
350	30	7,983	-44.[illegible]		22	9.9
300	30	9,000	-50.9		23	10.8
250	30	10,178	-53.7		22	12.6
200	29	11,622	-50.2		23	12.5
175	29	12,496	-49.6		23	12.6
150	29	13,505	-49.4		23	11.5
125	29	14,699	-50.3		23	10.3
100	29	16,152	-51.2		23	8.0
80	29	17,595	-53.5		23	6.4
70	27	18,460	-53.9		23	4.8
60	27	19,449	-53.9		23	3.1
50	27	20,621	-53.6		18	1.3
40	26	22,061	-53.3		11	2.6
30	26	23,916	-52.5		10	5.6
25	26	25,096	-52.0		09	7.8
20	24	26,536	-51.5		09	8.8
15	24	28,412	-49.6		09	10.0
10	19	31,065	-47.1		08	8.2
7	16	33,450	-42.2		08	4.9
5	8	35,658	-37.7			

GREEN BAY, WIS. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	210	3.3	-.3	18	.5
1000	30	132				
950	30	550	3.3	-2.2	21	2.2
900	30	986	2.5	-4.8	25	3.8
850	30	1,448	1.2	-6.7	27	5.0
800	30	1,934	-.3	-9.7	28	7.6
750	30	2,446	-2.5	-11.4	28	10.5
700	30	2,994	-5.0	-15.3	28	12.3
650	30	3,570	-8.0	-18.8	28	15.1
600	30	4,192	-11.5	-24.2	28	18.2
550	30	4,849	-15.5	-28.6	27	20.1
500	30	5,567	-20.5	-32.8	27	20.9
450	30	6,331	-25.7	-38.0	27	23.4
400	30	7,182	-31.7	-42.6	27	26.8
350	30	8,113	-38.2	-47.6	27	30.1
300	30	9,159	-44.8		27	33.2
250	30	10,362	-50.6		27	37.5
200	30	11,803	-54.3		28	37.0
175	30	12,660	-53.7		28	32.2
150	30	13,651	-53.3		28	27.0
125	30	14,824	-53.7		28	21.0
100	30	16,252	-55.6		28	17.8
80	29	17,668	-56.9		28	14.0
70	29	18,512	-57.3		29	9.4
60	29	19,489	-56.7		31	6.0
50	29	20,649	-55.3		01	3.4
40	28	22,075	-55.0		05	2.5
30	27	23,913	-54.0		08	5.5
25	27	25,085	-53.5		08	6.3
20	27	26,523	-52.7		08	7.5
15	26	28,387	-50.6		08	6.8
10	22	31,049	-46.4		08	2.8
7	18	33,415	-41.2		29	3.2
5						

GREENSBORO, N. C. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	273	11.5	7.3	24	1.9
1000	30	164				
950	30	594	12.0	3.2	27	5.7
900	30	1,047	10.6	-1.3	29	8.0
850	30	1,522	9.1	-4.8	30	9.0
800	30	2,023	7.5	-8.2	30	11.1
750	30	2,550	4.8	-12.0	29	11.8
700	30	3,112	1.5	-14.3	30	13.4
650	30	3,706	-1.6	-17.3	29	14.6
600	30	4,339	-5.6	-19.7	29	16.6
550	30	5,014	-10.1	-24.0	30	18.7
500	30	5,745	-14.7	-28.9	30	21.4
450	30	6,531	-20.0	-32.3	30	24.1
400	30	7,399	-26.0	-37.7	29	25.8
350	30	8,352	-33.1	-44.9	29	30.2
300	30	9,418	-41.2	-50.6	29	32.3
250	30	10,632	-50.6		30	32.9
200	30	12,057	-58.6		30	31.6
175	30	12,893	-59.3		30	31.4
150	30	13,859	-58.8		30	26.9
125	30	14,999	-60.3		30	22.1
100	30	16,380	-62.6		30	17.3
80	30	17,754	-63.3		31	11.2
70	30	18,575	-62.6		32	8.2
60	29	19,532	-61.1		34	4.8
50	29	20,668	-59.2		04	3.1
40	28	22,072	-56.9		07	3.9
30	28	23,904	-54.1		09	3.1
25	26	25,078	-52.6		09	2.1
20	26	26,524	-50.7		33	.6
15	24	28,401	-47.9		29	3.6
10	21	31,116	-42.2		28	11.3
7	6	33,535	-39.0			
5						

GUAM, MARIANA IS. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	111	24.6	22.6	08	4.3
1000	29	105			08	4.1
950	29	557	21.8	20.2	08	11.3
900	29	1,023	18.9	17.2	09	11.1
850	29	1,514	16.5	12.7	09	9.7
800	29	2,029	14.7	7.2	09	8.0
750	29	2,572	12.5	-.1	09	7.5
700	29	3,150	9.5	-4.0	08	7.8
650	29	3,761	6.2	-8.4	08	7.3
600	29	4,414	2.5	-13.2	08	6.9
550	29	5,109	-1.3	-16.8	08	5.3
500	29	5,867	-5.7	-22.1	08	5.1
450	29	6,684	-10.8	-26.7	08	4.9
400	29	7,581	-16.7	-32.0	06	4.1
350	29	8,570	-23.7	-37.9	04	2.1
300	29	9,678	-31.9	-45.6	31	1.5
250	29	10,939	-42.0		27	3.4
200	29	12,409	-54.0		25	4.3
175	29	13,252	-60.5		26	3.8
150	29	14,196	-67.4		28	3.1
125	29	15,273	-74.5		02	2.1
100	28	16,552	-79.4		07	4.5
80	26	17,816	-78.3		08	5.1
70	25	18,586	-73.9		09	4.5
60	25	19,499	-68.4		10	1.7
50	25	20,606	-63.5		17	.5
40	23	21,993	-58.6		06	1.9
30	23	23,828	-52.4		09	5.6
25	23	25,010	-50.9		09	8.2
20	23	26,470	-48.2		09	11.9
15	20	28,377	-45.2		08	16.5
10	16	31,106	-39.9		09	22.9
7						
5						

HILO, HAWAII 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	11	20.1	17.9	23	1.4
1000	30	131	20.9	17.7	24	1.5
950	30	573	18.0	15.5	12	1.2
900	30	1,036	14.9	13.0	13	2.0
850	30	1,519	12.1	10.7	14	2.5
800	30	2,026	9.8	5.7	16	2.3
750	30	2,560	7.4	-.7	19	2.0
700	30	3,127	4.7	-7.9	22	2.2
650	30	3,728	1.3	-11.2	25	3.7
600	30	4,368	-2.1	-17.0	26	5.9
550	30	5,052	-6.3	-21.2	27	7.2
500	30	5,794	-11.2	-26.0	27	9.0
450	30	6,589	-16.7	-31.2	27	11.4
400	30	7,470	-22.8	-37.6	27	14.2
350	30	8,435	-30.1	-44.1	27	18.0
300	30	9,515	-38.2	-49.0	27	24.4
250	30	10,747	-46.9		27	30.6
200	30	12,199	-55.4		27	37.8
175	30	13,041	-60.3		27	39.0
150	30	13,991	-65.6		28	35.8
125	30	15,089	-69.1		28	28.3
100	30	16,412	-72.1		28	15.9
80	28	17,729	-70.1		28	6.8
70	28	18,528	-66.6		29	3.5
60	28	19,467	-63.5		13	.3
50	28	20,592	-61.3		11	1.8
40	28	21,988	-57.6		09	3.0
30	28	23,825	-52.8		09	4.0
25	27	25,011	-50.3		09	4.8
20	27	26,474	-48.0		08	5.8
15	27	28,388	-44.2		09	5.9
10	17	31,125	-40.9		10	4.9
7	9	33,549	-37.2			
5						

HUNTINGTON W. VA. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	246	9.3	6.2	25	.5
1000	30	161				
950	30	588	10.5	3.1	24	3.6
900	30	1,038	8.5	.7	26	8.4
850	30	1,510	6.6	-2.2	28	9.8
800	30	2,007	5.0	-5.0	28	11.2
750	30	2,529	2.5	-7.4	29	13.1
700	30	3,088	-.1	-11.7	29	13.8
650	30	3,675	-3.0	-15.1	28	16.2
600	30	4,309	-6.6	-18.8	29	18.5
550	30	4,980	-11.0	-22.1	29	20.8
500	30	5,710	-15.8	-26.3	29	23.0
450	30	6,491	-21.2	-31.3	28	25.1
400	30	7,358	-26.9	-37.4	28	28.5
350	30	8,308	-33.9	-43.7	28	32.0
300	30	9,370	-41.8	-49.1	28	35.0
250	30	10,582	-50.5		28	36.5
200	30	12,013	-57.2		29	37.5
175	30	12,856	-57.5		29	31.3
150	30	13,830	-57.3		29	27.8
125	30	14,980	-58.8		29	23.2
100	30	16,374	-60.4		29	16.7
80	30	17,762	-60.7		30	11.6
70	30	18,592	-60.6		31	8.3
60	30	19,556	-59.8		33	4.4
50	30	20,699	-58.3		01	3.6
40	30	22,112	-56.0		05	3.9
30	29	23,946	-54.1		07	3.9
25	28	25,120	-52.9		07	3.3
20	28	26,565	-51.5		05	2.4
15	26	28,445	-48.8		32	.4
10	23	31,138	-43.8		27	7.7
7	11	33,519	-40.8			
5	5	35,877	-37.0			

* INTERNATIONAL FALLS, MINN. 973 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	360	-1.2	-6.4	25	.2
1000	30	135				
950	30	542	-1.5	-6.8	11	.6
900	30	975	-2.7	-7.6	22	2.1
850	30	1,428	-3.4	-8.8	27	3.7
800	30	1,907	-4.6	-12.4	27	5.0
750	30	2,409	-6.1	-12.7	28	7.1
700	30	2,952	-8.5	-15.5	27	9.2
650	30	3,517	-11.3	-19.1	27	10.7
600	30	4,135	-14.6	-23.7	27	12.1
550	30	4,781	-18.8	-28.6	27	14.3
500	30	5,494	-23.5	-33.1	28	15.5
450	30	6,248	-28.9	-37.9	28	16.2
400	30	7,090	-35.0	-42.8	27	16.9
350	30	8,008	-41.6	-48.7	27	19.3
300	30	9,038	-48.4		27	22.6
250	30	10,226	-52.2		27	27.4
200	30	11,668	-52.1		27	25.0
175	30	12,532	-51.8		27	23.6
150	30	13,533	-51.1		27	20.9
125	30	14,718	-51.4		27	17.9
100	30	16,160	-53.2		28	14.6
80	30	17,593	-54.3		28	11.2
70	30	18,448	-54.5		28	9.7
60	30	19,436	-54.3		29	6.4
50	30	20,606	-53.7		30	4.6
40	29	22,043	-53.2		33	2.4
30	29	23,898	-52.5		03	2.6
25	29	25,076	-52.3		06	4.0
20	29	26,520	-52.0		07	5.3
15	25	28,391	-50.1		08	7.1
10	25	31,055	-47.2		08	8.0
7	18	33,405	-42.9		08	5.1
5						

JACKSON, MISS. 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	94	16.6	14.6	15	1.5
1000	30	152	16.9	14.0	15	2.6
950	30	593	16.8	10.9	20	6.4
900	30	1,051	15.4	8.1	22	7.4
850	30	1,535	13.7	3.6	23	7.5
800	30	2,045	11.7	-2.4	24	7.2
750	30	2,580	8.8	-5.8	25	7.5
700	30	3,150	5.3	-8.0	26	8.3
650	30	3,748	1.9	-13.0	26	10.2
600	30	4,393	-1.9	-17.2	27	10.9
550	30	5,072	-6.5	-21.5	27	11.6
500	30	5,817	-11.8	-26.2	27	13.4
450	30	6,609	-17.4	-31.5	27	14.9
400	30	7,489	-23.6	-37.4	27	16.7
350	30	8,451	-31.0	-41.6	27	17.6
300	30	9,526	-39.4	-49.0	28	18.9
250	30	10,748	-49.2		28	21.6
200	30	12,175	-59.6		28	24.1
175	30	13,005	-61.9		28	24.2
150	30	13,958	-61.9		28	23.0
125	30	15,080	-64.6		28	19.7
100	30	16,433	-67.1		28	14.3
80	30	17,775	-67.4		29	7.0
70	30	18,580	-66.5		29	2.7
60	30	19,515	-65.0		06	.8
50	30	20,634	-61.8		08	3.5
40	29	22,026	-58.3		07	4.5
30	29	23,851	-54.8		06	4.1
25	29	25,021	-52.7		07	1.9
20	29	26,467	-50.7		25	.8
15	29	28,354	-47.3		26	4.5
10	28	31,064	-41.6		27	11.8
7	13	33,522	-36.2			
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* JACKSONVILLE, FLA. 1021 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	5	16.8	14.9	27	1.0
1000	30	186	18.6	13.9	24	1.1
950	30	624	17.0	9.5	25	1.5
900	30	1,085	14.8	5.2	29	1.3
850	30	1,567	12.9	-.3	30	2.7
800	30	2,075	10.8	-5.1	30	3.2
750	30	2,609	8.5	-10.3	30	3.9
700	30	3,178	5.5	-13.0	30	5.7
650	30	3,776	2.2	-17.7	30	7.3
600	30	4,421	-2.1	-21.2	30	9.0
550	30	5,093	-6.8	-24.2	30	10.1
500	30	5,843	-11.8	-28.9	29	11.4
450	30	6,632	-17.4	-33.9	30	13.3
400	30	7,513	-23.7	-39.4	30	14.9
350	30	8,475	-30.8	-45.0	30	16.1
300	30	9,551	-39.2	-51.0	30	17.9
250	30	10,775	-48.8		30	20.2
200	29	12,210	-58.2		30	21.5
175	29	13,046	-60.6		30	22.0
150	29	14,003	-61.5		30	21.0
125	28	15,125	-64.5		30	17.7
100	27	16,481	-66.8		30	13.5
80	27	17,824	-67.6		32	7.2
70	27	18,628	-66.5		34	6.1
60	26	19,562	-64.9		02	5.5
50	25	20,676	-61.6		04	5.1
40	25	22,070	-57.6		06	5.3
30	24	23,900	-53.3		07	4.1
25	24	25,079	-51.2		09	4.0
20	23	26,536	-48.3		23	.9
15	22	28,447	-44.2		26	5.0
10	19	31,215	-36.5		27	12.2
7	7	33,723	-31.8			

JOHN F. KENNEDY INT. AP NY 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	5	6.1	.0	33	2.2
1000	30	145	5.6	-1.2	32	3.2
950	30	567	4.0	-2.8	32	5.4
900	30	1,004	3.5	-4.1	32	7.4
850	30	1,467	2.4	-5.7	32	9.3
800	30	1,956	.5	-8.0	32	11.1
750	30	2,475	-1.3	-10.9	31	12.1
700	30	3,021	-3.7	-12.9	30	13.4
650	30	3,602	-6.9	-16.0	30	15.2
600	30	4,224	-10.3	-19.7	30	17.2
550	30	4,887	-14.3	-24.2	30	19.4
500	30	5,606	-19.0	-28.5	30	21.6
450	30	6,381	-24.6	-33.3	30	23.5
400	30	7,230	-30.7	-40.0	30	25.6
350	30	8,165	-37.3	-44.5	30	29.0
300	30	9,214	-44.3		30	33.7
250	30	10,417	-51.3		30	37.0
200	30	11,854	-54.7		30	33.9
175	30	12,709	-54.1		30	29.5
150	30	13,698	-54.3		30	25.3
125	30	14,865	-55.1		30	21.6
100	30	16,282	-57.7		30	14.8
80	29	17,686	-58.8		30	11.0
70	29	18,523	-58.5		31	8.6
60	29	19,495	-57.8		32	5.5
50	29	20,649	-56.3		34	3.3
40	28	22,069	-55.4		01	1.1
30	28	23,908	-54.4		05	2.1
25	27	25,083	-53.6		09	3.3
20	25	26,522	-52.5		08	2.2
15	23	28,392	-49.6		10	1.7
10	14	31,059	-44.7		29	6.2
7						

JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	3	24.5	20.3	08	6.1
1000	30	127	23.4	19.7	07	7.0
950	30	572	19.6	17.7	07	7.9
900	30	1,038	16.7	14.0	08	6.5
850	30	1,524	14.0	9.9	08	5.2
800	30	2,034	12.0	1.5	08	3.6
750	30	2,574	10.4	-6.5	06	2.2
700	30	3,146	8.0	-11.7	03	1.8
650	30	3,749	4.7	-14.2	34	1.4
600	30	4,401	1.0	-17.7	31	1.9
550	30	5,088	-3.6	-21.5	29	3.7
500	30	5,842	-8.6	-25.5	28	5.6
450	30	6,646	-13.7	-29.4	29	8.0
400	30	7,538	-19.7	-33.8	28	12.3
350	29	8,514	-26.9	-39.5	28	16.5
300	29	9,608	-35.0	-46.5	27	22.0
250	29	10,855	-44.2		27	27.1
200	29	12,315	-55.2		27	31.9
175	29	13,155	-61.5		27	30.5
150	29	14,096	-67.5		27	27.2
125	29	15,178	-73.1		28	21.8
100	28	16,471	-76.7		28	13.4
80	27	17,759	-74.7		29	5.1
70	27	18,540	-70.9		29	1.9
60	27	19,464	-66.0		09	.6
50	27	20,580	-61.9		13	1.2
40	25	21,973	-58.0		08	2.4
30	24	23,809	-53.6		08	3.8
25	24	24,989	-50.5		07	6.5
20	24	26,451	-48.0		08	9.5
15	21	28,360	-44.5		08	12.9
10	19	31,096	-40.4		09	13.5
7	8	33,551	-36.4			

KEY WEST, FLA. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	24	3	22.2	17.0	08	3.8
1000	24	161	21.0	16.6	09	5.7
950	24	600	17.5	15.1	09	7.1
900	24	1,065	15.1	11.3	10	6.5
850	24	1,548	13.7	4.9	09	4.8
800	24	2,058	12.3	-.1	08	3.6
750	24	2,596	10.2	-3.0	07	4.1
700	24	3,168	7.2	-6.9	06	3.9
650	24	3,768	3.9	-10.3	05	3.6
600	24	4,420	-.5	-13.9	05	3.9
550	24	5,101	-5.1	-17.9	04	2.7
500	24	5,852	-9.9	-22.4	35	2.1
450	24	6,648	-15.8	-27.9	33	2.2
400	24	7,532	-22.6	-33.5	33	3.6
350	24	8,498	-30.3	-40.1	31	5.2
300	24	9,577	-38.8	-47.5	30	8.0
250	24	10,805	-47.9		29	11.0
200	24	12,247	-56.5		29	11.6
175	24	13,088	-59.9		29	13.9
150	23	14,038	-63.2		29	12.4
125	23	15,148	-67.5		30	12.2
100	23	16,479	-71.5		31	10.0
80	23	17,796	-71.5		32	7.8
70	23	18,587	-69.9		35	5.9
60	23	19,511	-66.7		03	4.3
50	23	20,628	-61.9		05	4.8
40	23	22,026	-57.2		06	4.6
30	23	23,867	-52.7		06	4.7
25	23	25,054	-50.0		07	4.2
20	23	26,524	-47.1		05	1.7
15	22	28,452	-43.0		32	.3
10	16	31,221	-37.7			
7	7	33,692	-34.1			

KING SALMON, ALASKA 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	15	.4	-4.0	19	2.3
1000	30	156	.4	-4.4	19	2.4
950	30	565	-1.4	-6.1	22	3.4
900	30	996	-3.7	-7.5	24	4.7
850	30	1,446	-5.7	-9.9	24	6.0
800	30	1,920	-7.5	-13.2	24	7.1
750	30	2,421	-9.7	-16.0	25	8.4
700	30	2,952	-11.8	-19.7	25	10.1
650	30	3,515	-15.0	-23.0	25	11.3
600	30	4,118	-18.6	-26.2	25	12.0
550	30	4,760	-22.3	-29.7	25	14.2
500	30	5,458	-26.6	-35.1	26	14.1
450	30	6,208	-31.6	-38.7	26	16.3
400	30	7,037	-37.1	-43.3	26	17.0
350	30	7,948	-43.0		27	16.5
300	30	8,974	-49.0		27	17.4
250	30	10,159	-53.2		26	17.6
200	30	11,591	-53.5		27	16.3
175	29	12,458	-52.7		26	14.3
150	29	13,455	-52.2		26	14.1
125	29	14,636	-52.0		26	11.4
100	29	16,077	-53.2		26	10.6
80	29	17,516	-52.6		26	9.3
70	29	18,380	-52.1		26	8.5
60	29	19,380	-51.8		26	6.4
50	29	20,562	-51.7		25	6.8
40	28	22,009	-51.9		24	3.0
30	26	23,875	-51.9		22	2.5
25	26	25,057	-51.7		23	2.5
20	26	26,505	-51.5		20	2.6
15	25	28,381	-50.7		16	3.8
10	20	31,055	-48.7		17	4.8

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	+ KOROR, CAROLINE IS. 1007 MB						KOTZEBUE, ALASKA 1014 MB						KWAJALEIN, MARSHALL IS. 1011 MB						LAKE CHARLES, LA. 1017 MB						LANDER, WYO. 824 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	30	28.1	24.3	08	1.7	30	5	-6.5	-8.5	15	3.0	29	4	26.6	22.8	07	5.9	30	5	20.0	18.2	13	2.2	30	1,696	.4	-5.3	24	1.0
1000	30	92	27.4	23.6	07	2.1	30	108	-7.0	-9.6	16	3.1	29	98	26.1	22.3	07	6.2	30	147	20.2	18.6	15	4.3	30	106				
950	30	541	23.3	19.6	08	4.1	30	508	-7.7	-9.8	18	4.8	29	549	22.8	20.4	07	7.0	30	590	17.6	15.6	18	7.6	30	525				
900	30	1,016	20.4	15.2	07	3.9	30	928	-8.9	-10.9	20	5.6	29	1,020	19.9	16.6	08	6.8	30	1,050	16.1	10.0	19	8.1	30	969				
850	30	1,509	18.0	11.0	08	3.2	30	1,370	-9.9	-12.3	20	6.8	29	1,511	17.2	12.5	08	6.0	30	1,536	14.8	2.4	20	7.9	30	1,439				
800	30	2,027	15.6	7.3	08	3.4	30	1,837	-11.9	-15.3	21	6.7	29	2,026	14.9	7.5	08	4.6	30	2,047	12.8	-3.0	21	7.3	30	1,928	1.3	-7.0	28	.7
750	30	2,572	13.0	3.1	09	3.7	30	2,328	-14.2	-18.5	21	7.3	29	2,571	12.4	1.4	08	3.3	30	2,585	10.4	-8.7	23	6.8	30	2,442	-1.4	-9.9	25	3.1
700	30	3,151	9.9	-1.9	09	4.0	30	2,850	-16.8	-22.0	22	7.6	29	3,149	9.8	-4.5	09	2.7	30	3,158	7.4	-12.2	24	7.2	30	2,992	-4.9	-13.1	24	6.0
650	30	3,762	6.7	-6.1	08	4.6	30	3,403	-19.8	-25.4	22	8.1	29	3,758	6.6	-9.0	09	1.7	30	3,763	3.5	-14.5	25	6.6	30	3,562	-9.0	-16.5	23	8.8
600	30	4,417	2.8	-10.2	08	4.9	30	3,993	-23.2	-29.1	23	8.3	29	4,410	2.6	-11.5	09	1.3	30	4,409	-.9	-17.1	25	7.4	30	4,187	-13.1	-22.0	23	12.2
550	30	5,112	-1.4	-14.3	08	4.3	30	4,623	-27.1	-34.6	23	9.4	29	5,108	-1.7	-14.8	15	.5	30	5,088	-5.9	-21.4	26	8.0	30	4,834	-18.1	-27.5	23	13.6
500	30	5,872	-5.4	-20.4	09	3.9	30	5,307	-31.5	-39.6	23	10.2	29	5,865	-5.8	-17.6	23	1.7	30	5,837	-11.0	-26.6	26	8.5	30	5,549	-23.5	-32.9	23	15.3
450	30	6,686	-10.1	-25.5	09	4.1	30	6,040	-36.2	-43.0	23	10.5	29	6,678	-10.7	-22.2	25	4.4	30	6,636	-16.5	-33.4	27	9.6	30	6,306	-29.6	-38.6	23	16.2
400	30	7,592	-15.4	-30.8	08	3.5	30	6,854	-41.8	-45.2	23	11.3	29	7,580	-16.0	-28.0	26	6.3	30	7,515	-22.7	-38.4	27	11.8	30	7,142	-36.1	-43.6	23	19.4
350	30	8,586	-22.6	-37.2	07	3.5	30	7,747	-47.6		24	12.3	29	8,568	-22.8	-35.1	26	7.8	30	8,479	-30.1	-44.1	27	14.5	30	8,057	-42.2	-48.2	23	25.1
300	30	9,698	-31.1	-45.0	09	2.8	30	8,754	-52.1		23	14.2	29	9,684	-31.3	-43.0	25	[illegible].5	30	9,557	-38.7	-50.9	27	15.6	30	9,086	-47.7		23	31.4
250	30	10,964	-41.4		10	2.8	30	9,930	-53.6		24	17.6	29	10,948	-41.6		25	11.0	30	10,783	-48.5		28	18.0	30	10,278	-51.8		23	34.7
200	30	12,438	-53.7		07	4.6	30	11,369	-52.1		24	18.7	29	12,421	-54.0		25	11.8	29	12,213	-59.0		28	20.0	30	11,719	-52.0		24	28.7
175	30	13,283	-60.6		07	3.8	29	12,231	-51.2		25	18.3	29	13,258	-61.0		25	11.0	29	13,045	-61.0		28	21.5	30	12,584	-51.2		24	26.1
150	30	14,226	-67.7		06	3.1	28	13,232	-50.8		24	18.6	29	14,204	-68.7		26	10.0	29	13,999	-62.6		27	20.2	30	13,586	-51.6		23	22.4
125	30	15,304	-74.6		08	3.2	25	14,415	-50.5		24	19.6	28	15,270	-75.6		27	6.6	29	15,116	-65.5		27	17.9	30	14,765	-52.7		23	17.0
100	30	16,582	-79.8		07	6.2	25	15,871	-50.0		24	19.3	26	16,548	-80.0		32	3.7	29	16,465	-68.1		27	13.2	30	16,198	-54.5		23	13.4
80	30	17,858	-75.4		06	2.3	25	17,329	-49.7		24	17.9	24	17,813	-77.1		26	2.7	29	17,800	-68.0		27	5.9	30	17,619	-57.0		23	6.9
70	30	18,641	-70.1		28	3.5	25	18,202	-49.6		24	16.4	23	18,588	-73.0		28	4.8	29	18,602	-67.7		25	1.9	30	18,464	-56.8		23	5.6
60	29	19,564	-65.9		27	7.6	24	19,223	-48.8		24	16.4	23	19,501	-68.1		28	7.3	29	19,535	-65.5		08	1.1	30	19,441	-57.0		21	3.5
50	29	20,683	-61.8		27	8.2	23	20,420	-48.9		23	14.9	23	20,616	-63.5		27	6.9	29	20,652	-61.9		08	3.6	30	20,595	-56.7		12	2.1
40	29	22,077	-57.8		27	5.9	22	21,895	-48.8		23	13.2	22	21,987	-59.7		27	4.0	29	22,047	-57.8		08	4.3	30	22,012	-55.7		10	2.6
30	28	23,911	-53.0		27	.9	21	23,784	-48.8		23	11.3	21	23,814	-55.1		11	.8	29	23,879	-53.7		07	4.1	29	23,851	-54.8		09	6.4
25	28	25,092	-50.9		09	4.4	19	24,974	-49.3		23	12.7	21	24,984	-52.5		09	5.6	29	25,056	-51.5		06	.6	29	25,019	-54.0		08	7.3
20	28	26,551	-48.7		09	12.0	19	26,438	-48.6		23	10.5	21	26,436	-49.2		09	12.9	29	26,512	-49.2		28	1.9	28	26,453	-53.0		09	8.2
15	27	28,463	-44.8		10	22.2	17	28,360	-46.8		21	9.2	20	28,342	-45.6		09	22.6	27	28,410	-45.7		26	6.3	28	28,319	-50.5		09	7.5
10	22	31,203	-38.8		09	28.9	9	31,082	-44.6				18	31,085	-40.2		09	27.1	25	31,140	-40.1		27	12.8	23	30,964	-46.7		08	4.4
7	5	33,641	-35.1										14	33,539	-35.7		09	28.9	10	33,542	-37.2				10	33,392	-42.1			
5													5	35,966	-31.0															

Standard pressure surface (mb)	* LIHUE KAUAI, HAWAII 1012 MB						LITTLE ROCK, ARK. 1008 MB						MCGRATH, ALASKA 1006 MB						+ MAJURO, MARSHALL IS. 1011 MB						+ MARCUS IS., N. PACIFIC 1017 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	36	20.1	17.4	03	2.6	30	79	15.8	11.9	12	.4	30	103	-1.3	-4.8	20	2.0	30	3	28.6	24.1	07	4.4	30	9	23.7	18.2	09	4.2
1000	30	139	20.6	17.2	03	3.6	30	146	15.5	11.3	15	.8	30	145			20	2.9	30	97	27.4	21.9	07	4.9	30	156	21.0	14.2	10	4.8
950	30	576	17.4	15.2	05	5.2	30	580	14.6	10.3	18	6.6	30	552	-3.3	-6.3	20	5.4	30	544	23.1	18.1	08	6.7	30	595	17.1	10.5	09	5.1
900	30	1,042	14.1	12.2	05	4.6	30	1,039	14.0	7.3	23	8.2	30	979	-5.5	-8.1	21	8.1	30	1,021	20.3	13.7	08	6.1	30	1,057	14.0	6.7	10	4.1
850	30	1,523	11.3	8.2	06	3.8	30	1,521	12.6	3.7	24	9.6	30	1,426	-7.7	-11.0	22	8.8	30	1,514	17.6	10.8	09	5.4	30	1,538	12.5	.6	09	3.0
800	30	2,028	9.6	.1	05	2.3	30	2,028	10.3	.1	25	10.3	30	1,896	-9.9	-13.8	22	10.0	30	2,031	15.1	7.1	09	3.8	30	2,046	11.7	-4.8	07	1.9
750	30	2,558	7.5	-8.0	02	1.4	30	2,559	7.9	-4.3	25	10.4	30	2,389	-12.0	-16.7	23	9.7	30	2,578	12.6	1.9	10	2.4	30	2,584	10.0	-8.1	36	1.9
700	30	3,128	5.2	-11.8	34	2.6	30	3,129	4.7	-8.8	25	11.1	30	2,918	-14.6	-20.0	23	8.8	30	3,153	10.0	-3.0	09	1.5	30	3,155	7.5	-13.2	33	3.0
650	30	3,723	1.8	-15.2	30	3.0	30	3,725	1.0	-11.7	26	12.0	30	3,472	-17.8	-23.3	24	10.0	30	3,763	6.8	-6.4	09	1.6	30	3,758	4.3	-16.0	31	4.3
600	30	4,371	-1.9	-18.6	30	4.2	30	4,369	-3.3	-15.7	26	13.5	30	4,072	-21.2	-26.6	24	11.4	30	4,421	3.1	-10.8	06	.8	30	4,408	.5	-18.6	30	5.4
550	30	5,049	-6.0	-24.6	29	6.1	30	5,043	-7.9	-19.3	26	15.2	30	4,701	-25.1	-31.1	25	12.4	30	5,115	-.9	-14.2	20	.5	30	5,097	-3.9	-22.5	30	6.3
500	30	5,798	-11.3	-28.4	29	7.6	30	5,787	-12.7	-23.7	26	18.9	30	5,396	-29.4	-35.5	25	14.8	30	5,878	-5.1	-18.2	25	1.6	30	5,847	-8.5	-26.5	29	7.5
450	30	6,594	-17.3	-33.4	29	10.0	30	6,575	-18.4	-29.7	26	20.5	30	6,133	-34.3	-38.9	25	15.6	30	6,697	-9.7	-23.2	25	3.4	30	6,651	-13.9	-31.6	29	9.3
400	30	7,471	-23.8	-39.0	29	12.2	30	7,453	-24.7	-36.0	27	21.8	30	6,956	-39.7	-40.2	26	17.1	30	7,602	-15.0	-28.5	25	5.9	30	7,541	-20.0	-36.7	28	10.7
350	30	8,431	-31.2	-44.1	29	15.4	30	8,411	-31.6	-42.8	27	24.4	30	7,858	-44.8		26	20.4	30	8,600	-21.7	-36.5	26	7.3	30	8,517	-27.1	-43.0	29	12.8
300	30	9,505	-39.2	-50.3	28	19.6	30	9,484	-39.7	-49.6	27	28.4	30	8,878	-49.6		26	21.3	30	9,717	-30.3	-44.2	25	7.8	30	9,610	-35.0	-49.9	30	16.1
250	30	10,729	-48.0		28	25.8	30	10,705	-49.4		27	30.3	30	10,063	-52.6		26	19.4	30	10,988	-40.5	-53.2	24	8.1	30	10,856	-44.4		30	18.9
200	29	12,173	-55.5		28	32.8	30	12,133	-59.4		27	33.5	29	11,510	-52.5		25	16.9	30	12,469	-53.1		25	9.8	30	12,320	-54.1		29	21.5
175	29	13,016	-59.5		28	33.6	30	12,965	-60.8		27	31.8	29	12,376	-51.1		26	17.6	30	13,316	-60.2		25	9.9	30	13,165	-59.9		29	23.9
150	29	13,969	-64.0		28	30.2	30	13,923	-60.9		27	28.9	29	13,379	-51.0		26	16.1	30	14,262	-67.3		26	8.3	30	14,115	-65.1		29	23.1
125	29	15,073	-68.2		28	23.5	30	15,053	-62.7		27	24.4	29	14,564	-51.6		26	15.1	30	15,343	-74.0		27	7.2	30	15,214	-69.5		28	20.4
100	29	16,400	-71.1		29	16.5	29	16,418	-65.3		27	18.7	29	16,009	-52.1		25	15.0	30	16,627	-78.5		30	4.9	30	16,530	-73.3		28	14.7
80	27	17,721	-69.5		29	9.6	29	17,777	-65.6		27	9.7	28	17,462	-51.2		25	12.9	30	17,905	-75.4		27	5.0	30	17,834	-72.9		28	7.0
70	26	18,519	-67.6		30	3.5	28	18,588	-64.6		27	7.0	28	18,330	-50.8		25	11.7	30	18,688	-69.6		27	7.4	30	18,620	-70.4		29	3.6
60	26	19,455	-63.4		35	.8	28	19,534	-63.0		25	1.8	28	19,334	-50.8		25	11.1	30	19,620	-63.8		27	10.1	30	19,545	-65.6		33	2.1
50	25	20,584	-61.3		08	1.9	28	20,662	-60.5		11	1.5	28	20,523	-50.2		25	9.3	29	20,747	-60.2		27	9.9	30	20,667	-59.9		06	2.6
40	25	21,980	-57.6		09	3.2	27	22,061	-57.6		09	3.5	28	21,978	-50.5		24	8.2	29	22,151	-56.5		27	8.8	30	22,074	-56.0		09	4.6
30	24	23,818	-53.2		09	4.5	27	23,890	-54.5		09	3.9	28	23,851	-51.0		24	7.1	28	23,997	-52.1		27	2.1	30	23,925	-51.1		11	4.3
25	24	24,998	-50.8		09	4.5	27	25,062	-52.9		08	4.3	28	25,037	-50.9		25	6.[illegible]	28	25,181	-50.4		09	3.6	29	25,115	-49.2		13	3.1
20	24	26,458	-48.5		04	2.5	25	26,509	-50.7		08	2.0	26	26,486	-50.6		22	5.2	25	26,646	-47.7		10	10.5	29	26,585	-46.7		26	1.1
15	23	28,362	-44.9		08	1.6	23	28,396	-47.5		21	.2	18	28,393	-48.5		18	7.5	23	28,559	-44.1		09	19.7	29	28,513	-42.2		26	5.0
10	23	31,096	-40.5		16	1.3	14	31,117	-42.3				8	31,147	-45.1				16	31,313	-37.3		09	25.4	28	31,281	-37.3		27	10.7
7	23	33,550	-35.3		36	.2																			16	33,738	-35.9		27	16.1
5	18	35,919	-30.0		01	1.7																			7	36,020	-34.2			
4	6	37,515	-27.8																											

Standard pressure surface (mb)	* MEDFORD, OREG. 968 MB						MERIDA, MEXICO 1016 MB						* MIAMI, FLA. 1019 MB						* MIDLAND, TEXAS 913 MB						MONTERREY, MEXICO 964 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	401	3.3	1.2	27	.0	30	11	20.7	19.9	10	3.2	30	4	20.4	16.6	09	1.6	30	874	15.6	6.9	18	2.8	29	423	20.2	18.6	13	1.8
1000	30	134					30	146	21.6	20.3	11	7.5	30	164	20.9	15.8	09	2.8	30	92					29	106				
950	30	554	2.9	-.4	33	.3	30	589	20.2	16.7	13	10.3	30	601	17.4	13.3	10	4.9	30	533					29	551	19.5	17.8	12	2.6
900	30	989	.7	-1.6	26	.8	30	1,059	18.4	11.2	12	8.8	30	1,067	14.4	9.4	09	4.7	30	996	16.7	7.1	18	4.3	29	1,018	18.0	15.6	13	4.8
850	30	1,446	-2.2	-4.2	21	1.7	30	1,548	16.6	6.0	11	6.2	30	1,549	13.0	-.5	08	3.6	30	1,483	16.1	3.9	21	8.2	29	1,508	17.2	9.2	14	6.8
800	30	1,925	-5.3	-7.7	21	2.5	30	2,062	13.9	1.6	11	4.3	30	2,058	11.9	-6.1	06	2.7	30	1,997	14.7	-2.8	23	7.9	29	2,025	16.4	2.9	16	6.5
750	30	2,426	-8.5	-12.1	22	4.1	30	2,599	10.8	-2.4	12	3.4	30	2,596	10.0	-9.6	03	2.[illegible]	30	2,536	11.3	-6.0	23	9.4	29	2,571	14.1	-4.2	19	4.4
700	29	2,964	-11.7	-17.8	23	5.1	30	3,176	7.8	-7.1	11	2.9	30	3,167	6.8	-12.0	02	2.6	30	3,112	7.2	-8.5	23	10.6	29	3,151	10.4	-8.1	24	3.1
650	29	3,525	-15.2	-22.6	23	5.7	30	3,777	4.2	-10.4	10	2.9	30	3,772	3.5	-16.2	02	3.2	30	3,716	2.9	-11.6	24	12.4	29	3,758	5.9	-11.5	27	3.3
600	29	4,129	-19.5	-28.0	22	5.8	30	4,430	.3	-14.5	09	2.1	30	4,417	-.8	-19.7	01	3.1	30	4,359	-1.9	-15.4	24	15.3	29	4,412	.7	-14.9	28	4.0
550	29	4,762	-24.3	-32.1	22	6.1	30	5,114	-3.6	-20.2	04	1.9	30	5,099	-5.3	-23.9	35	3.5	30	5,038	-6.9	-19.0	24	18.6	29	5,097	-4.7	-18.3	28	5.2
500	29	5,457	-29.5	-36.6	22	7.1	30	5,870	-8.3	-25.1	05	2.7	30	5,848	-10.4	-28.0	33	5.2	30	5,781	-12.1	-24.7	24	20.1	29	5,847	-9.8	-25.4	26	5.2
450	29	6,194	-34.8	-42.6	23	6.5	30	6,670	-13.7	-30.1	03	1.7	30	6,651	-16.1	-32.6	32	6.2	30	6,574	-17.7	-30.4	25	21.8	29	6,650	-15.2	-31.2	25	5.8
400	29	7,014	-40.8	-44.6	23	7.5	30	7,566	-20.3	-36.3	01	2.3	30	7,528	-22.5	-38.3	32	7.6	30	7,450	-24.3	-35.8	25	23.5	29	7,533	-21.8	-37.4	25	7.8
350	29	7,911	-46.6		24	7.2	29	8,539	-27.8	-42.8	01	2.2	30	8,495	-30.1	-44.2	32	8.9	30	8,409	-31.3	-42.1	24	26.8	29	8,503	-29.2	-43.4	25	9.5
300	29	8,926	-49.1		26	7.2	28	9,629	-36.3	-49.8	30	4.2	30	9,573	-38.8	-50.5	31	9.7	30	9,482	-39.5	-47.6	25	30.5	29	9,584	-37.9	-51.0	26	11.6
250	29	10,120	-49.5		27	8.3	28	10,868	-45.6		28	7.0	30	10,800	-48.3		30	11.2	30	10,704	-49.2		25	33.4	29	10,813	-48.2		26	14.1
200	29	11,582	-49.0		26	9.6	28	12,321	-54.6		28	9.7	30	12,239	-57.1		30	15.4	30	12,133	-58.5		25	34.9	29	12,248	-58.5		26	16.8
175	29	12,459	-48.7		26	8.8	28	13,168	-58.7		28	10.7	30	13,079	-59.7		29	15.9	30	12,967	-60.4		25	34.4	28	13,079	-61.7		26	18.1
150	29	13,471	-49.5		25	8.0	28	14,126	-63.2		28	10.9	29	14,037	-62.6		29	16.6	30	13,926	-61.3		25	28.3	28	14,027	-64.7		25	17.8
125	27	14,659	-50.6		25	6.9	28	15,232	-68.0		28	9.3	29	15,150	-67.0		30	14.2	30	15,050	-64.0		25	24.4	27	15,131	-68.1		25	15.7
100	27	16,108	-52.0		24	6.2	27	16,553	-73.7		30	3.7	28	16,483	-70.6		31	10.7	30	16,406	-66.7		25	17.9	27	16,463	-70.9		25	10.3
80	27	17,551	-53.1		22	4.3	25	17,855	-73.9		04	4.2	28	17,802	-71.1		34	6.6	30	17,749	-67.9		25	12.7	27	17,778	-72.1		23	5.0
70	27	18,410	-53.8		20	3.8	25	18,637	-72.0		06	4.7	28	18,594	-69.9		01	5.2	30	18,554	-65.9		24	7.5	27	18,567	-70.3		19	1.9
60	27	19,396	-54.5		20	2.4	24	19,555	-67.7		07	6.3	28	19,517	-67.3		04	5.2	30	19,495	-63.9		22	2.4	26	19,489	-67.0		11	2.9
50	27	20,562	-55.1		16	2.1	22	20,664	-61.7		08	5.2	28	20,629	-62.5		06	[illegible].1	30	20,619	-61.1		13	2.0	26	20,604	-61.9		08	4.3
40	26	21,986	-55.3		12	2.8	21	22,063	-56.4		08	6.3	27	22,021	-57.6		06	5.4	30	22,014	-58.1		10	2.8	25	21,998	-57.2		08	4.4
30	26	23,822	-55.3		10	4.0	19	23,912	-51.7		07	5.2	27	23,857	-53.0		07	4.6	30	23,840	-54.7		08	2.5	25	23,839	-52.8		07	4.1
25	26	24,986	-55.4		08	4.5	18	25,102	-48.3		07	5.2	26	25,035	-50.3		08	3.[illegible]	30	25,011	-53.1		08	1.6	24	25,023	-50.5		07	2.5
20	26	26,412	-54.4		09	4.8	15	26,578	-45.5		08	5.3	24	26,495	-47.4		14	.7	30	26,457	-50.6		31	.7	23	26,486	-47.7		24	1.4
15	25	28,268	-52.3		09	5.5	14	28,511	-41.8		10	4.1	22	28,411	-43.2		27	4.9	29	28,348	-47.1		26	3.4	21	28,401	-44.2		26	6.7
10	24	30,918	-47.9		07	3.3	11	31,281	-38.0				19	31,183	-36.9		26	8.4	26	31,067	-40.8		27	10.9	10	31,159	-38.1			
7	18	33,308	-41.7		07	2.5							12	33,667	-32.7				24	33,529	-35.0		27	20.4						
5	8	35,650	-34.0																7	35,872	-30.5									

See reference note at end of table

RAWINSONDE DATA

Average monthly values

APRIL 1967

MONTGOMERY, ALA. — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	61	16.3	13.8	11	.1
1000	30	166	17.3	13.8	18	.8
950	30	606	17.2	10.1	21	3.3
900	30	1,066	15.3	6.4	23	4.3
850	30	1,550	13.8	2.1	24	5.9
800	30	2,059	11.3	-2.3	25	6.1
750	30	2,596	8.4	-6.9	26	6.7
700	30	3,163	5.5	-11.6	27	7.7
650	30	3,762	2.2	-14.0	27	8.8
600	30	4,407	-2.1	-16.5	28	10.5
550	30	5,086	-6.8	-20.1	28	12.1
500	30	5,830	-11.5	-24.7	28	13.4
450	30	6,622	-17.3	-30.8	28	14.2
400	30	7,503	-23.4	-36.4	28	15.9
350	30	8,465	-30.9	-42.5	28	17.3
300	30	9,540	-39.3	-49.8	28	17.9
250	30	10,762	-49.0		29	21.3
200	30	12,192	-58.9		29	22.7
175	30	13,024	-61.5		29	23.2
150	30	13,978	-61.8		29	22.7
125	30	15,100	-64.3		29	19.1
100	30	16,458	-66.1		29	15.0
80	30	17,807	-66.8		30	7.[illegible]
70	30	18,613	-66.0		31	[illegible].4
60	30	19,550	-64.9		34	2.5
50	30	20,669	-61.9		04	2.9
40	30	22,061	-57.7		06	3.7
30	28	23,897	-53.8		05	3.1
25	28	25,071	-52.2		06	2.5
20	28	26,522	-49.4		31	.7
15	27	28,416	-45.7		27	4.6
10	24	31,148	-39.8		27	11.[illegible]
7	19	33,625	-33.5		26	20.9
5	14	36,002	-28.4			

* NANTUCKET, MASS. — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	14	3.9	.5	36	3.0
1000	30	124	4.2	-1.0	34	2.5
950	30	537	3.3	-5.0	33	4.4
900	30	978	1.4	-7.0	32	5.0
850	30	1,438	.3	-8.6	32	7.4
800	30	1,924	-.4	-10.4	32	10.1
750	30	2,437	-2.5	-12.6	32	11.0
700	30	2,984	-4.9	-15.3	31	12.9
650	30	3,560	-8.1	-19.1	31	14.7
600	30	4,183	-11.4	-22.9	31	16.8
550	30	4,838	-15.6	-26.5	31	18.6
500	29	5,563	-20.5	-31.8	30	21.2
450	29	6,328	-25.8	-37.6	30	22.6
400	29	7,179	-31.3	-42.4	30	24.7
350	29	8,113	-37.7	-47.0	30	26.5
300	29	9,162	-44.3		30	30.[illegible]
250	29	10,368	-49.6		30	33.2
200	29	11,816	-52.9		30	29.2
175	29	12,679	-52.4		30	26.5
150	29	13,675	-52.8		30	24.5
125	29	14,848	-54.3		30	20.7
100	29	16,273	-56.0		30	16.6
80	29	17,686	-57.3		30	11.0
70	29	18,530	-57.0		31	7.9
60	29	19,506	-56.3		32	5.5
50	29	20,666	-55.3		35	3.1
40	27	22,087	-54.2		04	3.5
30	27	23,936	-52.9		07	4.7
25	23	25,115	-52.3		08	3.8
20	22	26,560	-51.0		09	4.[illegible]
15	21	28,439	-48.8		10	4.8
10	18	31,142	-44.1		11	.8
7	15	33,563	-37.9		27	6.9
5	6	35,836	-34.3			

* NASHVILLE, TENN. — 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	180	12.3	9.3	19	.4
1000	30	163				
950	30	596	13.0	6.1	21	3.9
900	30	1,049	11.8	2.8	25	6.4
850	30	1,526	10.1	-.3	26	8.4
800	30	2,029	7.8	-2.9	27	9.6
750	30	2,559	5.1	-7.4	27	10.6
700	30	3,119	2.2	-12.0	27	12.7
650	30	3,711	-.7	-14.9	27	13.9
600	30	4,350	-4.7	-17.7	27	15.4
550	30	5,023	-9.2	-22.1	27	16.2
500	30	5,760	-14.0	-25.4	27	19.7
450	30	6,544	-19.4	-30.6	27	23.0
400	30	7,418	-25.6	-35.8	28	24.7
350	30	8,372	-32.7	-42.6	28	25.5
300	30	9,439	-40.9	-48.4	28	28.7
250	30	10,654	-50.4		28	34.0
200	30	12,076	-59.5		28	35.3
175	30	12,911	-59.5		28	32.9
150	30	13,876	-59.4		28	27.4
125	30	15,013	-61.3		28	22.5
100	30	16,389	-62.9		28	17.0
80	30	17,76[illegible]	-63.1		28	9.0
70	30	18,581	-63.0		29	4.2
60	29	19,530	-62.3		32	2.1
50	29	20,662	-59.8		04	2.9
40	29	22,065	-56.9		06	3.8
30	29	23,895	-54.7		07	4.0
25	29	25,065	-53.3		07	3.8
20	28	26,507	-51.1		07	2.2
15	28	28,390	-48.0		28	[illegible]
10	25	31,109	-41.1		26	10.7
7	24	33,561	-35.4		26	19.0
5	10	35,945	-29.7			

NOME, ALASKA — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	5	-4.5	-6.4	13	.6
1000	28	99			22	1.2
950	28	501	-5.8	-7.5	21	4.2
900	28	925	-7.6	-9.7	22	5.7
850	28	1,368	-9.0	-12.8	22	6.5
800	28	1,836	-11.0	-15.4	22	7.2
750	28	2,327	-13.3	-18.8	22	7.4
700	28	2,853	-15.9	-21.6	23	7.1
650	28	3,403	-19.3	-24.5	22	7.7
600	28	3,999	-22.7	-29.2	23	8.7
550	28	4,627	-26.6	-33.5	23	9.4
500	28	5,315	-31.1	-38.2	23	8.8
450	28	6,049	-36.4	-42.4	23	9.6
400	28	6,862	-41.8	-44.1	23	12.0
350	28	7,756	-46.7		24	13.7
300	28	8,770	-50.4		24	16.3
250	28	9,953	-52.2		24	17.5
200	28	11,400	-50.7		24	18.2
175	28	12,272	-50.0		24	18.5
150	28	13,279	-50.2		24	17.8
125	28	14,469	-50.4		24	18.5
100	28	15,926	-50.3		23	18.2
80	28	17,383	-50.0		23	17.3
70	28	18,255	-49.8		23	16.4
60	28	19,266	-49.3		24	14.6
50	28	20,460	-49.3		23	14.4
40	28	21,925	-49.3		23	12.1
30	28	23,807	-50.2		23	12.7
25	28	24,997	-50.3		23	11.7
20	21	26,456	-49.8		23	11.6
15	5	28,292	-51.3			
10						
7						
5						

* NORTH PLATTE, NEBR. — 913 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	848	3.9	-.5	09	.6
1000	30	103				
950	30	523				
900	30	968	4.7	-1.5	15	1.8
850	30	1,436	6.0	-2.0	22	3.0
800	30	1,933	5.9	-5.6	24	5.0
750	30	2,457	3.3	-9.4	25	7.5
700	30	3,016	-.1	-12.3	25	10.0
650	30	3,599	-3.9	-15.7	24	12.5
600	30	4,232	-8.6	-19.7	24	14.2
550	30	4,896	-13.6	-24.4	24	15.7
500	30	5,619	-19.1	-30.4	24	17.8
450	30	6,388	-24.6	-36.3	25	21.5
400	30	7,243	-30.6	-41.5	25	25.6
350	30	8,178	-37.7	-47.0	25	29.2
300	30	9,226	-44.8		25	33.[illegible]
250	30	10,428	-51.4		25	37.9
200	30	11,860	-55.3		24	36.2
175	30	12,711	-55.3		25	33.1
150	30	13,698	-54.4		25	27.3
125	30	14,861	-56.4		25	21.5
100	30	16,270	-58.4		25	16.0
80	30	17,670	-59.5		26	9.1
70	30	18,506	-58.7		25	5.2
60	30	19,476	-58.1		23	2.6
50	29	20,630	-56.7		14	.9
40	28	22,050	-55.4		10	3.0
30	28	23,889	-54.5		09	4.3
25	28	25,058	-53.9		09	6.2
20	27	26,495	-52.6		09	6.0
15	27	28,364	-50.2		08	5.1
10	26	31,036	-45.3		07	2.2
7	25	33,455	-39.2		29	2.6
5	6	35,802	-34.4			

* OAKLAND, CALIF. — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	6	7.7	5.3	17	.6
1000	30	139	7.3	4.3	22	1.0
950	30	558	4.4	1.6	25	2.8
900	30	998	1.6	-1.7	25	4.0
850	30	1,457	-1.2	-6.2	25	4.6
800	30	1,938	-3.9	-10.9	25	4.9
750	30	2,441	-7.0	-15.2	25	5.4
700	30	2,981	-10.1	-19.4	25	6.1
650	30	3,542	-13.6	-23.8	25	7.0
600	30	4,152	-17.8	-28.8	25	8.4
550	30	4,793	-22.6	-33.0	26	9.5
500	30	5,490	-27.8	-38.0	26	11.2
450	30	6,235	-33.0	-43.5	26	14.1
400	30	7,060	-37.8	-48.4	26	18.1
350	30	7,972	-41.9	-51.0	26	22.2
300	30	9,006	-45.9		26	24.3
250	30	10,211	-49.1		26	25.1
200	30	11,669	-50.5		26	23.1
175	30	12,539	-50.7		26	20.4
150	30	13,542	-51.6		26	19.0
125	30	14,721	-53.3		25	15.7
100	30	16,153	-54.6		24	11.7
80	30	17,579	-55.5		23	7.6
70	29	18,425	-56.4		22	6.0
60	29	19,401	-57.0		20	4.3
50	29	20,555	-57.1		17	2.3
40	28	21,967	-56.5		12	2.5
30	27	23,797	-55.6		10	2.9
25	27	24,961	-54.7		09	3.0
20	24	26,394	-53.4		08	2.4
15	22	28,241	-51.7		36	.6
10	19	30,903	-46.1		26	2.6
7	12	33,321	-40.7		27	4.0
5						

OKLAHOMA CITY, OKLA. — 967 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	392	15.1	11.7	16	2.[illegible]
1000	30	106				
950	30	544	14.8	9.9	17	6.0
900	30	1,000	14.3	6.3	20	10.6
850	30	1,483	13.6	2.9	23	12.0
800	30	1,992	11.4	-.6	24	12.1
750	30	2,523	8.5	-6.5	24	12.3
700	30	3,096	5.1	-10.9	25	13.8
650	30	3,691	1.0	-14.5	25	15.8
600	30	4,334	-3.6	-17.8	25	16.9
550	30	5,010	-8.2	-21.9	25	19.6
500	30	5,750	-13.3	-26.1	25	21.2
450	30	6,536	-19.1	-29.8	25	23.0
400	30	7,410	-25.3	-34.9	25	25.9
350	30	8,365	-32.4	-43.1	25	29.0
300	30	9,433	-40.6	-47.8	25	33.1
250	30	10,649	-49.8		25	36.4
200	30	12,075	-59.2		25	38.2
175	30	12,907	-60.8		26	35.9
150	30	13,867	-60.2		26	31.1
125	29	15,001	-62.1		26	26.2
100	29	16,372	-64.4		26	18.8
80	28	17,732	-64.8		26	10.0
70	27	18,548	-64.0		24	6.[illegible]
60	27	19,495	-62.1		21	3.2
50	26	20,627	-59.8		13	2.0
40	26	22,028	-57.6		09	5.3
30	26	23,856	-54.9		09	4.5
25	26	25,024	-53.8		09	3.7
20	26	26,463	-51.8		08	1.6
15	24	28,331	-48.8		24	2.3
10	21	31,014	-43.6		26	9.0
7	9	33,454	-38.6			
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OMAHA, NEBR. — 966 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	403	6.6	3.4	10	1.3
1000	30	113				
950	30	535	6.6	2.5	13	2.1
900	30	982	7.3	.4	19	4.5
850	30	1,452	6.7	-3.1	23	6.0
800	30	1,949	5.2	-6.2	25	7.1
750	30	2,472	3.1	-9.5	26	9.4
700	30	3,031	-.3	-12.1	26	10.8
650	30	3,613	-4.0	-15.4	26	13.1
600	30	4,247	-8.5	-18.6	25	16.3
550	30	4,910	-13.3	-23.6	26	18.2
500	30	5,636	-18.1	-29.4	25	19.8
450	30	6,409	-23.6	-35.1	26	22.7
400	30	7,267	-29.3	-41.1	26	27.1
350	30	8,207	-36.1	-46.2	25	30.8
300	30	9,261	-43.6		25	35.2
250	30	10,465	-51.1		26	39.7
200	30	11,897	-56.4		26	36.0
175	30	12,745	-55.4		26	34.0
150	30	13,730	-54.9		26	28.7
125	29	14,895	-56.9		26	22.9
100	28	16,301	-58.7		27	16.5
80	26	17,699	-59.2		27	9.7
70	26	18,535	-59.1		26	6.5
60	26	19,501	-58.6		26	4.7
50	25	20,652	-56.9		27	1.2
40	24	22,070	-55.6		05	1.3
30	24	23,910	-54.1		08	2.7
25	24	25,081	-53.6		08	2.8
20	24	26,519	-52.6		08	2.4
15	23	28,386	-50.3		08	1.5
10	22	31,051	-46.5		25	2.1
7	18	33,445	-42.3		26	2.9
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* PAGO PAGO, AMERICAN SAMOA — 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	5	28.4	24.3	05	1.8
1000	30	95	27.2	22.9	03	2.1
950	30	546	23.4	19.3	01	3.7
900	30	1,019	20.5	16.2	36	3.6
850	30	1,512	17.9	12.1	36	2.9
800	30	2,029	15.2	8.5	36	2.4
750	30	2,574	12.3	4.8	34	1.7
700	30	3,151	9.4	1.4	33	1.3
650	30	3,763	6.0	-3.2	30	1.5
600	30	4,416	2.4	-6.4	30	1.5
550	30	5,108	-1.3	-11.2	28	.5
500	30	5,870	-5.5	-15.3	20	1.0
450	30	6,691	-10.3	-20.5	20	1.5
400	30	7,589	-15.6	-28.7	21	2.4
350	30	8,583	-22.5	-35.7	17	3.7
300	28	9,696	-30.9	-44.4	18	5.4
250	28	10,962	-41.0	-51.1	19	8.9
200	28	12,439	-53.4		20	11.5
175	28	13,284	-60.3		19	12.0
150	28	14,229	-67.5		18	10.3
125	28	15,307	-74.3		17	8.8
100	28	16,593	-78.0		14	6.0
80	28	17,880	-72.9		10	4.6
70	28	18,669	-69.6		09	4.4
60	28	19,596	-66.1		09	4.5
50	28	20,715	-61.6		08	5.6
40	28	22,114	-57.0		08	5.9
30	27	23,955	-52.3		09	6.5
25	26	25,142	-49.4		09	[illegible].8
20	26	26,615	-45.9		09	12.7
15	25	28,545	-41.8		09	17.6
10	24	31,321	-36.4		09	22.9
7	15	33,824	-32.5			
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* PEORIA, ILL. — 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	200	8.1	3.3	19	1.3
1000	30	139				
950	30	564	8.3	1.9	22	4.6
900	30	1,010	7.2	-1.4	26	7.1
850	30	1,479	6.1	-5.0	27	8.[illegible]
800	30	1,975	4.7	-6.2	27	10.7
750	30	2,501	2.3	-8.8	27	12.8
700	30	3,054	-.6	-12.8	27	14.6
650	30	3,642	-4.0	-16.0	27	17.1
600	30	4,271	-8.1	-20.1	27	18.9
550	30	4,937	-12.5	-24.9	27	20.5
500	30	5,663	-17.2	-29.9	27	23.7
450	30	6,441	-22.9	-35.5	27	25.3
400	29	7,296	-28.6	-40.2	27	30.5
350	29	8,240	-35.6	-45.6	27	33.8
300	29	9,296	-42.8		27	37.2
250	29	10,503	-51.3		27	40.3
200	29	11,929	-57.3		28	39.3
175	29	12,773	-56.6		28	35.1
150	29	13,753	-56.4		28	29.8
125	29	14,907	-57.7		28	23.8
100	29	16,308	-59.8		[illegible]	16.9
80	29	17,699	-60.6		28	9.1
70	29	18,530	-60.2		28	6.9
60	29	19,493	-59.4		29	4.0
50	29	20,638	-58.0		33	1.0
40	29	22,049	-56.4		05	1.6
30	29	23,880	-55.1		07	4.1
25	28	25,046	-54.2		08	5.4
20	28	26,483	-52.6		08	5.[illegible]
15	28	28,353	-49.9		08	3.5
10	26	31,030	-44.3		21	.5
7	19	33,441	-39.2		27	7.1
5	9	35,702	-34.6			

* PITTSBURGH, PA. — 975 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	359	6.6	2.6	27	1.6
1000	30	151				
950	30	577	7.6	.8	27	3.0
900	30	1,019	5.6	-2.1	29	6.7
850	30	1,485	4.1	-5.8	29	[illegible].0
800	30	1,977	2.3	-8.7	30	10.5
750	30	2,495	.1	-11.8	29	12.5
700	30	3,046	-2.8	-14.3	29	14.1
650	30	3,629	-5.8	-17.1	29	15.6
600	30	4,254	-9.3	-21.5	29	17.9
550	30	4,920	-13.1	-24.7	29	19.8
500	30	5,642	-18.0	-29.1	29	21.2
450	30	6,418	-23.3	-34.0	29	23.3
400	30	7,274	-29.3	-39.9	29	25.8
350	30	8,215	-35.9	-46.1	29	30.0
300	30	9,270	-42.8		29	34.7
250	30	10,479	-50.5		29	36.7
200	30	11,913	-56.1		29	36.3
175	30	12,763	-55.8		30	31.8
150	30	13,746	-55.3		29	26.6
125	30	14,907	-56.6		29	20.8
100	30	16,316	-58.2		29	17.1
80	30	17,718	-59.0		30	10.8
70	30	18,554	-58.9		30	7.4
60	30	19,522	-58.2		32	5.6
50	30	20,674	-56.9		33	4.0
40	29	22,098	-55.3		36	1.9
30	29	23,938	-54.1		04	2.5
25	29	25,111	-53.1		07	3.4
20	29	26,553	-51.7		08	3.8
15	26	28,434	-48.5		08	2.5
10	26	31,130	-43.5		28	1.8
7	26	33,555	-38.3		28	5.8
5	16	35,914	-31.9			

* PONAPE, CAROLINE IS. — 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	39	27.9	23.9	07	3.0
1000	30	86	27.4	23.4	08	3.8
950	30	530	23.5	19.3	08	7.4
900	30	1,011	20.4	15.6	08	7.6
850	30	1,504	17.8	11.9	09	[illegible].6
800	30	2,021	15.2	8.0	09	4.4
750	30	[illegible],567	12.5	3.5	10	2.8
700	30	3,143	9.4	-.2	10	2.6
650	30	3,754	6.1	-5.2	09	2.3
600	30	4,408	2.5	-9.6	07	1.4
550	30	5,105	-1.3	-14.3	04	1.2
500	30	5,862	-5.3	-19.5	05	.8
450	30	6,680	-9.6	-24.4	02	1.9
400	30	7,586	-15.0	-28.7	32	1.2
350	30	8,583	-21.4	-35.6	26	2.7
300	30	9,701	-29.9	-44.0	26	3.5
250	30	10,974	-40.2	-52.2	24	4.6
200	30	12,456	-52.9		23	5.0
175	30	13,303	-60.1		24	5.1
150	30	14,249	-67.3		27	4.8
125	30	15,328	-74.1		31	2.3
100	30	16,610	-79.3		04	2.1
80	30	17,881	-76.1		30	.1
70	29	18,665	-70.0		27	4.2
60	29	19,593	-64.7		26	8.9
50	29	20,715	-61.2		27	10.5
40	29	22,110	-57.7		27	8.9
30	27	23,948	-52.7		28	3.7
25	27	25,129	-50.6		09	2.0
20	27	26,590	-48.5		10	9.8
15	27	28,497	-44.8		09	19.2
10	23	31,249	-38.2		09	29.4
7	16	33,735	-34.4			
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PORTLAND, MAINE — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	20	2.4	-5.0	35	1.7
1000	30	133	2.1	-6.6	35	3.3
950	30	546	.9	-7.7	35	4.0
900	30	980	-.9	-9.2	35	4.3
850	30	1,436	-1.7	-10.7	33	5.4
800	30	1,917	-3.4	-12.4	32	7.4
750	30	2,424	-5.0	-16.0	32	10.3
700	30	2,967	-7.3	-17.7	31	11.6
650	30	3,536	-10.0	-19.8	31	13.0
600	30	4,156	-13.2	-23.9	31	14.4
550	30	4,808	-17.3	-28.1	31	15.9
500	30	5,522	-21.6	-32.8	30	17.3
450	30	6,285	-26.7	-37.8	30	19.6
400	30	7,132	-32.8	-42.7	30	21.1
350	30	8,059	-39.4	-46.5	30	22.6
300	30	9,100	-46.0		30	25.3
250	30	10,298	-51.5		30	28.2
200	30	11,744	-52.1		30	24.9
175	30	12,610	-51.6		30	22.4
150	29	13,614	-51.5		29	20.1
125	29	14,794	-53.2		30	15.3
100	29	16,226	-54.8		29	12.5
80	29	17,647	-56.0		30	10.1
70	29	18,495	-55.9		30	7.4
60	29	19,477	-55.2		32	4.7
50	29	20,641	-54.6		33	2.4
40	29	22,069	-54.0		02	1.8
30	28	23,916	-53.9		07	2.7
25	28	25,087	-53.4		08	2.8
20	27	26,522	-52.4		07	2.7
15	26	28,388	-50.7		08	1.9
10	23	31,043	-46.8		22	.6
7	15	33,436	-42.0		27	11.0
5	8	35,758	-36.6			

* QUILLAYUTE, WASH. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	58	2.9	2.4	09	1.3
1000	30	115	3.4	2.1	09	1.6
950	30	529	2.8	-.9	14	2.7
900	30	967	.2	-4.3	17	3.3
850	30	1,423	-2.5	-7.1	17	3.5
800	30	1,902	-5.5	-10.3	18	3.5
750	30	2,405	-8.7	-14.6	18	3.6
700	30	2,937	-12.2	-18.3	19	3.0
650	30	3,498	-16.2	-23.7	19	3.3
600	30	4,096	-20.1	-28.5	18	3.4
550	30	4,735	-24.4	-32.7	17	3.3
500	30	5,423	-29.4	-36.9	16	3.4
450	30	6,162	-34.9	-40.7	16	3.4
400	30	6,979	-40.5	-42.7	15	3.2
350	30	7,879	-45.2		11	3.7
300	30	8,898	-49.6		08	4.4
250	30	10,086	-50.8		02	2.6
200	29	11,545	-49.3		31	1.6
175	29	12,420	-49.1		31	2.5
150	28	13,429	-49.2		26	1.4
125	28	14,622	-50.0		26	1.0
100	28	16,079	-50.8		23	1.6
80	25	17,529	-52.1		22	1.5
70	25	18,391	-52.8		19	.9
60	25	19,384	-53.3		19	.9
50	25	20,557	-53.7		12	.8
40	24	21,988	-54.1		11	2.9
30	22	23,833	-54.1		10	3.4
25	22	25,004	-53.8		10	5.7
20	20	26,433	-53.8		09	6.6
15	19	28,279	-53.1		08	6.9
10	17	30,926	-49.9		09	10.4
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RAPID CITY, S. DAK. — 900 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	966	2.4	-2.0	35	2.4
1000	30	105				
950	30	526				
900	30	967			01	1.4
850	30	1,430	3.4	-4.0	28	3.1
800	30	1,921	2.4	-7.3	27	4.7
750	30	2,437	.2	-9.3	27	6.1
700	30	2,992	-2.9	-12.6	26	7.4
650	30	3,569	-7.1	-16.6	26	9.7
600	30	4,194	-11.6	-21.0	25	11.6
550	30	4,847	-16.4	-27.1	24	13.7
500	30	5,565	-21.8	-32.1	24	15.4
450	30	6,325	-27.7	-37.0	24	17.3
400	30	7,168	-33.9	-42.6	24	19.3
350	30	8,090	-41.0	-45.0	24	22.4
300	30	9,123	-47.6		24	27.6
250	30	10,314	-52.3		24	31.1
200	30	11,751	-53.8		25	27.9
175	30	12,610	-52.7		25	25.8
150	30	13,606	-52.6		25	22.3
125	30	14,781	-54.0		25	18.1
100	30	16,211	-55.5		25	13.5
80	30	17,624	-57.8		25	8.8
70	29	18,466	-57.2		25	5.9
60	29	19,442	-57.0		24	3.3
50	29	20,599	-56.1		27	1.3
40	29	22,021	-55.2		09	2.1
30	29	23,860	-54.5		09	4.3
25	29	25,030	-53.9		09	5.6
20	29	26,465	-53.1		09	6.0
15	28	28,322	-51.8		09	7.1
10	24	30,973	-47.6		09	4.3
7	8	33,334	-44.2			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST CLOUD, MINN. 977 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	316	2.0	-1.9	18	.8
1000	30	123				
950	30	539	1.9	-2.4	18	1.3
900	30	975	1.5	-3.6	24	2.9
850	30	1,436	1.7	-5.1	27	5.5
800	30	1,924	.4	-7.9	27	7.2
750	30	2,438	-1.8	-11.5	27	9.1
700	30	2,987	-4.8	-14.3	27	11.1
650	30	3,561	-8.5	-19.2	27	12.8
600	30	4,183	-12.2	-23.0	27	15.1
550	30	4,837	-16.3	-28.2	27	17.1
500	30	5,553	-21.4	-33.5	27	18.7
450	30	6,313	-26.9	-38.5	27	21.1
400	30	7,162	-32.9	-44.6	26	24.3
350	30	8,088	-39.7	-49.3	26	26.9
300	30	9,127	-46.2		26	30.2
250	30	10,324	-51.1		26	32.3
200	30	11,764	-53.2		26	32.0
175	30	12,624	-53.2		27	27.9
150	30	13,620	-52.3		27	24.8
125	30	14,796	-53.5		27	19.3
100	30	16,227	-55.5		27	16.1
80	30	17,646	-56.0		27	11.4
70	30	18,493	-56.3		27	7.8
60	30	19,473	-55.8		28	5.1
50	30	20,634	-55.1		30	2.6
40	30	22,061	-54.2		02	1.7
30	30	23,906	-53.6		07	3.3
25	30	25,080	-52.9		08	4.2
20	30	26,520	-52.5		08	5.6
15	30	28,384	-50.8		08	6.1
10	28	31,042	-47.3		08	7.6
7	22	33,427	-43.2		14	2.0
5	5	35,618	-41.7			

ST PAUL IS., ALASKA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	10	1.7	-.5	20	4.9
1000	30	115			21	5.8
950	30	526	-1.5	-2.4	22	8.8
900	30	956	-3.7	-4.7	22	10.0
850	30	1,406	-5.3	-7.7	23	10.4
800	30	1,881	-7.3	-13.2	23	10.7
750	30	2,380	-9.4	-17.9	23	10.7
700	30	2,913	-12.2	-20.8	23	12.0
650	30	3,474	-15.1	-23.3	23	12.6
600	30	4,079	-18.5	-27.7	23	14.2
550	30	4,719	-22.6	-31.5	22	13.6
500	30	5,416	-27.1	-35.2	23	15.6
450	30	6,163	-32.2	-39.3	23	16.1
400	30	6,991	-37.8	-43.6	24	18.3
350	30	7,901	-43.4	-46.7	24	21.6
300	30	8,924	-49.3		24	23.7
250	30	10,108	-53.5		24	21.6
200	30	11,544	-52.2		24	18.6
175	30	12,411	-51.1		24	18.7
150	30	13,413	-51.5		23	17.5
125	30	14,595	-51.8		23	16.2
100	30	16,040	-52.2		23	14.2
80	30	17,485	-51.8		23	13.7
70	30	18,350	-51.6		23	13.0
60	30	19,350	-51.3		23	11.2
50	29	20,536	-50.8		22	9.9
40	29	21,987	-51.2		21	8.1
30	29	23,855	-51.8		20	7.1
25	28	25,039	-51.9		20	6.6
20	28	26,485	-51.8		19	5.7
15	27	28,360	-50.8		17	6.3
10	19	31,043	-47.0		15	6.6
7	12	33,413	-44.7			
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SALEM, OREG. 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	61	3.0	.8	18	1.9
1000	30	123	4.1	1.5	18	2.4
950	30	538	3.4	.4	19	3.3
900	30	978	.9	-2.5	20	3.9
850	30	1,435	-2.3	-5.9	21	4.7
800	30	1,914	-5.5	-10.1	22	5.0
750	30	2,414	-8.6	-14.2	22	5.5
700	30	2,949	-12.0	-19.9	22	5.3
650	30	3,506	-15.7	-25.2	22	5.9
600	30	4,110	-19.8	-29.5	22	6.4
550	30	4,743	-24.6	-32.0	21	7.2
500	30	5,436	-29.7	-37.6	21	7.8
450	30	6,170	-35.2	-42.3	21	8.1
400	30	6,990	-41.1	-44.6	21	7.5
350	30	7,886	-46.4		21	6.1
300	30	8,901	-49.9		21	2.4
250	30	10,093	-49.8		25	2.1
200	30	11,556	-48.5		27	3.7
175	30	12,435	-48.5		26	3.3
150	29	13,447	-49.2		25	3.9
125	29	14,640	-50.0		24	3.2
100	29	16,095	-51.1		22	3.6
80	29	17,543	-51.9		21	2.9
70	29	18,404	-53.3		19	2.9
60	29	19,394	-54.2		17	1.7
50	28	20,564	-54.3		13	1.7
40	28	21,992	-54.6		10	2.4
30	28	23,833	-54.9		09	4.2
25	28	24,999	-54.8		09	4.5
20	28	26,428	-54.2		08	6.5
15	27	28,279	-52.3		09	6.7
10	24	30,932	-48.1		09	6.1
7	5	33,366	-40.6			
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SALT LAKE CITY, UTAH 866 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,288	4.3	-2.2	17	2.8
1000	30	103				
950	30	528				
900	30	977				
850	30	1,442	5.2	-3.9	17	4.5
800	30	1,935	2.5	-6.7	19	6.6
750	30	2,453	-1.4	-9.7	21	6.7
700	30	2,999	-5.9	-12.8	22	8.0
650	30	3,572	-10.4	-16.6	22	10.4
600	30	4,186	-14.9	-21.6	22	11.8
550	30	4,836	-19.5	-26.9	22	13.2
500	30	5,540	-24.6	-31.7	22	14.5
450	30	6,297	-30.5	-37.3	22	17.0
400	30	7,126	-36.3	-42.9	23	21.7
350	30	8,041	-42.2	-47.3	23	27.0
300	30	9,071	-47.8		23	30.3
250	30	10,263	-51.6		23	31.2
200	30	11,707	-51.9		24	27.3
175	30	12,574	-51.1		23	23.5
150	30	13,574	-52.1		23	20.2
125	30	14,751	-53.5		23	18.7
100	30	16,183	-55.0		22	13.4
80	30	17,602	-57.2		22	9.8
70	30	18,445	-57.7		22	6.4
60	30	19,416	-58.4		20	3.0
50	29	20,565	-57.5		16	1.5
40	27	21,978	-56.6		10	2.3
30	27	23,804	-56.1		09	4.2
25	26	24,964	-55.2		09	4.4
20	23	26,393	-54.0		09	5.6
15	22	28,250	-51.7		08	4.6
10	13	30,959	-46.2			
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SAN DIEGO, CALIF. 1002 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	124	8.6	7.3	08	.8
1000	30	139			05	.7
950	30	564	7.6	4.4	29	2.7
900	30	1,008	5.1	.7	29	3.9
850	30	1,473	3.1	-5.9	28	5.9
800	30	1,964	1.8	-9.9	27	8.2
750	30	2,483	.0	-14.0	26	9.8
700	30	3,032	-2.3	-17.1	25	12.4
650	30	3,613	-5.2	-20.6	25	16.2
600	30	4,243	-8.3	-24.3	25	19.3
550	30	4,910	-12.0	-28.0	25	22.6
500	30	5,638	-16.8	-31.6	25	26.1
450	30	6,414	-22.3	-35.6	25	29.0
400	30	7,277	-28.6	-41.1	25	31.7
350	30	8,220	-35.2	-46.8	25	33.8
300	30	9,278	-42.7		25	36.7
250	30	10,486	-51.3		25	38.3
200	30	11,913	-57.3		25	39.6
175	30	12,759	-56.2		25	36.1
150	30	13,738	-56.7		25	33.8
125	30	14,888	-58.3		24	28.0
100	30	16,286	-59.7		24	19.0
80	29	17,678	-60.7		23	12.2
70	29	18,508	-60.5		23	8.7
60	29	19,467	-60.4		23	3.5
50	29	20,605	-59.2		19	1.1
40	29	22,009	-56.7		09	2.2
30	29	23,840	-55.0		09	2.0
25	29	25,006	-54.2		10	.5
20	29	26,441	-52.7		25	.9
15	29	28,309	-49.7		27	3.6
10	28	30,992	-44.0		28	9.0
7	24	33,397	-39.6		27	10.7
5	20	35,717	-35.3			

* SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	6	24.2	18.8	09	2.4
1000	28	145	23.1	17.8	08	4.5
950	28	587	19.2	14.7	07	5.9
900	28	1,054	15.9	10.8	07	5.5
850	28	1,537	12.9	6.6	06	4.8
800	28	2,045	10.6	.5	05	2.8
750	28	2,582	10.4	-7.8	03	2.1
700	28	3,154	7.7	-11.1	35	1.3
650	28	3,753	4.6	-15.3	35	2.2
600	28	4,408	.9	-19.6	33	2.9
550	28	5,096	-3.3	-23.4	31	3.7
500	28	5,849	-8.1	-27.0	30	5.2
450	28	6,653	-13.7	-31.7	28	7.0
400	28	7,544	-20.0	-36.7	28	9.6
350	28	8,521	-26.9	-42.7	28	13.9
300	27	9,616	-34.8	-49.0	28	19.5
250	26	10,864	-44.3		27	25.1
200	25	12,323	-55.2		26	29.4
175	25	13,164	-60.7		26	29.0
150	24	14,113	-65.7		27	24.3
125	21	15,206	-70.7		27	18.7
100	16	16,522	-74.0		28	11.7
80	14	17,825	-72.6		31	7.8
70	13	18,609	-70.0		33	4.0
60	12	19,538	-65.0		02	3.0
50	11	20,664	-60.4		06	3.2
40	10	22,066	-56.0		07	4.7
30	10	23,918	-51.4		09	6.3
25	10	25,110	-48.4		10	7.3
20	10	26,587	-46.0		10	8.3
15	9	28,506	-43.1			
10	9	31,276	-37.5			
7	7	33,743	-33.1			
5	5	36,117	-28.5			

SAN NICOLAS, CALIF. 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	174	8.8	6.5	30	2.1
1000	30	141				
950	30	567	8.2	1.0	30	6.4
900	30	1,011	5.4	-3.9	29	6.1
850	30	1,476	2.8	-7.6	28	6.4
800	30	1,965	1.0	-13.3	27	7.1
750	30	2,481	-1.5	-19.0	26	8.9
700	30	3,028	-4.3	-22.5	26	11.0
650	30	3,608	-7.1	-25.1	26	14.3
600	30	4,229	-10.5	-28.2	26	18.1
550	30	4,893	-14.3	-32.4	26	21.2
500	30	5,610	-18.8	-36.7	25	24.5
450	30	6,387	-23.9	-41.2	25	27.8
400	30	7,236	-30.1	-45.8	25	31.1
350	30	8,173	-36.7	-51.0	25	34.4
300	30	9,224	-44.2	-57.6	25	37.0
250	30	10,425	-51.8	-64.5	25	36.3
200	30	11,855	-55.7	-68.5	25	37.3
175	30	12,705	-55.9	-68.8	25	33.7
150	30	13,686	-56.0	-69.5	25	29.2
125	30	14,839	-58.3		25	25.4
100	30	16,239	-59.6		24	19.8
80	30	17,634	-60.2		23	12.4
70	29	18,469	-60.1		22	7.6
60	29	19,431	-60.1		22	4.9
50	29	20,571	-58.9		17	1.2
40	28	21,978	-56.8		09	2.9
30	27	23,809	-55.4		17	1.1
25	25	24,971	-54.2		09	1.7
20	25	26,409	-52.2		07	.7
15	24	28,283	-49.0		26	5.2
10	22	30,982	-43.3		26	12.5
7	11	33,421	-38.0		27	16.5
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* SAULT STE MARIE, MICH. 990 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	221	-.7	-4.9	06	1.2
1000	30	142				
950	30	551	.3	-6.0	26	1.3
900	30	986	-.1	-6.8	27	5.2
850	30	1,443	-1.7	-8.5	28	6.8
800	30	1,925	-3.1	-11.8	28	8.0
750	30	2,432	-5.0	-13.7	28	9.0
700	30	2,975	-7.4	-16.4	28	10.6
650	30	3,544	-10.2	-18.8	28	12.8
600	30	4,163	-13.2	-22.3	28	15.1
550	30	4,814	-17.1	-27.1	28	16.2
500	30	5,530	-21.8	-31.7	28	19.2
450	30	6,289	-27.2	-36.4	28	20.9
400	30	7,135	-33.4	-42.1	28	24.4
350	30	8,059	-40.3	-45.2	28	26.3
300	30	9,096	-46.3		28	29.9
250	30	10,294	-51.0		28	33.3
200	30	11,739	-51.8		28	31.6
175	30	12,603	-51.5		28	28.7
150	30	13,604	-51.6		28	24.5
125	30	14,785	-52.4		28	21.7
100	30	16,222	-54.0		28	18.3
80	30	17,650	-55.1		29	13.0
70	30	18,502	-54.9		29	10.6
60	30	19,489	-54.6		29	7.3
50	30	20,656	-54.2		30	5.0
40	30	22,090	-53.3		34	3.1
30	30	23,945	-52.9		06	2.7
25	30	25,122	-52.4		06	3.8
20	30	26,567	-51.6		08	5.7
15	29	28,449	-49.9		08	7.3
10	27	31,116	-45.9		07	6.1
7	23	33,525	-41.1		07	3.8
5	11	35,807	-37.3			

SHEMYA, ALASKA 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	38	1.0	-1.2	24	3.8
1000	30	100			24	3.7
950	30	512	-2.4	-4.0	25	4.5
900	30	938	-4.8	-7.0	25	4.6
850	30	1,386	-7.1	-10.4	25	4.7
800	30	1,858	-9.1	-14.2	25	5.7
750	30	2,356	-11.5	-18.4	25	6.8
700	30	2,882	-14.3	-22.5	25	7.7
650	30	3,441	-17.4	-26.3	25	8.7
600	30	4,037	-20.7	-29.8	25	10.1
550	30	4,674	-24.5	-34.1	24	11.7
500	30	5,365	-28.5	-37.6	24	12.9
450	30	6,108	-33.2	-41.5	24	13.7
400	30	6,932	-38.4	-43.4	24	17.7
350	30	7,839	-44.2		26	16.6
300	30	8,860	-49.7		26	16.6
250	30	10,041	-53.5		25	16.7
200	30	11,477	-52.1		24	16.7
175	30	12,344	-51.3		24	16.8
150	30	13,345	-51.4		24	16.9
125	30	14,528	-51.9		23	16.9
100	30	15,972	-52.4		23	16.1
80	30	17,413	-52.6		23	14.9
70	30	18,276	-52.2		22	15.1
60	30	19,275	-51.7		22	12.7
50	30	20,459	-51.4		22	11.7
40	30	21,909	-51.3		21	11.1
30	30	23,776	-51.8		21	8.8
25	30	24,957	-52.1		20	7.2
20	30	26,402	-51.9		20	6.1
15	29	28,268	-51.0		18	3.8
10	22	30,920	-48.9		20	3.7
7	11	33,313	-46.3		13	3.7
5	7	35,575	-45.0			

* SHREVEPORT, LA. 1007 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	79	17.1	15.7	15	2.7
1000	30	136	17.0	15.3	16	3.6
950	30	576	16.8	13.3	19	8.6
900	30	1,036	15.6	8.6	20	9.2
850	30	1,520	14.4	1.3	22	8.9
800	30	2,031	12.4	-4.7	23	8.4
750	30	2,566	9.3	-8.2	24	8.8
700	30	3,138	6.1	-12.0	25	9.1
650	30	3,736	2.5	-16.0	26	10.4
600	30	4,383	-2.0	-18.7	26	11.8
550	30	5,060	-6.8	-22.8	26	13.1
500	30	5,806	-11.8	-27.1	26	14.6
450	30	6,597	-17.7	-31.4	26	16.3
400	30	7,477	-23.8	-35.7	26	18.1
350	30	8,438	-31.0	-42.2	26	20.6
300	30	9,511	-39.6	-49.8	27	22.7
250	30	10,733	-49.3		27	25.7
200	30	12,160	-59.6		27	25.6
175	30	12,989	-62.1		27	26.5
150	30	13,943	-62.2		27	26.9
125	30	15,063	-64.6		27	21.3
100	30	16,419	-66.8		27	14.9
80	30	17,763	-66.9		27	9.0
70	30	18,571	-66.0		26	4.6
60	30	19,509	-64.1		21	1.3
50	30	20,632	-61.3		11	2.5
40	30	22,027	-57.7		09	3.1
30	30	23,856	-54.3		07	3.5
25	29	25,029	-52.4		08	2.3
20	29	26,476	-50.3		32	.2
15	27	28,368	-46.2		27	4.9
10	26	31,098	-40.2		27	12.0
7	22	33,558	-34.0		27	17.3
5	9	35,930	-29.2			

SPOKANE, WASH. 929 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	717	1.4	-1.8	15	1.6
1000	30	114				
950	30	531				
900	30	969	2.6	-4.1	16	2.0
850	30	1,430	.3	-6.6	16	2.3
800	30	1,914	-3.0	-9.5	19	2.2
750	30	2,420	-6.5	-12.4	20	3.1
700	30	2,958	-10.2	-16.2	22	3.7
650	30	3,520	-13.9	-20.8	22	3.8
600	30	4,129	-18.0	-25.5	21	4.4
550	30	4,770	-22.2	-30.8	20	4.6
500	30	5,469	-27.2	-34.8	20	5.1
450	30	6,215	-32.7	-39.9	18	6.9
400	30	7,040	-39.0	-43.7	19	8.3
350	30	7,942	-45.9		18	9.1
300	30	8,953	-51.9		19	8.2
250	30	10,131	-52.5		20	6.7
200	30	11,581	-49.6		21	6.7
175	30	12,458	-48.9		21	6.5
150	30	13,469	-48.9		22	6.4
125	30	14,665	-49.8		22	6.2
100	30	16,121	-50.8		21	5.5
80	30	17,571	-52.2		21	4.2
70	30	18,431	-53.5		21	2.9
60	30	19,420	-53.8		20	1.7
50	30	20,591	-53.8		15	1.9
40	30	22,024	-53.8		11	2.9
30	30	23,871	-53.9		09	4.6
25	29	25,043	-53.7		09	6.5
20	28	26,478	-52.9		09	6.7
15	28	28,339	-51.6		08	8.3
10	28	30,988	-48.7		09	8.6
7	26	33,363	-43.1		09	7.4
5	18	35,608	-38.0			

SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	10	25.2	21.2	09	4.3
1000	30	124	24.3	20.6	09	5.4
950	30	574	20.8	18.1	10	6.9
900	30	1,040	17.8	13.3	10	6.8
850	30	1,527	15.2	9.0	10	5.6
800	30	2,040	12.5	4.6	11	4.2
750	30	2,579	10.3	-1.1	10	3.8
700	30	3,152	8.3	-6.9	09	3.1
650	30	3,757	5.1	-10.0	09	1.7
600	30	4,411	1.3	-12.5	09	.6
550	30	5,100	-3.1	-16.4	28	1.0
500	30	5,855	-7.7	-22.6	29	2.3
450	30	6,662	-13.1	-27.7	29	3.2
400	30	7,555	-19.5	-33.2	28	4.9
350	30	8,534	-26.8	-39.3	28	7.9
300	30	9,627	-35.3	-46.3	27	10.7
250	30	10,873	-44.9		27	15.3
200	30	12,331	-55.3		26	18.7
175	30	13,174	-60.3		27	17.8
150	30	14,124	-65.3		28	14.3
125	30	15,219	-70.7		29	9.1
100	29	16,528	-74.4		32	3.9
80	29	17,824	-74.2		04	4.6
70	29	18,605	-72.1		06	4.9
60	28	19,519	-68.0		06	4.0
50	28	20,628	-62.3		05	4.2
40	26	22,021	-56.4		07	4.4
30	26	23,870	-51.2		09	5.5
25	26	25,058	-49.3		09	5.8
20	25	26,528	-45.9		09	6.2
15	19	28,450	-43.5		09	8.2
10	5	31,191	-40.0			
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TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	8	18.2	16.1	09	1.5
1000	30	171	19.0	15.1	10	2.8
950	30	606	17.7	10.8	12	2.8
900	30	1,073	15.2	8.5	13	1.3
850	30	1,556	13.5	2.3	06	.4
800	30	2,065	11.8	-3.7	05	1.2
750	30	2,600	10.1	-8.8	35	1.2
700	30	3,175	7.3	-12.6	34	2.2
650	30	3,781	3.6	-16.1	32	3.3
600	30	4,427	-.6	-20.2	32	4.3
550	30	5,108	-5.3	-23.6	32	5.3
500	30	5,858	-10.4	-27.7	31	6.6
450	30	6,661	-15.9	-32.5	31	7.8
400	30	7,541	-22.5	-37.8	31	9.7
350	30	8,507	-29.9	-44.2	31	11.0
300	30	9,586	-38.4	-50.7	30	11.4
250	30	10,815	-48.0		30	13.2
200	30	12,253	-57.4		30	15.9
175	29	13,091	-59.5		30	17.1
150	29	14,050	-61.7		29	16.7
125	29	15,169	-65.3		30	16.6
100	29	16,516	-68.5		30	12.2
80	29	17,848	-69.5		32	6.7
70	29	18,646	-68.2		35	5.2
60	29	19,576	-66.2		02	4.7
50	28	20,693	-62.2		05	5.5
40	28	22,087	-57.4		06	5.5
30	25	23,922	-52.9		06	3.8
25	25	25,104	-50.3		08	3.3
20	24	26,575	-47.0		23	.8
15	24	28,496	-43.0		26	5.5
10	22	31,267	-37.1		26	11.0
7	7	33,773	-33.7			
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TOPEKA, KANS. 982 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	269	10.9	6.4	17	1.9
1000	30	115				
950	30	543	10.7	5.3	17	3.9
900	30	995	10.2	3.2	21	6.5
850	30	1,471	10.1	-.9	24	9.6
800	30	1,974	8.1	-2.9	25	10.9
750	30	2,502	5.2	-6.5	25	13.1
700	30	3,066	2.2	-10.0	25	14.7
650	30	3,655	-1.9	-13.6	25	16.0
600	29	4,293	-6.2	-19.0	25	18.5
550	29	4,959	-10.9	-24.0	26	19.7
500	29	5,695	-16.0	-29.9	25	22.3
450	29	6,473	-21.0	-34.5	26	24.7
400	29	7,341	-26.9	-38.6	26	27.3
350	29	8,291	-33.8	-44.1	26	31.3
300	29	9,355	-41.8	-46.6	26	35.4
250	29	10,567	-50.9		26	38.5
200	29	11,993	-58.2		26	38.5
175	29	12,835	-57.5		26	35.1
150	29	13,812	-56.7		26	29.9
125	29	14,963	-58.6		27	24.2
100	29	16,358	-60.7		26	17.4
80	29	17,743	-61.3		26	9.4
70	29	18,572	-60.5		25	5.3
60	29	19,534	-60.1		25	2.9
50	29	20,675	-58.5		22	1.6
40	27	22,083	-56.4		08	1.9
30	27	23,916	-54.8		09	3.1
25	27	25,085	-53.7		07	1.9
20	26	26,524	-52.4		07	.4
15	25	28,397	-50.2		26	1.6
10	24	31,070	-45.4		26	5.3
7	17	33,458	-41.9		26	9.2
5	7	35,641	-40.2			

TRUK, CAROLINE IS. * 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	2	27.6	23.9	07	3.4
1000	30	96	26.8	22.5	07	4.3
950	30	547	23.3	18.7	08	7.3
900	30	1,020	20.4	15.1	08	6.9
850	30	1,513	17.9	12.3	09	5.6
800	30	2,031	15.4	8.7	09	4.7
750	30	2,574	13.0	4.6	10	4.3
700	30	3,155	9.8	.3	09	4.4
650	30	3,766	6.4	-3.6	09	4.7
600	30	4,421	2.9	-8.2	09	4.6
550	30	5,116	-.8	-12.6	09	4.4
500	30	5,878	-5.1	-18.3	08	4.5
450	30	6,692	-9.7	-23.8	07	4.4
400	30	7,602	-15.0	-29.7	06	2.8
350	29	8,597	-21.7	-36.4	04	1.7
300	29	9,714	-30.1	-44.4	05	.2
250	29	10,985	-40.5	-52.4	20	2.9
200	29	12,465	-53.0		20	4.1
175	29	13,312	-60.1		21	3.3
150	29	14,256	-67.6		24	1.0
125	29	15,334	-74.3		03	2.1
100	29	16,616	-79.3		06	4.4
80	29	17,889	-75.4		07	3.1
70	28	18,673	-69.1		27	3.2
60	27	19,610	-63.8		27	8.5
50	26	20,737	-60.1		27	9.5
40	26	22,137	-57.2		27	7.7
30	24	23,976	-53.0		33	2.1
25	24	25,159	-49.9		08	6.0
20	22	26,631	-47.2		10	13.9
15	21	28,545	-43.6		10	21.8
10	15	31,272	-38.9		10	26.5
7	6	33,735	-33.0			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

• TUCSON, ARIZ. 924 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	789	10.1	-2.5	15	2.0
1000	30	118				
950	30	551				
900	30	1,005	13.4	-3.1	19	1.5
850	30	1,484	11.0	-5.7	22	3.1
800	30	1,987	7.7	-8.5	22	7.1
750	30	2,511	4.7	-13.5	23	11.4
700	30	3,076	2.1	-16.9	23	13.9
650	30	3,665	-1.5	-18.8	24	15.8
600	30	4,303	-5.3	-22.3	24	18.7
550	30	4,974	-9.7	-25.1	24	21.9
500	30	5,710	-14.7	-29.6	24	24.1
450	30	6,490	-20.2	-33.8	24	27.6
400	30	7,362	-26.2	-38.2	24	31.1
350	30	8,313	-33.7	-43.2	24	34.7
300	30	9,376	-41.8	-46.3	24	37.5
250	30	10,586	-50.9		24	41.9
200	29	12,007	-57.9		25	45.2
175	29	12,848	-57.9		25	40.5
150	29	13,819	-58.5		24	32.8
125	29	14,959	-60.9		24	28.0
100	28	16,338	-63.8		24	20.1
80	28	17,702	-64.8		23	14.4
70	28	18,516	-64.3		24	8.5
60	28	19,461	-62.7		23	2.0
50	27	20,590	-60.6		12	1.9
40	26	21,990	-57.7		11	2.9
30	25	23,818	-55.0		10	2.4
25	25	24,986	-53.9		12	.7
20	25	26,425	-51.9		24	1.7
15	25	28,303	-48.4		27	5.4
10	24	31,014	-41.8		28	12.2
7	21	33,473	-35.4		28	15.9
5	5	35,783	-30.3			

• VANDENBERG AFB, CALIF. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	100	7.0	5.5	10	.7
1000	30	146	7.5	5.2	07	.6
950	30	567	5.9	2.8	32	3.1
900	30	1,009	3.1	-.9	30	3.5
850	30	1,470	.6	-6.2	27	4.5
800	30	1,956	-1.4	-12.1	27	6.3
750	30	2,464	-4.0	-16.4	26	8.2
700	30	3,009	-6.9	-18.9	26	9.5
650	30	3,578	-10.4	-21.9	26	11.3
600	30	4,196	-14.0	-26.6	26	15.5
550	30	4,847	-17.6	-29.9	26	19.4
500	30	5,561	-22.0	-33.7	26	23.8
450	30	6,320	-26.9	-37.6	26	27.7
400	30	7,169	-32.3	-43.4	25	31.0
350	30	8,098	-38.2	-48.6	25	33.9
300	30	9,144	-44.9		25	36.7
250	30	10,344	-51.2		25	36.7
200	30	11,781	-54.4		25	34.3
175	30	12,637	-54.3		25	31.4
150	30	13,624	-55.1		25	26.8
125	30	14,785	-56.1		25	22.4
100	30	16,198	-58.0		24	18.0
80	30	17,600	-58.5		23	10.6
70	30	18,439	-58.7		23	8.2
60	30	19,405	-59.1		21	5.4
50	30	20,547	-58.8		20	2.5
40	29	21,944	-57.4		14	1.7
30	29	23,771	-56.1		13	1.5
25	29	24,931	-55.3		09	.8
20	29	26,358	-53.9		23	.4
15	29	28,215	-51.0		26	3.6
10	25	30,889	-45.9		27	7.6
7	16	33,311	-40.6		27	6.7
5	10	35,652	-34.8			

VICTORIA, TEXAS 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	33	21.0	19.1	15	2.9
1000	30	121	21.2	19.5	15	5.2
950	30	561	18.8	16.9	17	11.4
900	30	1,029	16.5	12.4	18	12.1
850	30	1,516	15.7	2.9	19	11.4
800	30	2,029	14.0	-3.5	19	9.4
750	30	2,569	11.9	-8.0	20	7.7
700	30	3,145	8.7	-10.6	22	6.2
650	30	3,747	4.4	-13.3	23	6.2
600	30	4,400	.0	-17.4	24	6.4
550	30	5,083	-4.9	-20.8	25	6.9
500	30	5,834	-10.2	-25.4	26	7.2
450	30	6,629	-16.0	-30.6	26	9.1
400	30	7,514	-22.6	-34.7	26	11.3
350	30	8,480	-30.0	-41.9	26	13.7
300	30	9,559	-38.5	-49.5	26	16.4
250	30	10,786	-48.4		26	18.0
200	30	12,220	-58.7		27	20.9
175	30	13,052	-61.4		27	21.8
150	30	14,004	-63.3		27	20.4
125	30	15,116	-66.8		26	18.6
100	30	16,454	-69.8		26	12.3
80	30	17,775	-70.7		25	7.1
70	30	18,570	-69.0		25	4.2
60	30	19,494	-66.7		15	1.8
50	30	20,607	-62.5		09	3.6
40	30	21,997	-58.3		08	4.3
30	30	23,825	-54.1		08	3.0
25	30	24,999	-52.2		29	.2
20	30	26,450	-49.8		26	3.5
15	30	28,349	-45.8		27	7.2
10	30	31,080	-40.2		27	13.6
7	20	33,523	-35.7		27	16.3
5	5	35,817	-33.6			

• WAKE IS., PACIFIC AREA 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	5	24.6	21.4	06	6.2
1000	30	135	23.5	20.6	06	7.2
950	30	577	19.8	17.8	07	7.5
900	30	1,047	16.8	14.1	08	6.7
850	30	1,533	13.8	11.1	08	5.2
800	30	2,044	11.9	3.7	08	4.0
750	30	2,583	10.4	-4.3	06	2.6
700	30	3,155	8.1	-10.7	04	1.7
650	30	3,760	4.9	-15.4	36	1.9
600	30	4,412	1.2	-19.2	36	2.2
550	30	5,104	-2.9	-23.0	35	3.2
500	30	5,856	-7.7	-27.0	35	3.9
450	30	6,666	-13.6	-31.0	33	4.5
400	30	7,552	-19.8	-37.0	32	6.8
350	30	8,529	-26.9	-42.9	30	8.2
300	30	9,623	-34.8	-49.9	29	12.2
250	30	10,872	-43.9		28	16.2
200	30	12,337	-53.9		28	20.5
175	30	13,183	-59.8		28	20.0
150	30	14,132	-65.9		28	18.6
125	30	15,224	-71.3		29	15.6
100	29	16,529	-75.8		29	7.6
80	22	17,813	-75.0		30	2.8
70	22	18,591	-72.3		02	1.6
60	22	19,509	-66.7		08	2.2
50	22	20,627	-61.3		08	3.4
40	22	22,023	-57.4		09	4.3
30	20	23,862	-52.5		08	6.2
25	20	25,047	-50.0		08	6.5
20	20	26,513	-47.6		08	6.9
15	20	28,430	-43.0		09	7.1
10	18	31,196	-38.0		08	8.7
7	18	33,666	-35.3		10	10.1
5	5	36,036	-31.4			

• WALLOPS IS., VA. NASA 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	3	7.8	4.3	30	1.5
1000	29	151	9.4	2.3	29	2.6
950	29	581	9.9	-.1	30	7.7
900	29	1,026	8.0	-2.4	30	9.2
850	29	1,496	5.4	-5.7	30	10.1
800	29	1,992	4.6	-7.4	30	11.8
750	29	2,514	2.2	-10.3	30	12.6
700	29	3,071	-1.2	-14.1	29	14.5
650	29	3,656	-4.2	-18.2	29	16.4
600	29	4,286	-8.1	-21.8	29	18.3
550	29	4,951	-12.4	-23.9	29	19.7
500	29	5,679	-17.0	-27.9	29	22.0
450	29	6,458	-22.2	-33.4	29	24.4
400	29	7,318	-28.0	-39.2	29	28.7
350	29	8,264	-34.6	-45.0	29	31.8
300	29	9,324	-42.3		29	33.7
250	29	10,534	-50.7		30	37.7
200	29	11,964	-56.8		30	35.7
175	28	12,813	-56.7		30	29.4
150	28	13,790	-56.9		30	24.9
125	28	14,943	-58.0		30	19.6
100	28	16,339	-60.7		30	14.5
80	28	17,726	-61.0		31	9.6
70	28	18,556	-60.5		32	7.3
60	28	19,517	-59.1		33	4.6
50	27	20,663	-57.6		36	4.1
40	25	22,074	-55.9		02	2.6
30	24	23,913	-53.9		07	3.3
25	23	25,087	-52.6		08	3.9
20	23	26,535	-50.5		09	1.4
15	22	28,423	-47.5		26	2.8
10	17	31,123	-41.8		27	7.6
7	9	33,541	-36.7			

WASHINGTON DULLES INT. AP 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	85	7.1	2.7	30	1.2
1000	30	152			32	1.9
950	30	579	8.4	-.5	29	5.6
900	30	1,023	6.9	-2.8	30	8.4
850	30	1,491	5.3	-5.2	30	11.3
800	30	1,985	3.4	-8.5	30	14.0
750	30	2,507	1.1	-11.9	30	14.4
700	30	3,058	-1.8	-15.0	30	14.5
650	30	3,646	-5.0	-17.1	30	16.4
600	30	4,269	-8.7	-20.2	29	18.7
550	30	4,935	-12.7	-24.2	29	20.5
500	30	5,659	-17.3	-30.0	29	21.8
450	30	6,432	-22.8	-33.8	29	24.3
400	30	7,294	-28.8	-39.8	29	27.2
350	30	8,236	-35.4	-44.5	29	31.3
300	30	9,293	-42.8		29	36.7
250	30	10,502	-50.7		30	39.1
200	30	11,931	-56.8		30	40.1
175	30	12,777	-56.9		29	35.3
150	30	13,757	-55.6		30	28.7
125	30	14,916	-57.0		30	22.7
100	30	16,322	-59.4		30	15.5
80	29	17,710	-61.1		30	10.0
70	29	18,540	-60.2		31	7.7
60	29	19,505	-58.8		33	4.6
50	29	20,652	-57.6		36	2.8
40	29	22,066	-56.0		04	2.7
30	29	23,904	-54.2		05	2.3
25	27	25,075	-53.5		05	1.3
20	26	26,511	-52.2		35	.8
15	22	28,385	-49.5		29	3.2
10	20	31,077	-44.2		28	8.3
7	10	33,466	-40.0			
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WINNEMUCCA, NEV. 864 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,310	.4	-2.6	21	.4
1000	30	120				
950	30	538				
900	30	984				
850	30	1,441	1.0	-3.7	25	.9
800	30	1,927	-1.6	-6.8	25	2.3
750	30	2,431	-5.2	-9.7	25	2.8
700	30	2,976	-9.1	-13.4	23	4.2
650	30	3,538	-13.2	-18.1	23	6.4
600	30	4,150	-17.4	-23.3	23	7.6
550	30	4,791	-21.7	-27.3	23	9.7
500	30	5,491	-26.7	-33.4	22	11.3
450	30	6,232	-32.6	-38.5	22	12.8
400	30	7,062	-39.3	-42.4	22	15.1
350	30	7,964	-45.4		22	17.5
300	30	8,982	-49.0		23	20.5
250	30	10,175	-49.9		24	21.8
200	29	11,638	-49.7		24	20.2
175	29	12,512	-49.5		24	18.4
150	28	13,519	-50.2		23	15.7
125	28	14,706	-51.4		23	14.6
100	28	16,150	-52.8		22	11.6
80	28	17,584	-54.6		22	8.2
70	28	18,437	-55.4		21	6.4
60	28	19,416	-56.6		20	3.8
50	27	20,573	-56.6		15	1.8
40	27	21,991	-56.0		11	3.0
30	26	23,823	-55.4		09	4.6
25	25	24,991	-54.9		09	5.4
20	22	26,420	-53.8		09	5.6
15	18	28,277	-51.9		09	6.1
10	11	30,950	-47.6			

WINSLOW, ARIZ. 848 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,492	2.4	-9.3	18	2.7
1000	30	135				
950	30	558				
900	30	1,004				
850	30	1,473				
800	30	1,968	5.1	-8.2	22	7.6
750	30	2,490	1.8	-12.0	23	11.6
700	30	3,045	-1.5	-16.5	23	16.2
650	30	3,627	-4.8	-19.9	23	17.0
600	30	4,257	-8.6	-23.3	23	18.8
550	30	4,922	-12.9	-26.5	24	20.9
500	30	5,647	-17.6	-30.7	24	24.3
450	30	6,423	-23.1	-35.5	24	26.6
400	30	7,281	-29.0	-40.0	24	32.9
350	30	8,223	-35.8	-45.0	24	36.8
300	30	9,278	-43.5		24	41.9
250	30	10,483	-51.5		24	42.5
200	29	11,911	-56.5		24	39.0
175	29	12,758	-56.1		24	33.6
150	29	13,739	-56.4		24	30.3
125	28	14,887	-59.2		24	25.8
100	28	16,276	-61.4		23	19.0
80	28	17,659	-61.3		23	12.8
70	27	18,489	-61.8		23	8.3
60	25	19,441	-61.9		23	4.1
50	24	20,575	-59.5		13	1.1
40	24	21,976	-58.1		11	3.0
30	23	23,795	-56.2		11	3.5
25	23	24,957	-54.9		09	3.7
20	22	26,394	-52.9		08	3.1
15	21	28,261	-50.1		18	.4
10	16	30,945	-44.1		27	5.1
7	6	33,380	-36.8			

YAKUTAT, ALASKA 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	12	-2.6	-4.3	09	1.0
1000	30	134	1.5	-5.4	05	.7
950	30	545	.4	-8.0	10	1.8
900	30	979	-2.0	-10.8	11	2.0
850	30	1,431	-4.4	-13.5	12	1.5
800	30	1,907	-6.6	-15.6	30	1.0
750	30	2,411	-9.6	-17.7	30	2.4
700	30	2,939	-12.6	-21.6	29	3.5
650	30	3,500	-15.8	-25.1	29	4.3
600	30	4,100	-19.3	-28.5	28	4.8
550	30	4,741	-23.1	-32.0	28	6.5
500	30	5,435	-27.7	-36.6	30	7.9
450	30	6,183	-32.8	-40.7	30	9.4
400	30	7,006	-38.1	-43.4	30	11.8
350	30	7,914	-43.9		30	13.6
300	30	8,936	-49.3		31	14.5
250	30	10,122	-52.4		31	14.6
200	30	11,562	-52.2		30	11.6
175	30	12,428	-51.5		30	10.9
150	30	13,429	-51.2		30	9.8
125	30	14,615	-51.2		29	7.5
100	30	16,063	-51.5		28	6.8
80	29	17,510	-51.7		28	4.8
70	29	18,376	-51.2		27	4.8
60	29	19,379	-50.7		27	3.7
50	29	20,566	-51.0		27	3.5
40	29	22,017	-51.1		26	2.1
30	29	23,887	-51.0		22	1.3
25	29	25,074	-50.9		17	1.2
20	29	26,525	-51.0		13	2.5
15	29	28,401	-50.0		11	3.5
10	27	31,099	-48.2		10	9.0
7	20	33,495	-45.6		09	10.5
5	8	35,864	-41.3			

+ YAP, CAROLINE IS. 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	17	28.2	24.4	07	2.8
1000	30	92	27.1	23.0	07	4.0
950	30	535	22.8	18.7	08	[illegible].6
900	30	1,015	20.0	14.7	08	6.7
850	30	1,508	17.5	10.4	09	6.0
800	30	2,024	15.1	6.0	09	5.6
750	30	2,564	12.6	1.5	08	5.6
700	30	3,147	9.8	-2.3	08	6.0
650	30	3,755	6.6	-7.1	08	6.3
600	30	4,413	3.1	-12.5	08	6.4
550	30	5,106	-.8	-17.0	08	5.6
500	30	5,869	-5.2	-21.7	09	6.3
450	30	6,684	-10.2	-26.2	09	6.8
400	30	7,588	-16.0	-32.4	09	6.4
350	30	8,581	-22.5	-38.1	09	4.0
300	30	9,695	-30.7	-45.6	08	1.9
250	30	10,964	-40.8	-51.4	09	1.3
200	30	12,443	-53.1		09	2.1
175	30	13,290	-60.1		08	2.6
150	30	14,235	-67.1		07	3.1
125	29	15,315	-74.3		05	4.0
100	29	16,596	-79.4		08	6.8
80	29	17,865	-76.8		08	5.6
70	29	18,642	-71.5		03	1.0
60	29	19,565	-65.8		27	4.6
50	29	20,683	-61.8		28	6.1
40	29	22,077	-57.8		28	4.2
30	29	23,910	-52.7		07	1.3
25	28	25,094	-50.2		09	6.5
20	27	26,556	-47.9		09	12.5
15	27	28,470	-43.9		10	21.5
10	23	31,206	-38.8		10	29.6
7	14	33,636	-35.3			
5	7	35,945	-33.8			

YUCCA FLAT, NEV. 877 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,196	1.7	-4.7	19	2.1
1000	30	122				
950	30	544				
900	30	988				
850	30	1,453	3.8	-6.1	20	4.1
800	30	1,942	.5	-8.3	20	7.4
750	30	2,457	-2.9	-11.8	20	7.5
700	30	3,001	-6.4	-15.9	21	8.5
650	30	3,574	-10.1	-19.9	22	10.1
600	30	4,189	-13.9	-24.6	23	12.0
550	30	4,839	-18.5	-29.7	23	14.8
500	30	5,549	-22.8	-33.5	24	18.8
450	30	6,308	-27.6	-38.5	24	23.7
400	30	7,151	-33.4	-43.2	24	29.9
350	30	8,077	-39.1	-47.6	24	33.3
300	30	9,120	-45.0		24	36.4
250	30	10,321	-50.8		25	36.3
200	30	11,762	-53.4		24	34.2
175	30	12,623	-52.4		24	29.5
150	30	13,620	-52.8		24	23.1
125	30	14,792	-54.2		24	18.3
100	29	16,215	-56.6		22	15.4
80	27	17,629	-56.7		23	9.7
70	27	18,473	-57.5		22	4.6
60	27	19,445	-58.3		19	2.4
50	26	20,594	-57.2		13	2.0
40	26	22,008	-56.3		10	2.2
30	26	23,836	-55.7		09	3.0
25	23	24,997	-54.6		09	2.8
20	20	26,426	-53.6		08	2.2
15	18	28,281	-51.6		35	.7
10	9	30,941	-46.7			

YUMA, ARIZ. 999 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	20	131	11.3	-1.6	31	.3
1000	20	117				
950	20	551	13.5	-3.5	28	4.7
900	20	1,002	11.3	-5.6	26	4.8
850	20	1,476	8.6	-7.6	24	4.8
800	20	1,975	6.2	-11.5	23	7.2
750	20	2,495	3.0	-15.3	23	8.5
700	20	3,056	.2	-20.0	24	10.7
650	20	3,642	-3.3	-22.8	24	13.7
600	20	4,275	-6.9	-25.9	24	16.0
550	20	4,942	-11.3	-28.8	24	18.8
500	20	5,671	-16.7	-32.2	24	20.2
450	20	6,441	-22.5	-35.4	24	23.7
400	20	7,308	-28.5	-41.0	24	26.4
350	20	8,250	-35.3	-46.7	24	30.5
300	19	9,301	-43.0		24	34.5
250	19	10,505	-52.1		24	34.0
200	15	11,914	-57.7		25	33.3
175	15	12,756	-57.8		25	33.6
150	11	13,733	-58.6		25	29.7
125	9	14,877	-59.9			
100	9	16,261	-62.2			

[illegible] station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dy- [illegible] temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

• Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Apr.									
1	0.99	1.10	----	----	----	----	----	----	----
2	1.00	1.10	1.25	1.41	1.44	----	----	----	----
6	----	----	----	----	----	1.34	----	----	----
8	----	----	----	----	----	----	----	----	0.78
9	----	----	----	----	----	----	----	----	.84
10	.91	1.01	----	----	----	----	----	----	----
12	.90	1.01	1.14	----	----	----	----	----	----
13	.86	.95	----	----	----	----	----	----	----
16	.91	1.02	1.16	1.32	----	----	----	----	----
20	.82	.92	1.04	1.22	1.43	----	----	----	----
21	.82	.93	1.06	1.22	1.44	1.16	----	----	.76
22	.94	1.04	1.16	1.27	1.45	----	----	----	----
24	.95	1.03	1.18	1.36	1.49	----	----	----	----
25	.90	1.00	1.12	----	----	----	----	----	.81
26	.98	1.06	1.18	1.32	----	----	1.16	1.02	.93
28	----	1.05	----	----	----	----	----	----	----
29	.98	1.07	1.19	1.33	----	----	----	----	----
Averages	0.92	1.02	1.15	1.30	1.45	1.25	1.16	1.02	0.82

BLUE HILL OBS., MASS.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Apr.									
1	0.55	0.65	0.77	0.94	1.10	----	----	----	----
2	.58	.69	.84	1.06	----	----	----	----	----
4	.91	1.01	1.13	1.29	1.44	1.24	1.05	0.89	0.77
5	----	----	----	----	----	1.04	.82	.67	.55
8	----	----	----	----	1.29	1.01	----	----	----
9	.70	.82	.95	1.15	1.30	----	----	----	----
10	----	----	----	----	----	1.08	.91	.81	.70
11	.95	1.08	1.16	1.32	1.47	----	----	----	----
12	.87	1.01	1.08	1.21	1.36	1.20	1.00	.87	.76
13	.84	.93	1.04	1.22	1.40	1.20	.96	.87	.72
20	----	----	----	1.07	1.37	1.13	.96	.81	.71
21	.82	.91	1.03	1.21	1.41	1.13	.95	.79	----
25	----	----	----	----	1.40	1.16	.96	.83	.72
26	.76	.84	.99	1.17	1.36	1.06	----	----	----
29	----	----	----	----	----	1.16	.94	.82	.67
30	.79	.91	1.01	1.20	1.39	1.13	.94	.82	.70
Averages	0.78	0.89	1.00	1.17	1.36	1.13	0.95	0.82	0.70

S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon

MADISON, WIS.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Apr.									
3	----	----	----	----	M 1.39	----	----	----	----
15	----	----	----	----	S 1.29	----	----	----	----
Averages	----	----	----	----	1.34	----	----	----	----

TUCSON, ARIZ.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Apr.									
1	0.86	0.95	1.07	1.23	1.38	1.24	1.08	0.95	0.84
2	.89	.98	1.10	1.25	----	----	----	----	----
6	----	----	1.07	----	----	1.21	1.05	.92	----
7	.89	.99	1.09	----	----	----	----	----	----
9	.85	.95	1.06	1.20	1.38	----	----	----	----
10	.87	.96	1.08	1.21	----	----	----	----	----
12	----	.94	1.04	1.19	----	----	----	----	----
18	.76	.88	1.03	1.18	1.36	1.11	.97	.84	.76
20	.79	----	----	1.18	----	1.14	----	----	----
21	.78	.89	1.02	1.19	1.42	1.13	.98	.86	.76
22	.86	.96	1.07	1.21	1.37	1.00	.84	.74	.66
23	.82	.93	1.05	1.21	1.25	.86	.73	.67	.59
24	.84	.93	1.04	1.20	1.05	1.23	1.08	.94	.82
25	.77	.90	1.00	1.18	1.40	1.21	1.07	.93	.84
26	.87	.97	1.09	1.24	1.44	1.24	1.09	.98	.88
27	.88	.97	1.10	1.21	1.41	1.25	1.10	.98	.89
29	.88	.98	1.10	1.20	1.37	----	----	----	----
30	.79	.90	1.04	1.20	1.42	1.20	1.08	.96	.85
Averages	0.83	0.94	1.06	1.20	1.35	1.15	1.00	0.88	0.78

GUAM, M. I.

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Apr.									
8	----	----	----	----	----	----	M 0.80	M 0.70	----
9	----	----	S 0.77	----	----	----	----	----	----
10	----	----	----	----	----	S 0.99	S .79	S .61	M 0.48
Averages	----	----	0.77	----	----	0.99	0.80	0.66	0.48

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. APRIL 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
AMES IOWA	---	289	603	296	228	---	594	---	---	---	---	---	131	359	571	584	358	608	630	---	339	517	265	659	168	251	---	609	129	411		408
ANNETTE ALASKA	390	311	257	479	472	175	447	131	291	496	96	565	341	498	204	542	554	548	576	500	574	539	313	319	346	414	599	599	609	617		419
APALACHICOLA FLORIDA	595	613	604	588	453	589	561	582	295	575	514	600	609	477	505	624	601	514	635	634	448	418	579	370	---	---	627	688	684	620		555
ARGONNE NAT. LAB.	52	227	524	324	262	188	383	192	291	266	484	366	151	376	540	310	270	197	458	251	310	254	386	378	495	149	465	606	93	144		313
ASTORIA OREGON	510	522	335	207	291	531	464	166	418	359	552	166	428	320	548	420	342	356	633	522	308	491	502	518	352	471	444	281	460	554		415
ATLANTA GEORGIA	587	598	551	565	521	598	496	578	526	413	537	197	129	281	585	491	418	627	639	646	562	415	193	690	247	175	640	696	667	621		496
BARROW ALASKA	351	200	311	382	371	417	436	416	354	436	403	366	301	417	462	406	270	454	405	393	498	328	329	421	443	481	352	450	389	322		382
BETHEL ALASKA	225	272	157	200	268	256	297	282	276	356	535	317	259	464	252	249	361	224	354	366	227	329	350	295	443	188	224	262	262	434		300
BISMARCK N.DAK.	297	578	575	574	153	441	615	563	591	390	283	172	66	110	425	80	618	644	437	138	251	599	652	434	257	366	479	270	52	48		372
BLUE HILL MASS.	494	500	327	600	404	57	43	580	575	367	656	630	627	508	55	61	165	70	72	642	659	184	365	80	642	661	243	389	674	686		401
BOISE IDAHO	424	561	466	375	300	370	308	571	469	287	361	575	459	---	364	414	315	392	198	493	626	333	249	499	429	400	405	276	513	361		407
BOSTON MASSACHUSETTS	462	455	334	565	381	49	29	544	544	346	638	615	595	448	32	67	172	48	95	626	632	140	333	56	652	628	282	359	657	679		382
BROWNSVILLE TEXAS	485	600	541	613	619	656	605	528	568	449	609	376	450	446	613	613	682	662	543	517	495	469	667	548	646	577	447	482	574	491		556
CANTON ISLAND P.I.	669	664	685	683	657	679	600	615	653	621	674	671	662	573	679	639	650	630	666	647	564	637	657	---	---	---	---	---	---	---		647
CAPE HATTERAS N.C.	596	559	581	613	357	381	444	463	584	545	548	---	---	496	458	586	502	629	546	651	608	200	379	558	578	114	180	668	676	572		503
CHARLESTON S.C.	649	674	695	626	573	650	643	673	697	708	463	156	338	541	488	605	480	675	692	712	692	385	314	497	562	202	585	772	752	680		573
CLEVELAND OHIO	169	433	471	564	191	110	51	521	216	268	621	603	126	431	573	466	437	54	376	613	60	278	481	177	571	189	699	706	286	433		370
COLUMBIA MISSOURI	269	292	545	486	369	532	620	360	429	605	621	186	170	636	576	387	670	614	634	140	240	702	80	713	146	64	667	676	239	439		438
DAVIS CALIFORNIA	484	532	597	196	196	253	424	564	598	182	532	635	450	659	423	565	225	351	493	409	263	478	168	425	565	573	691	668	628	684		466
DODGE CITY KANSAS	330	596	471	408	348	498	443	394	262	542	114	583	613	689	509	631	582	650	78	674	708	711	382	624	262	630	582	617	647	659		[illegible]
E. LANSING MICHIGAN	64	232	595	537	426	72	---	529	272	373	432	491	157	---	---	247	373	262	671	565	---	279	---	211	640	---	579	698	202	305		384
EL CENTRO CALIF. NPF	409	512	405	231	532	523	576	511	529	365	246	427	532	432	548	561	547	523	572	507	496	567	575	517	571	576	597	549	549	624		505
EL PASO TEXAS	708	698	513	631	405	413	603	656	477	734	468	549	640	717	729	627	385	722	725	766	738	781	793	806	809	812	780	516	753	836		662
ELY NEVADA	364	406	632	618	482	531	594	352	567	548	465	204	684	534	324	746	728	574	374	673	526	385	688	555	593	745	369	440	530	523		532
EPPLEY NEWPORT R.I.	498	361	340	584	330	57	51	516	565	339	631	608	614	441	88	86	315	138	146	623	603	246	631	78	647	617	131	453	659	666		402
FAIRBANKS ALASKA	184	240	301	206	276	360	299	345	412	302	351	486	338	315	446	307	262	508	325	398	465	411	388	356	487	564	445	492	579	629		382
FORT WORTH TEXAS	270	457	593	640	652	481	507	614	381	264	276	313	466	692	529	507	517	385	375	128	391	331	727	574	138	507	692	219	197	412		441
FRESNO CALIFORNIA	473	549	443	126	546	536	338	351	421	270	444	336	513	349	304	507	592	203	411	572	405	508	502	592	610	692	352	413	612	719		456
GLASGOW MONTANA	556	587	564	484	150	349	569	571	472	553	420	367	587	461	553	476	552	595	401	205	640	713	692	534	418	250	366	131	206	510		464
GRAND JUNCTION COLO.	455	530	514	219	386	654	671	649	396	560	611	286	369	605	248	686	701	708	604	480	702	581	658	561	463	732	729	663	484	531		548
GREAT FALLS MONTANA	489	513	554	281	272	607	587	392	555	433	95	563	577	---	579	601	---	62	257	453	651	705	546	---	---	418	105	314	199	500		435
GREENSBORO N.C.	528	545	465	581	470	389	352	582	349	236	591	574	164	446	561	465	345	625	634	643	418	394	210	608	646	88	542	664	648	369		471
INDIANAPOLIS INDIANA	525	531	466	515	175	---	264	375	518	500	612	526	286	293	654	523	636	212	626	437	269	686	491	497	459	---	---	---	---	---		462
ITHACA NEW YORK	233	182	381	377	470	56	18	518	178	90	560	564	230	256	235	539	23	24	31	566	252	274	237	199	602	501	465	582	549	565		325
LAKE CHARLES LA.	457	533	605	552	610	586	526	637	583	416	332	433	240	350	281	426	546	569	546	522	592	580	407	382	597	316	542	340	579	238		477
LAKELAND FLORIDA	470*	536*	643	635	613	637	582	602	573	650	652	568	611	666	627	523	580	664	574	658	664	632	551	528	497	537	523	636	726	646		600*
LANDER WYOMING	462	602	614	576	576	626	617	366	626	573	479	240	641	556	483	414	635	---	578	562	545	582	399	438	359	595	641	614	205	542		522
LARAMIE WYOMING	608	659	494	360	526	551	554	527	372	545	559	246	100	555	453	389	619	594	470	557	543	350	388	545	251	680	619	658	548	380		490
LAS VEGAS NEVADA	655	548	514	468	671	673	665	652	654	514	239	460	677	492	682	714	704	---	614	703	---	593	740	647	741	742	731	738	685	590		625
LITTLE ROCK ARKANSAS	---	---	---	---	600	493	525	512	359	129	435	694	209	584	440	425	540	507	518	291	223	553	314	---	86	423	606	---	---	---		430
LOS ANGELES, CALIF.	229	621	629	193	668	665	470	672	667	405	605	663	487	467	602	713	642	226	370	565	348	709	646	740	725	730	719	645	763*	763		452*
MADISON WISCONSIN	364	110	596	322	227	94	404	248	272	323	622	286	100	427	577	234	144	408	646	249	333	301	382	485*	361	377*	504	592	104	216		344*
MANHATTAN KANSAS	170	228	489	455	330	519	381	332	215	538	469	134	292	570	395	543	562	539	238	361	419	605	88	597	40	157	548	397	323	574		384
MATANUSKA ALASKA	43	170	240	365	86	195	162	288	478	79	404	478	474	144	493	298	193	470	424	435	453	537	528	551	558	550	245	251	356	587		351
MEDFORD OREGON	522	584	425	497	230	390	356	531	558	395	324	547	313	464	384	338	205	592	458	476	426	335	530	407	---	249	426	451	365	658		429
MIAMI FLORIDA	444	526	349	508	476	497	512	473	233	398	504	509	431	444	526	515	525	416	490	377	454	536	534	538	497	478	480	508	524	502		467
MIDLAND TEXAS	214	532	578	602	556	197	429	471	543	489	379	404	590	593	647	622	492	301	558	540	688	601	697	483	535	686	576	375	436	---		511
NASHVILLE TENNESSEE	602	602	350	510	562	563	581	598	507	78	653	487	351	308	594	613	455	632	612	556	251	678	377	451	298	280	700	701	615	286		495
NEW YORK N.Y. U	493	260	434	552	400	24	36	428	471	460	661	660	449	254	171	408	32	205	177	655	493	342	473	90	704	420	69	627	663	677		393
NORTH OMAHA NEBRASKA	173	---	611	298	332	503	593	205	416	608	503	73	167	399	619	639	688	700	612	416	529	677	397	713	90	269	665	613	432	615		578
OAK RIDGE TENNESSEE	587	590	484	614	504	566	541	635	524	114	646	567	300	352	567	604	336	644	634	647	369	591	344	631	438	138	467	709	584	300		501
OKLAHOMA CITY OKLA.	361	340	519	506	518	310	169	395	304	253	452	158	512	652	656	437	607	293	98	145	605	647	701	592	303	504	658	163	223	592		422
PALMER AAES ALASKA	28	143	199	304	74	180	128	264	386	87	388	429	409	139	442	248	169	390	423	427	406	481	475	495	496	443	193	298	384	490		314
PAGE ARIZONA	406	488	407	186	484	544	545	542	537	403	135	---	40	367	496	565	558	559	480	608	541	515	590	617	619	592	580	579	507	462		481
PHOENIX ARIZONA	639	564	---	---	---	---	666	602	668	470	661	---	668	547	553	681	677	697	695	703	717	719	719	722	723	734	724	586	711	740		663

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PORTLAND MAINE	415	507	470	572	379	93	86	593	575	305	622	592	603	520	39	151	234	43	200	620	552	50	366	170	643	595	491	418	640	654		407
PROSSER WASHINGTON	540	551	549	556	489	559	551	555	---	155	526	417	161	467	522	275	348	256	274	174	391	609	647	355	311	617	231	519	225	370		421
PULLMAN WASHINGTON	333	499	526	390	352	549	547	550	422	307	422	459	294	526	621	445	390	168	116	284	346	637	608	543	311	348	200	180	277	353		400
RAPID CITY S.DAK.	332	523	598	423	386	369	618	537	573	591	475	310	80	634	552	299	689	656	599	381	351	665	544	369	109	427	677	643	187	201		460
RENO NEVADA	320	208	539	177	279	306	300	465	536	522	258	495	489	626	316	514	595	459	474	470	318	604	420	366	368	306	513	462	617	558		429
RICHLAND 25 NW WASH.	508	502	509	494	449	531	480	535	372	200	485	355	350	473	455	251	352	244	215	179	299	585	575	334	344	590	264	518	183	346		399
RIVERSIDE CALIFORNIA	25	35	53	23	60	64	28	68	67	32	29	54	25	45	32	73	62	27	28	56	33	38	61	46	69	81	72	67	73	76		50
SAINT CLOUD MINN.	368	450	534	464	184	47	577	140	482	589	543	350*	123	302	219	335	102	562	606	33	521	288	290	463	199	363	650	295	194	67		345*
SALT LAKE CITY	325	611	565	530	166	626	636	248	602	405	361	---	---	---	---	---	688	686	397	367	447	297	331	470	714	702	220	139	181	352		443
SAN ANTONIO TEXAS	358	422	589	555	592	581	588	566	336	391	397	252	560	545	523	323	323	---	654	625	388	365	339	331	410	155	287	312	351	420		432
SANTA MARIA CALIF.	212	582	524	102	553	285	450	640	627	448	499	505	277	631	438	674	580	317	486	624	342	559	239	652	696	691	692	391	700	722		505
SAULT STE MARIE MICH	469	88	480	274	510	185	593	516	54	621	628	569	469	75	126	257	67	426	594	563	117	137	310	674	---	---	674	646	163	72		370
SEATTLE TACOMA WASH.	535	539	523	200	557	562	491	199	318	334	547	167	281	398	610	155	---	115	425	198	369	516	544	621	281	572	115	463	412	477		397
STATE COLLEGE PENN.	386	443	455	625	115	205	222	620	234	583	666	606	183	478	458	552	54	154	150	663	292	410	628	237	708	217	374	712	582	630		421
SPOKANE WASHINGTON	533	487	523	441	276	551	528	462	387	222	481	369	245	467	410	405	397	273	255	314	---	588	642	610	362	586	265	234	302	420		415
STERLING VIRGINA	542	553	335	637	135	238	425	626	265	295	642	662	177	584	521	405	75	531	444	670	286	481	680	385	712	135	120	726	632	467		446
STILLWATER OKLAHOMA	404	413	383	428	504	207	266	428	390	247	433	237	455	625	591	424	521	---	130	226	568	604	641	557	116	365	613	158	242	603		406
SWAN ISLAND W.I.	670	648	---	623	628	387	---	---	651	---	541	663	627	630	514	596	660	631	322	379	524	671	655	662	681	671	671	648	619	569		598
TAMPA FLORIDA	553	577	650	640	628	637	634	543	562	638	655	625	605	662	646	645	651	663	557	654	---	667	644	643	450	655	496	640	722	697		622
TUCSON ARIZONA	607	593	423	337	557	617	639	514	---	---	607	490	462	636	429	574	442	666	608	669	678	681	681	685	685	693	696	601	---	---		587
WAKE ISLAND,PACIFIC	679	585	676	582	627	635	620	684	698	693	598	538	336	---	---	---	---	---	658	694	514	687	574	698*	632	721	691	718	721	697		638*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska — APRIL 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	5	55	96	140	47	100	82	-60	-21	0	115	181	210	72	183	144	37	184	217	165	140	195	176	195	198	199	113	171	168	196		123

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

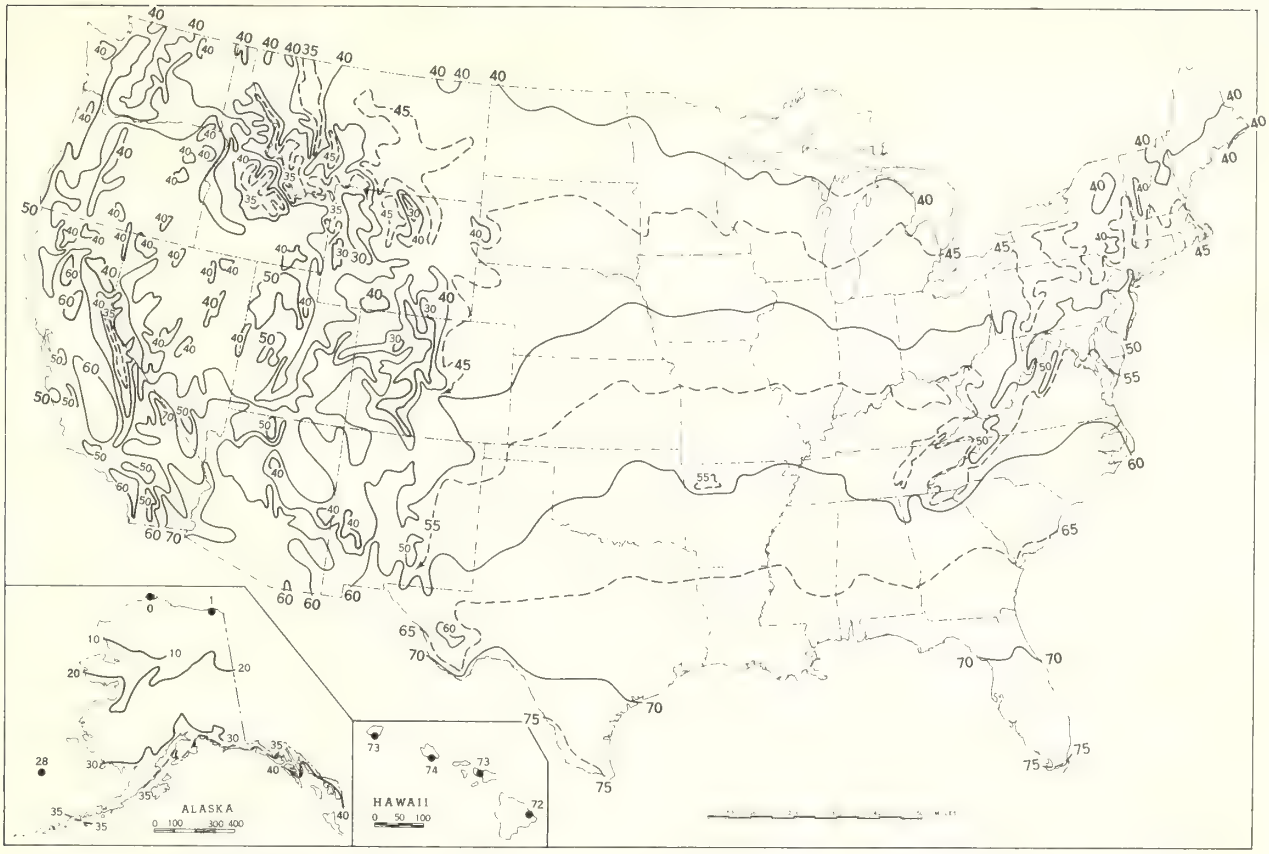
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ∧s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code ∧s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), April.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), April 1967.

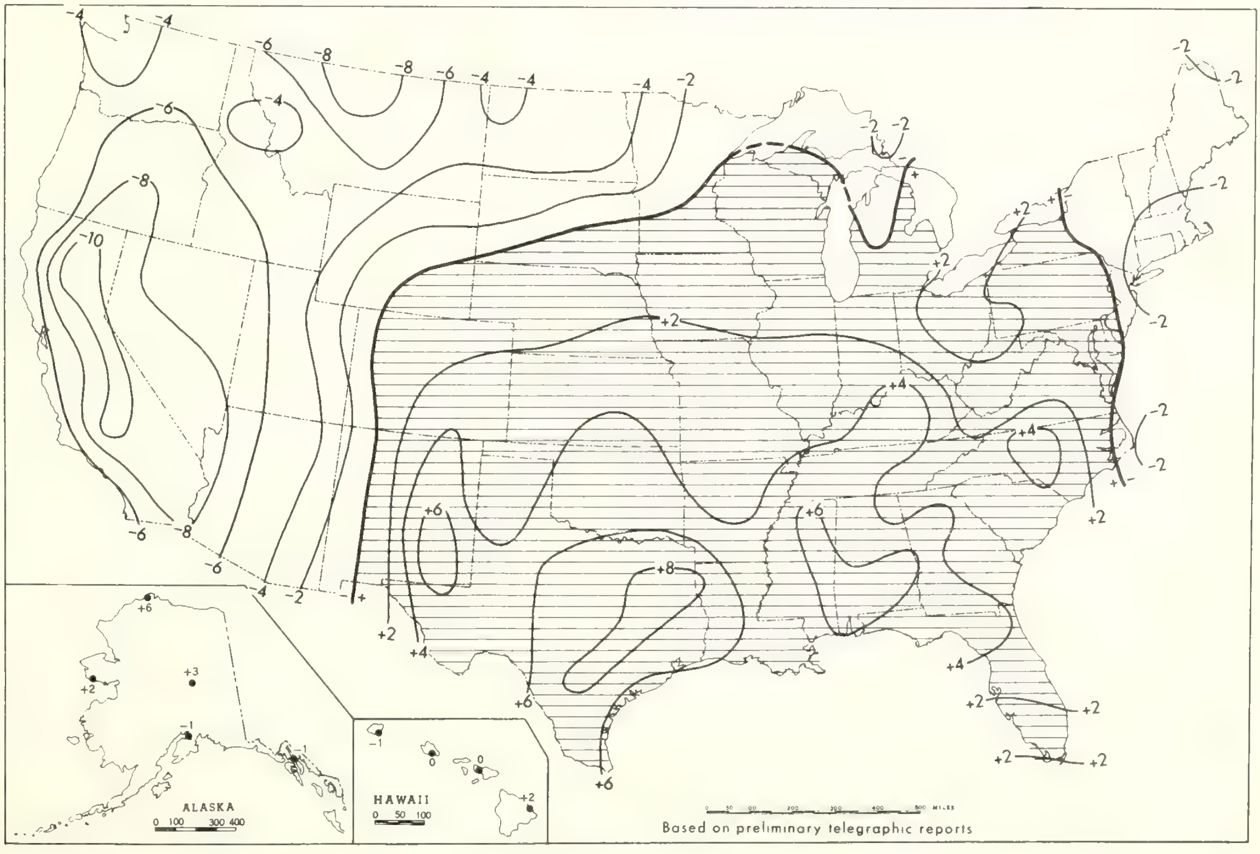


Chart II. Total Precipitation (Inches), April 1967.

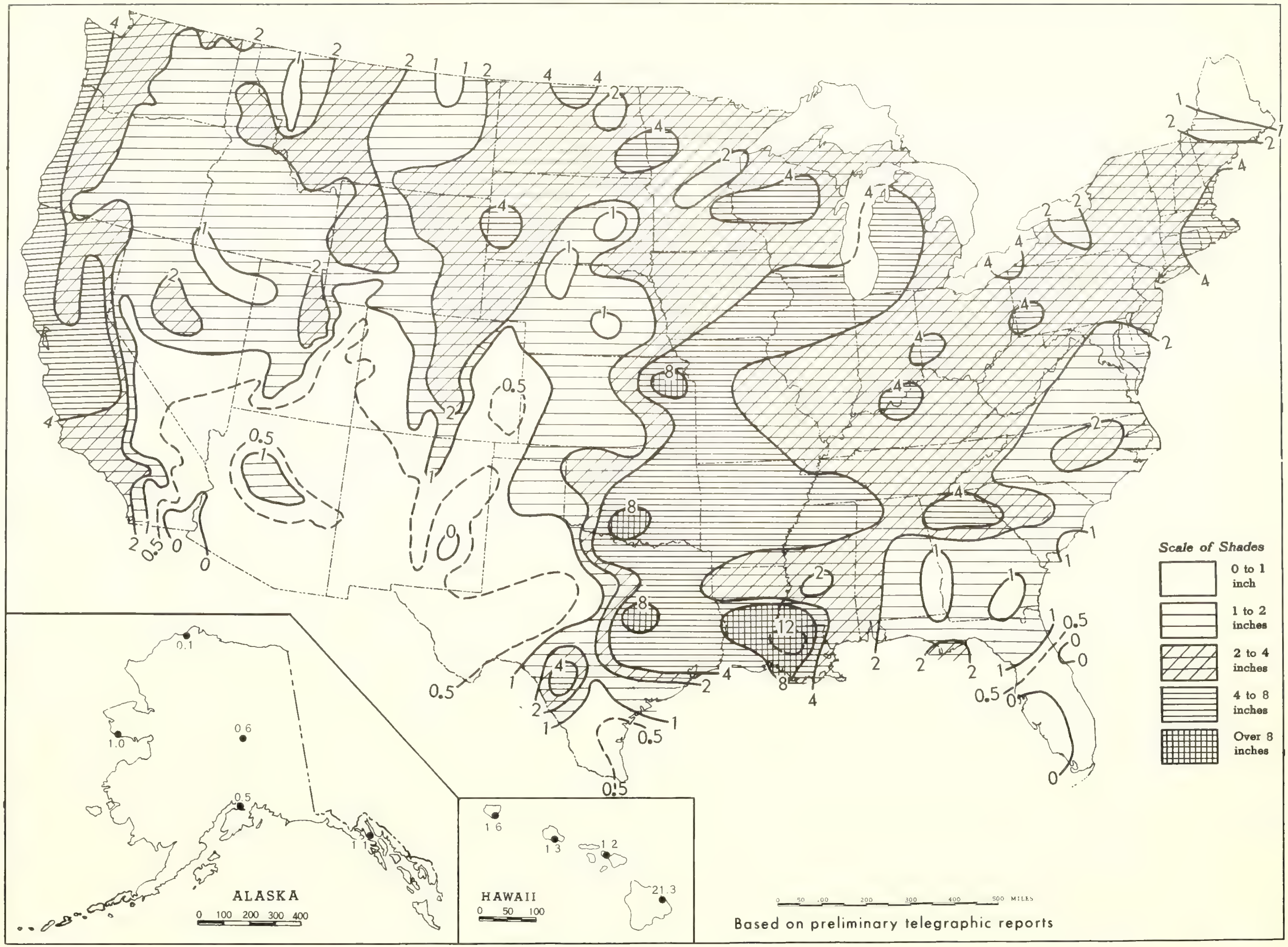


Chart III. Percentage of Normal Precipitation, April 1967.

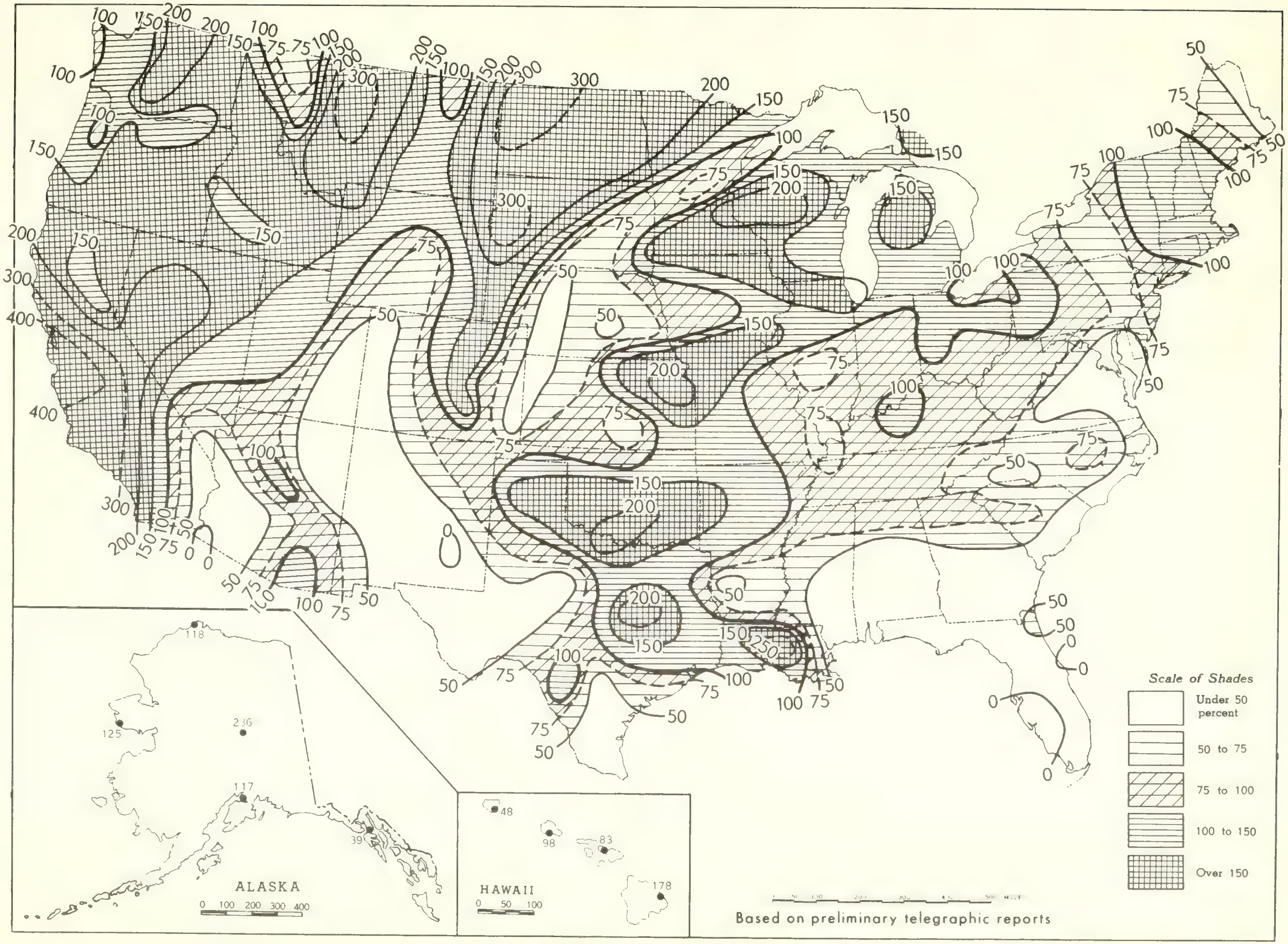
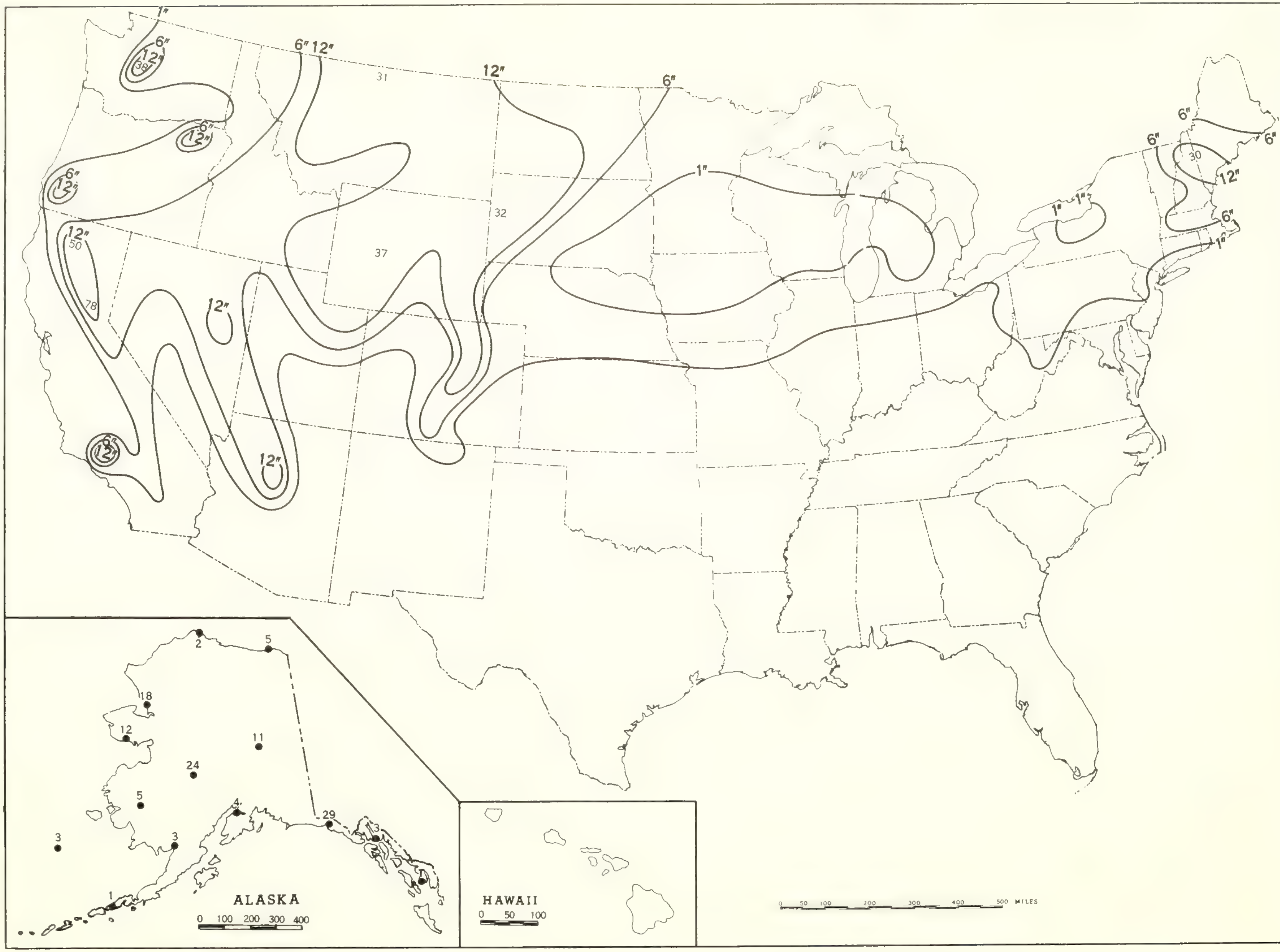
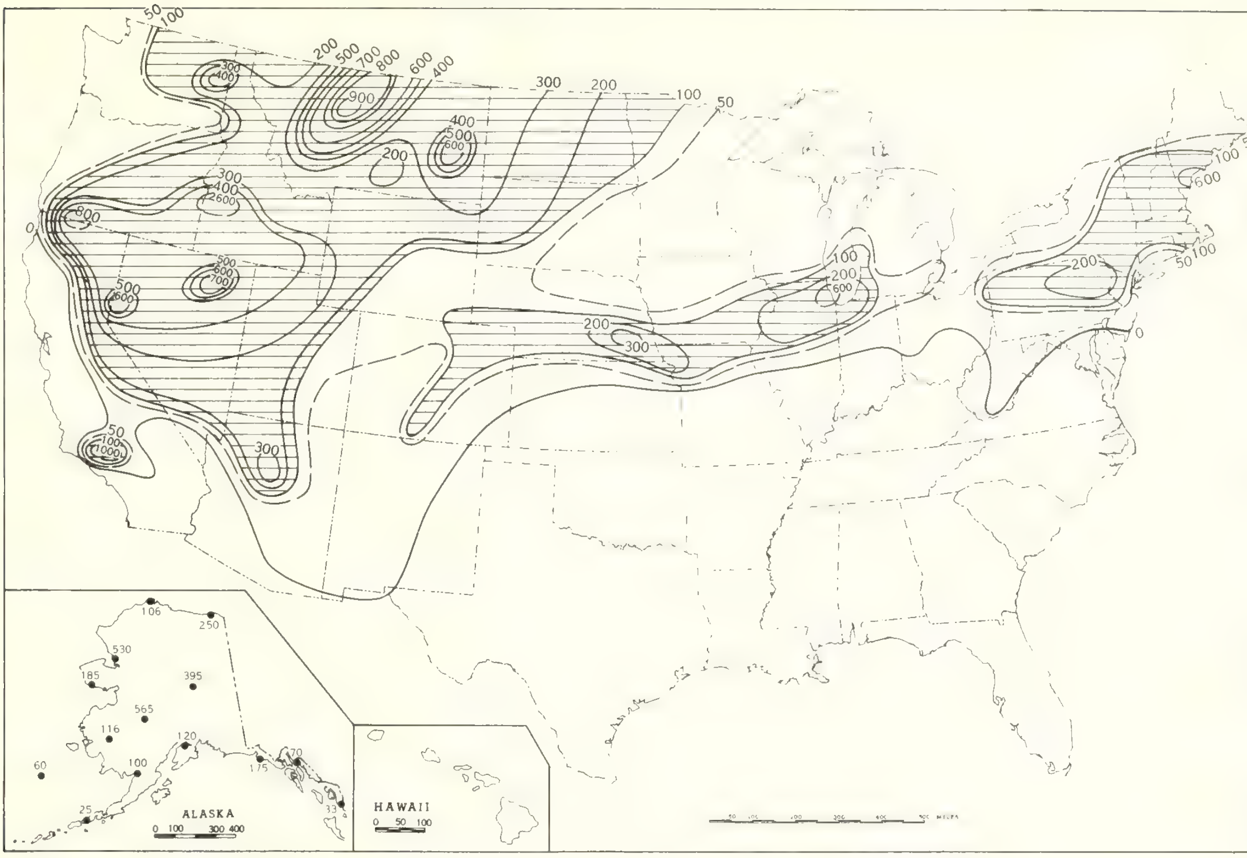


Chart IV. Total Snowfall (Inches), April 1967.

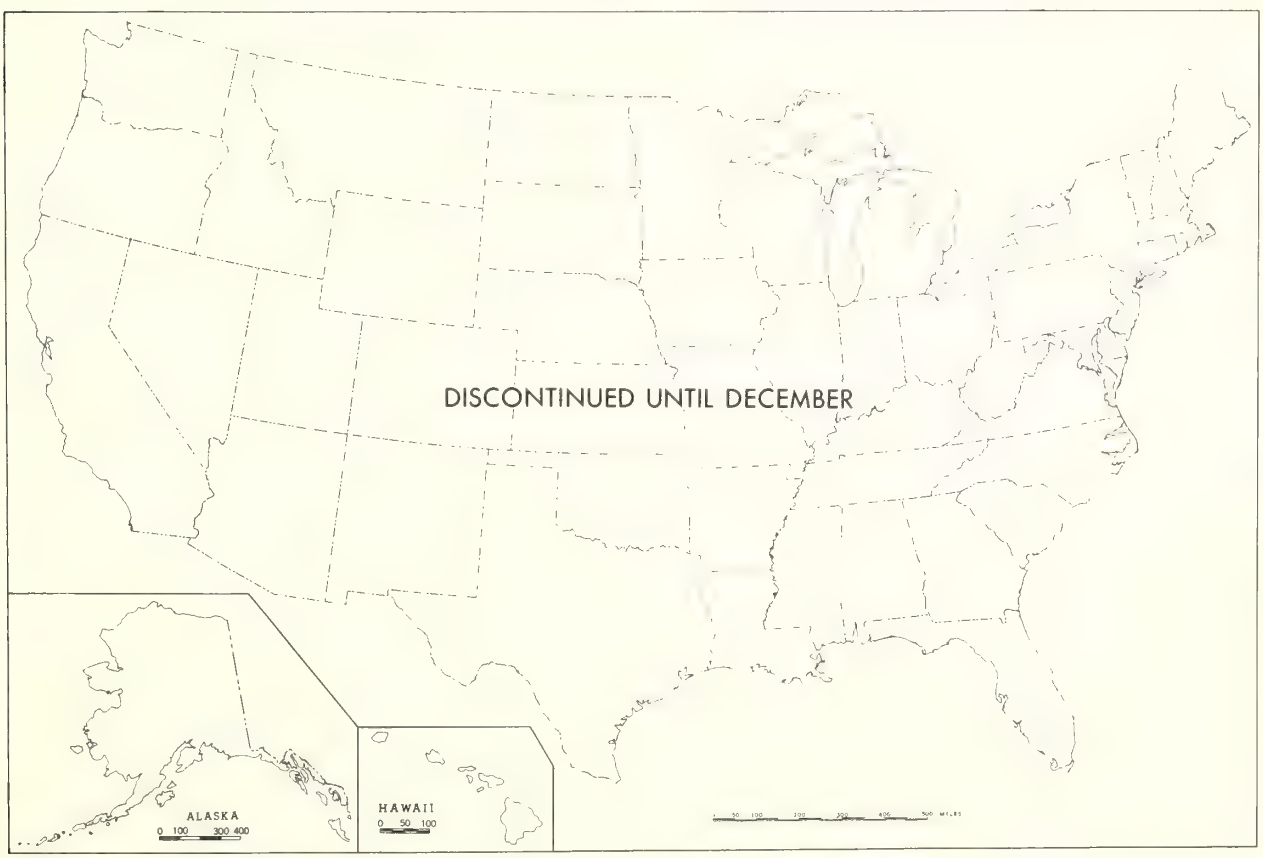


This is the total of unmelted snowfall recorded during the month at Weather Bureau and selected cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, April 1967.

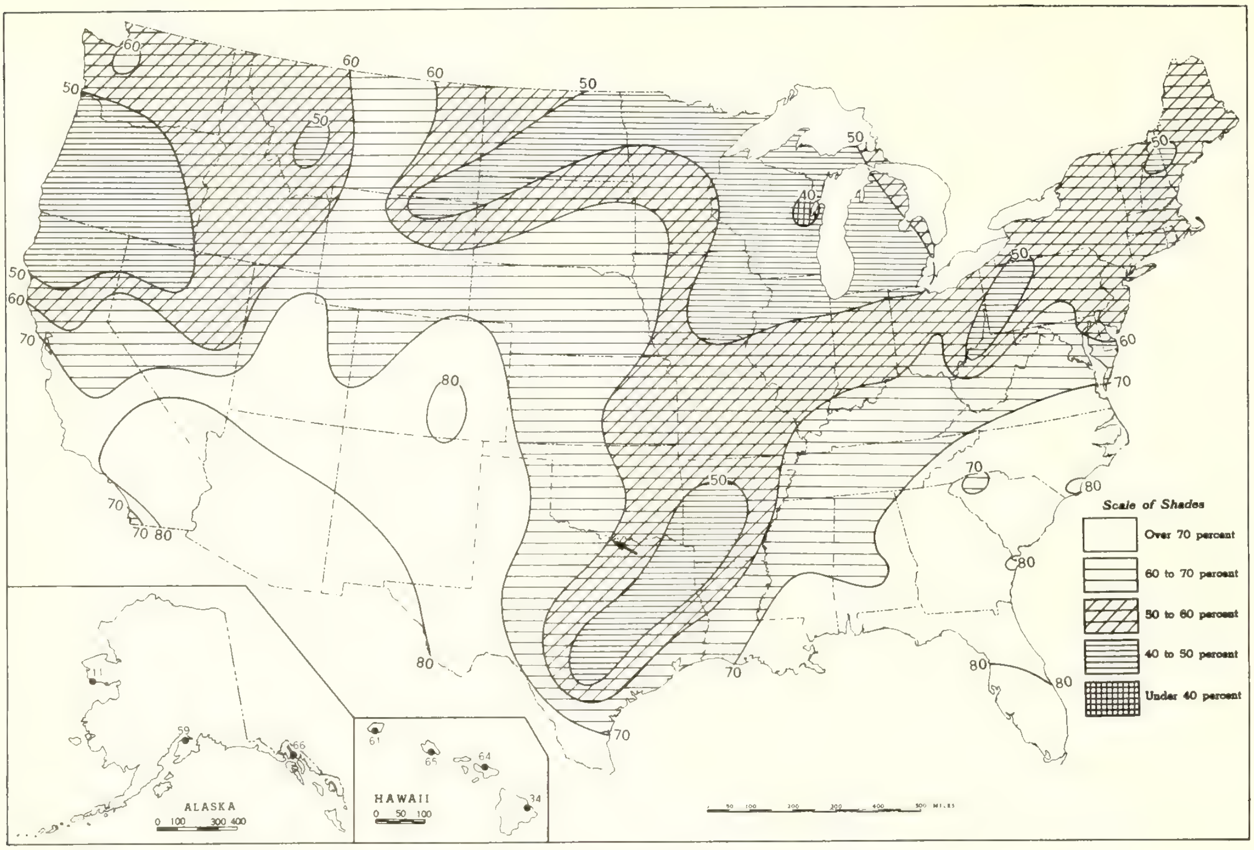


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., April 1967.

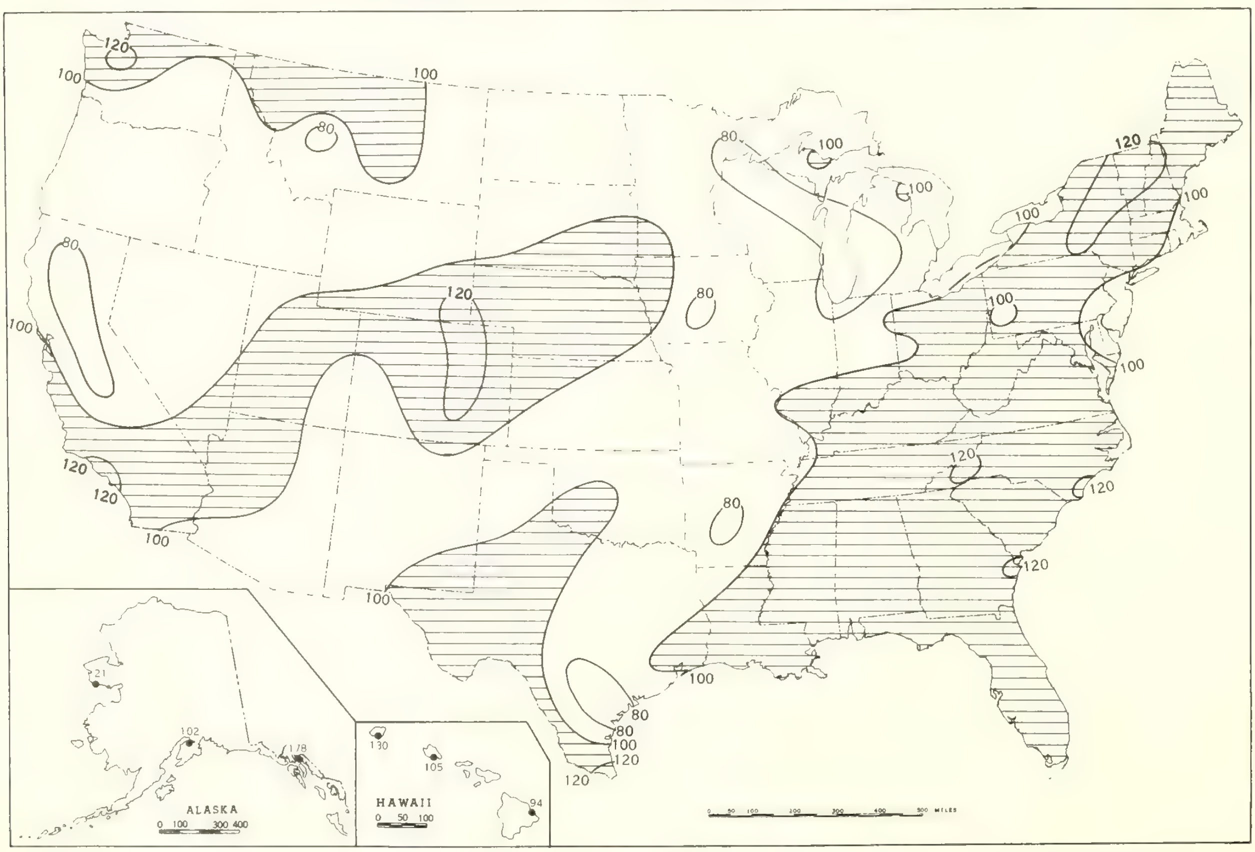


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a.m. E.S.T., of the Monday nearest the end of the month. It is based on reports from Weather Bureau and selected cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, April 1967.

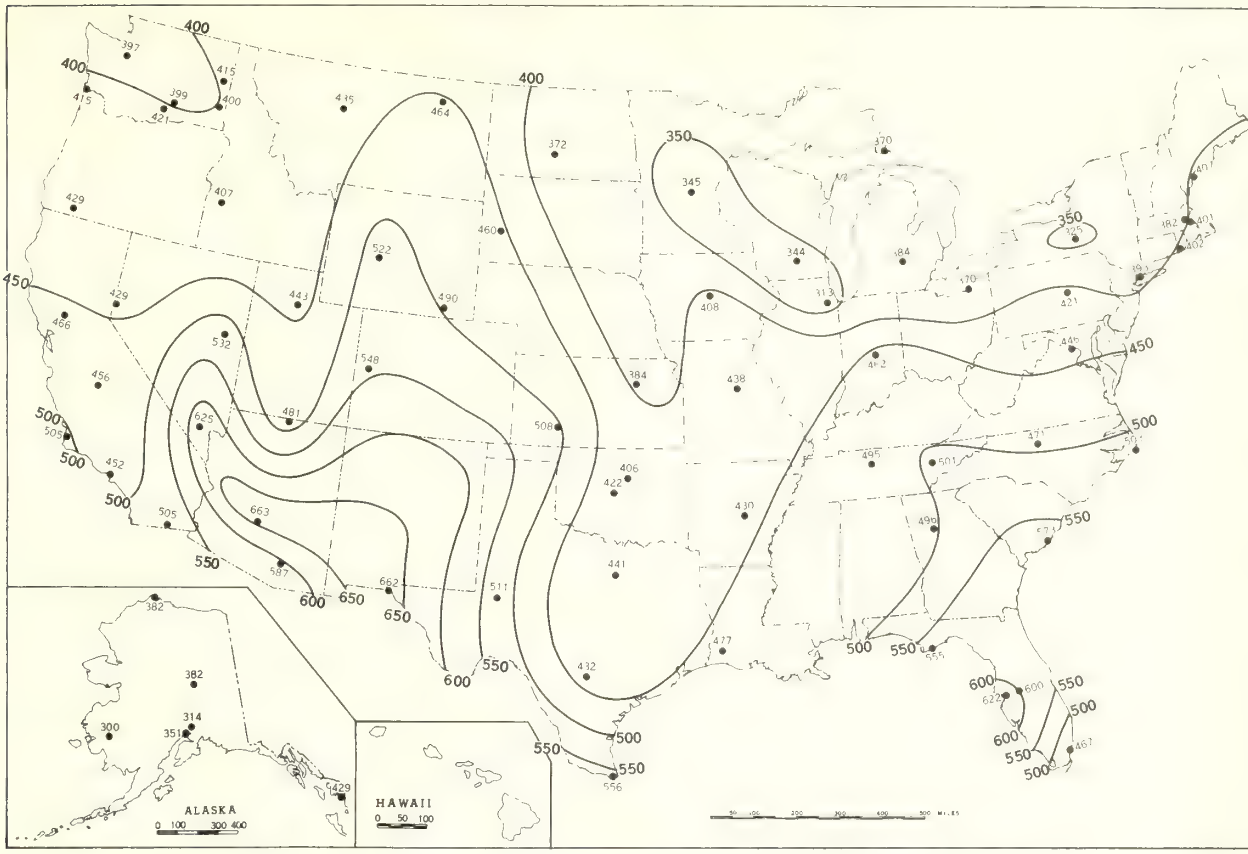


B. Percentage of Mean Monthly Sunshine, April 1967.

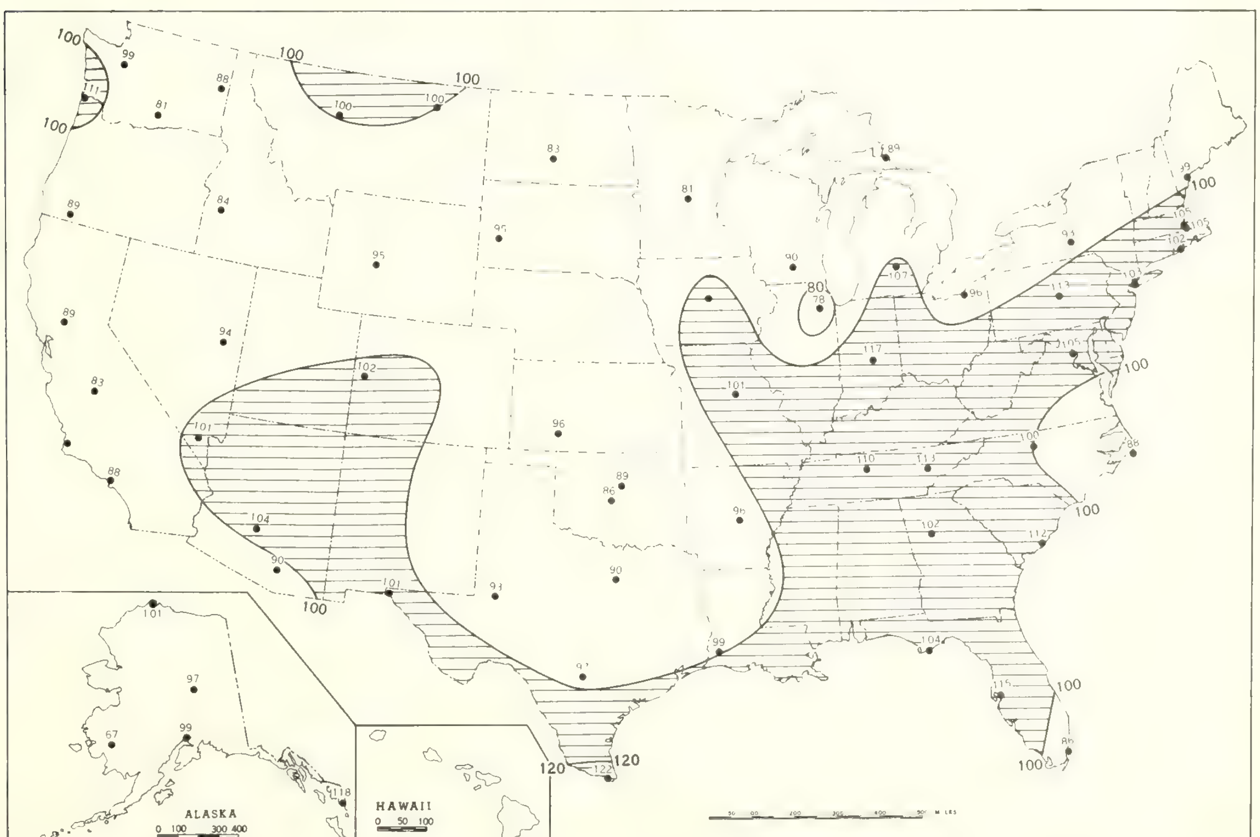


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, April 1967.

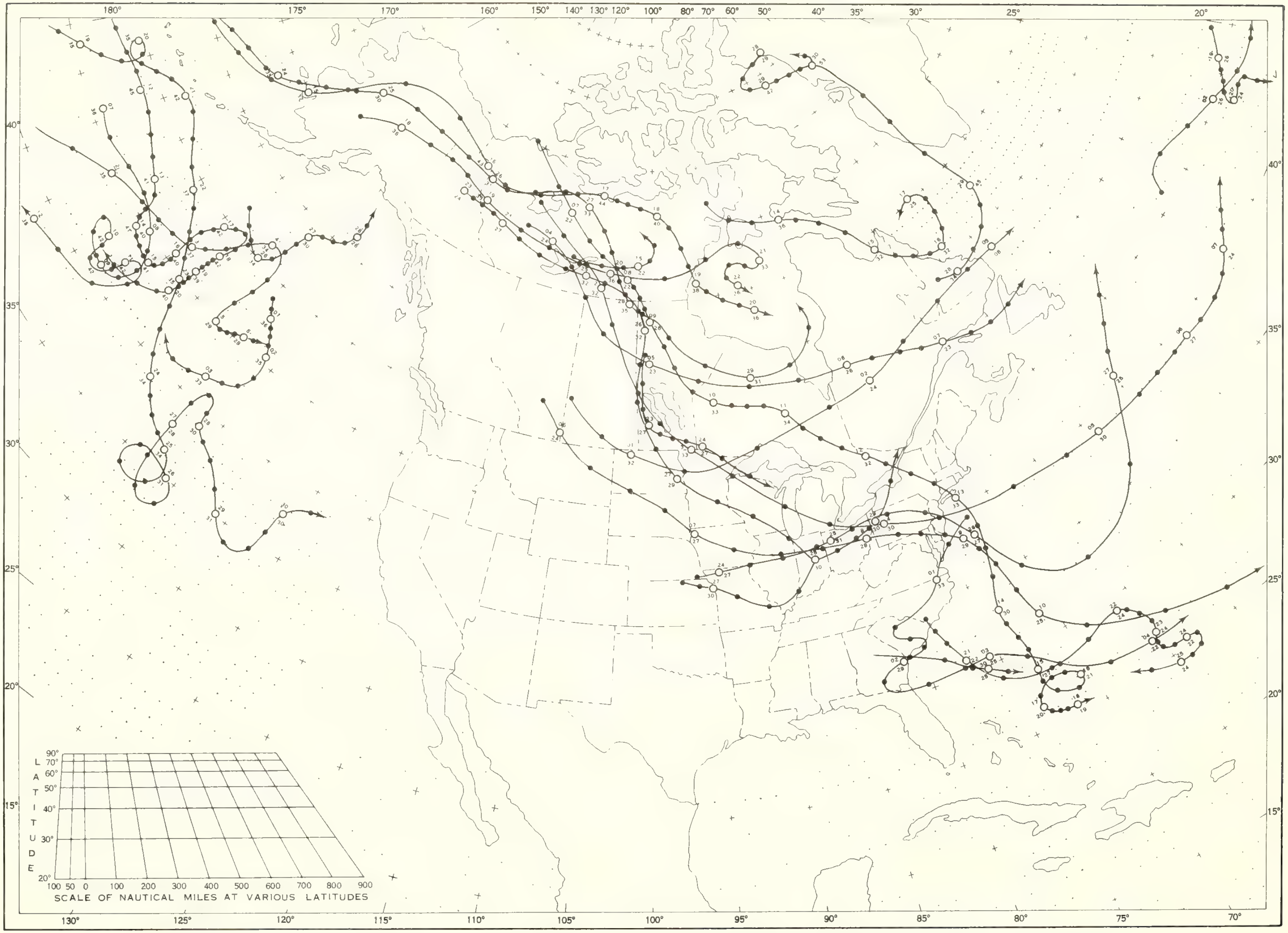


B. Percentage of Mean Daily Solar Radiation, April 1967.



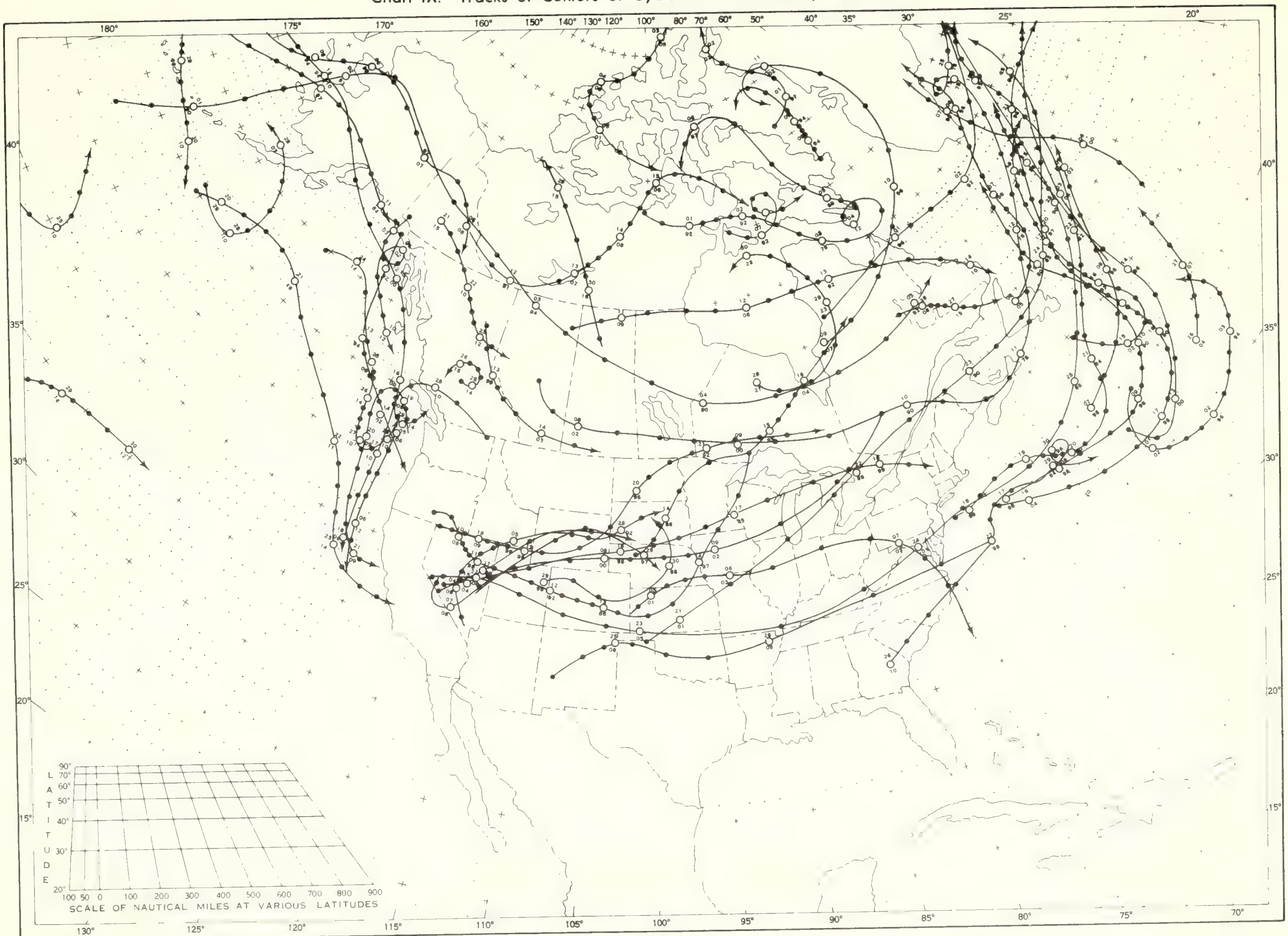
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, April 1967.



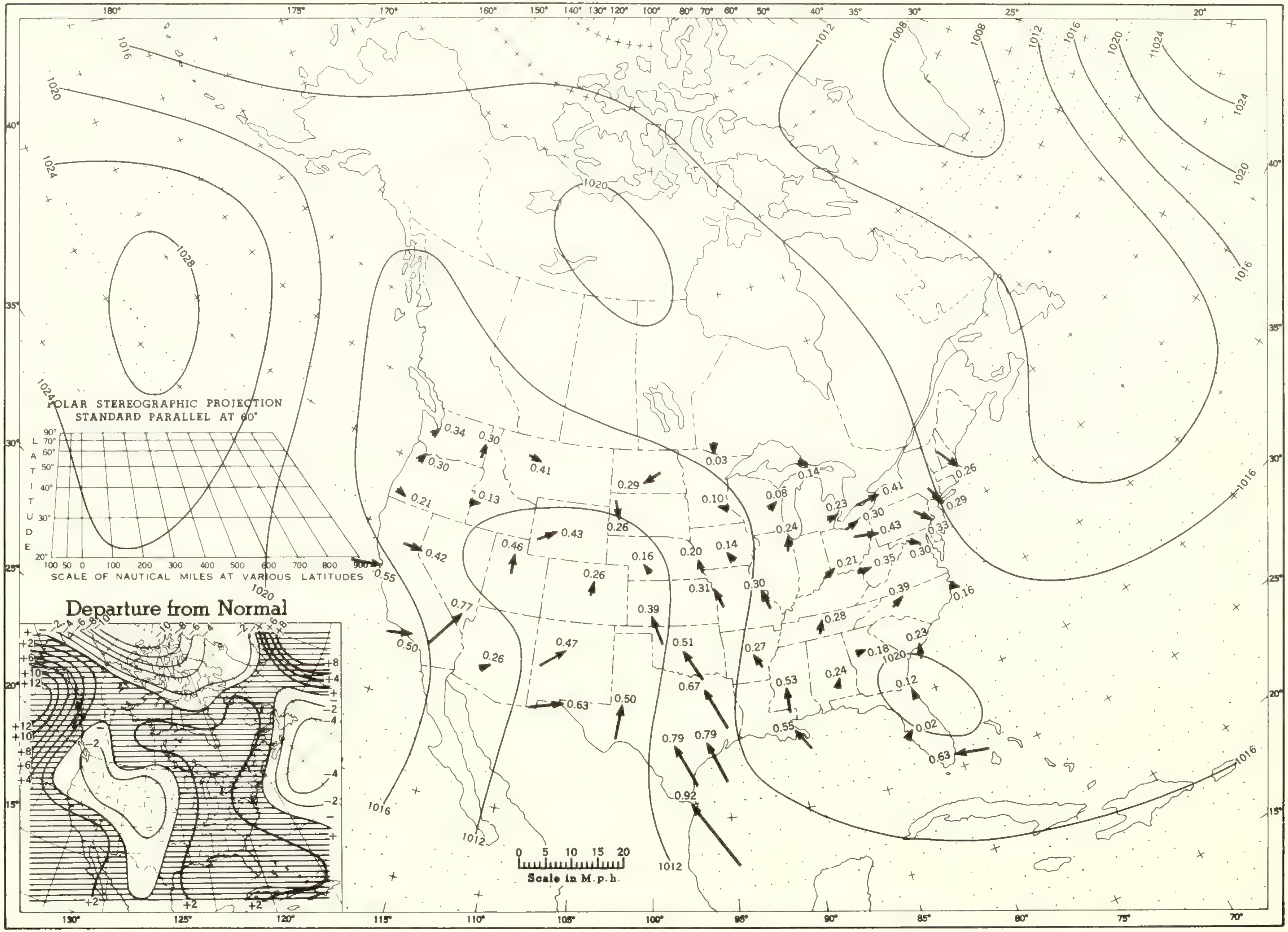
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, April 1967.



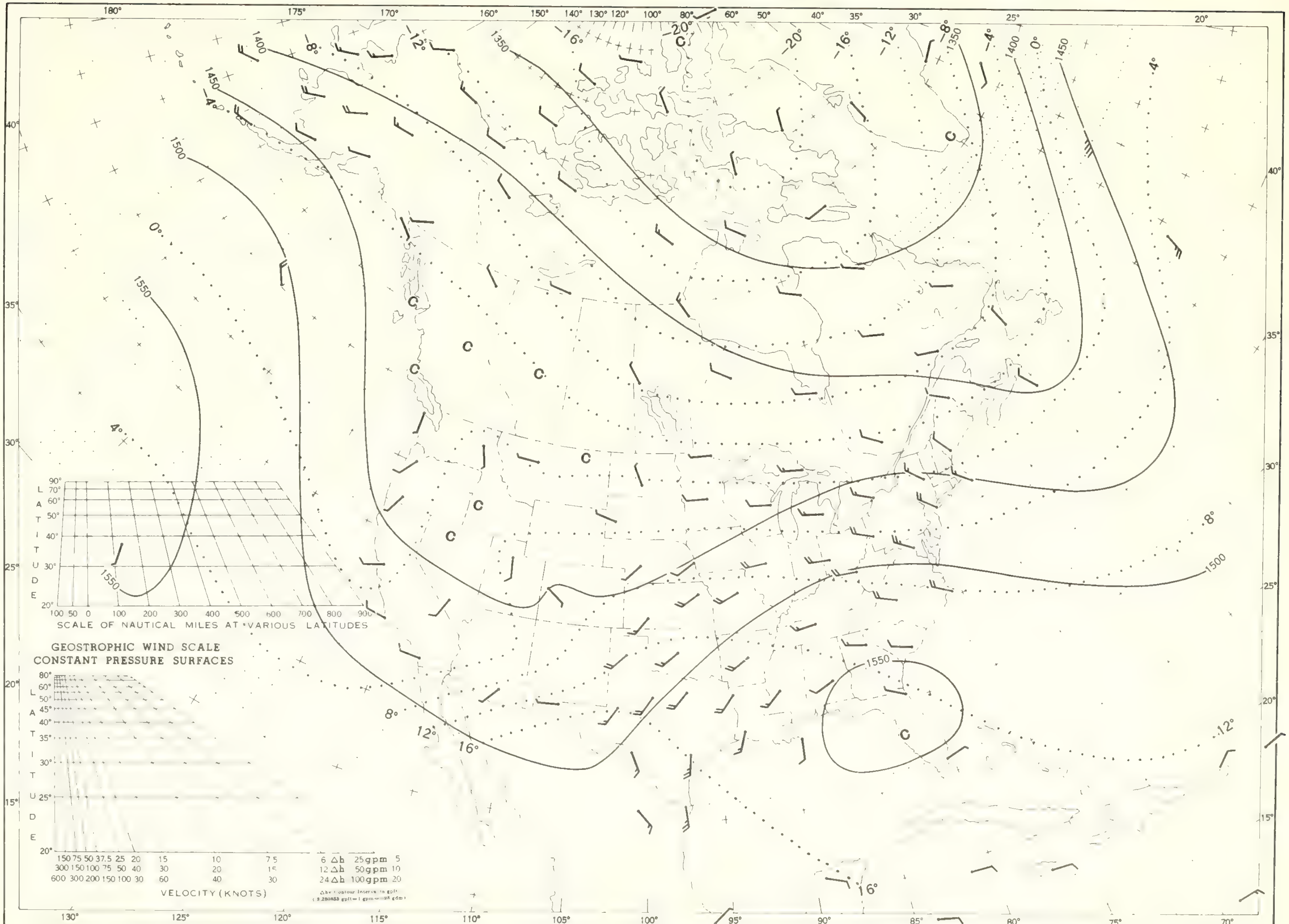
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, April 1967. Inset: Departure of Average Pressure (mb) from Normal, April 1967.



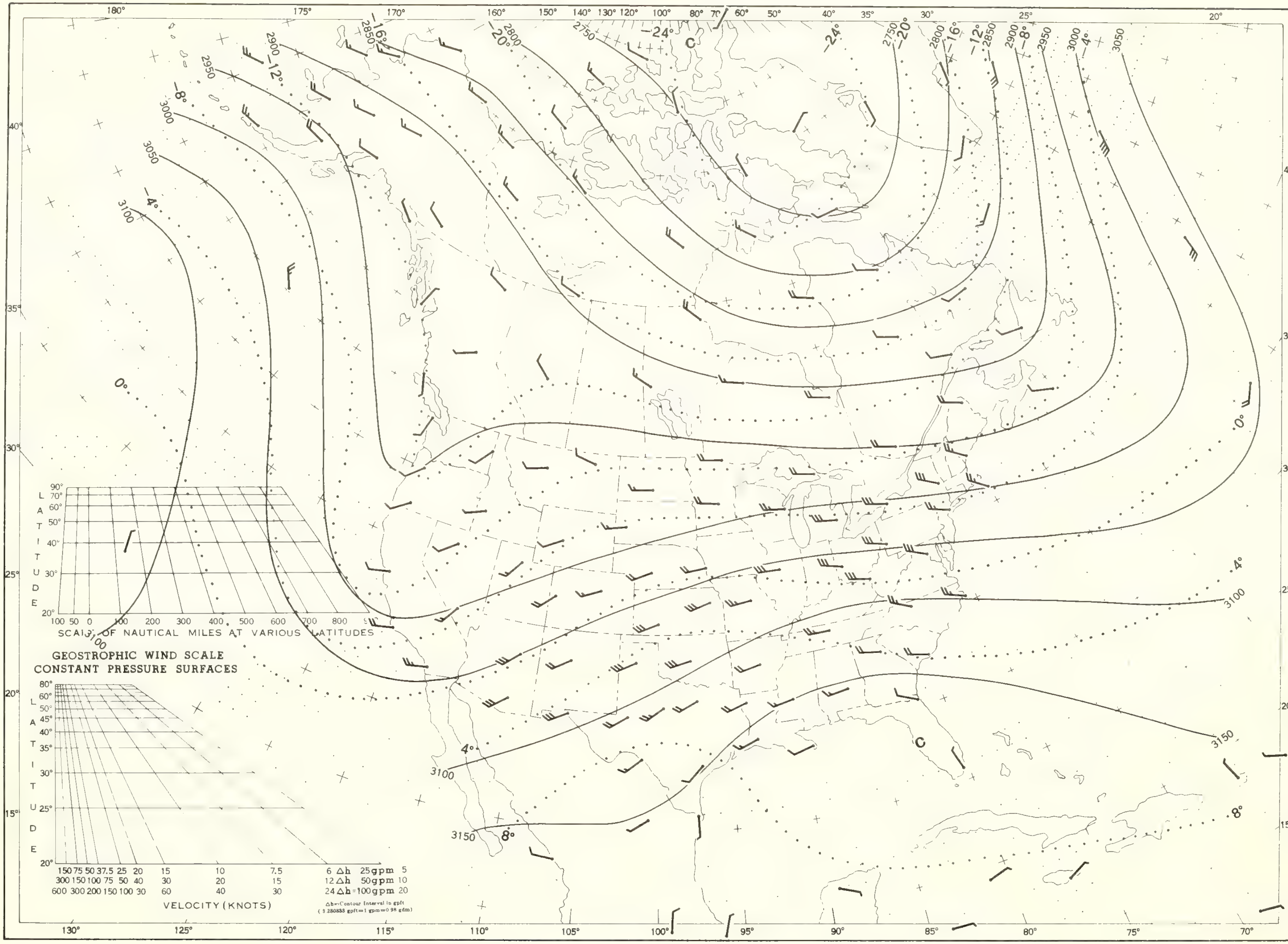
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.



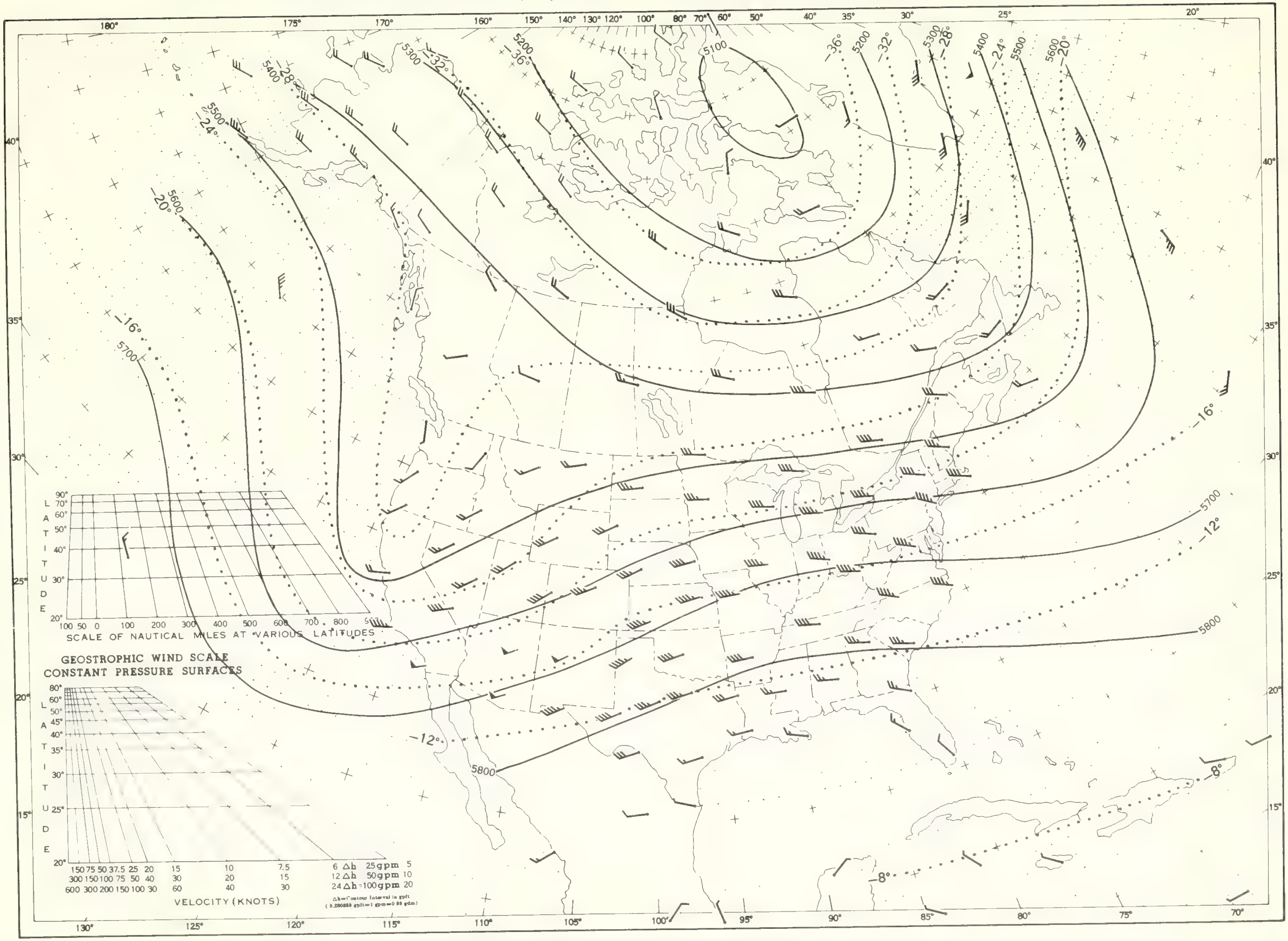
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.



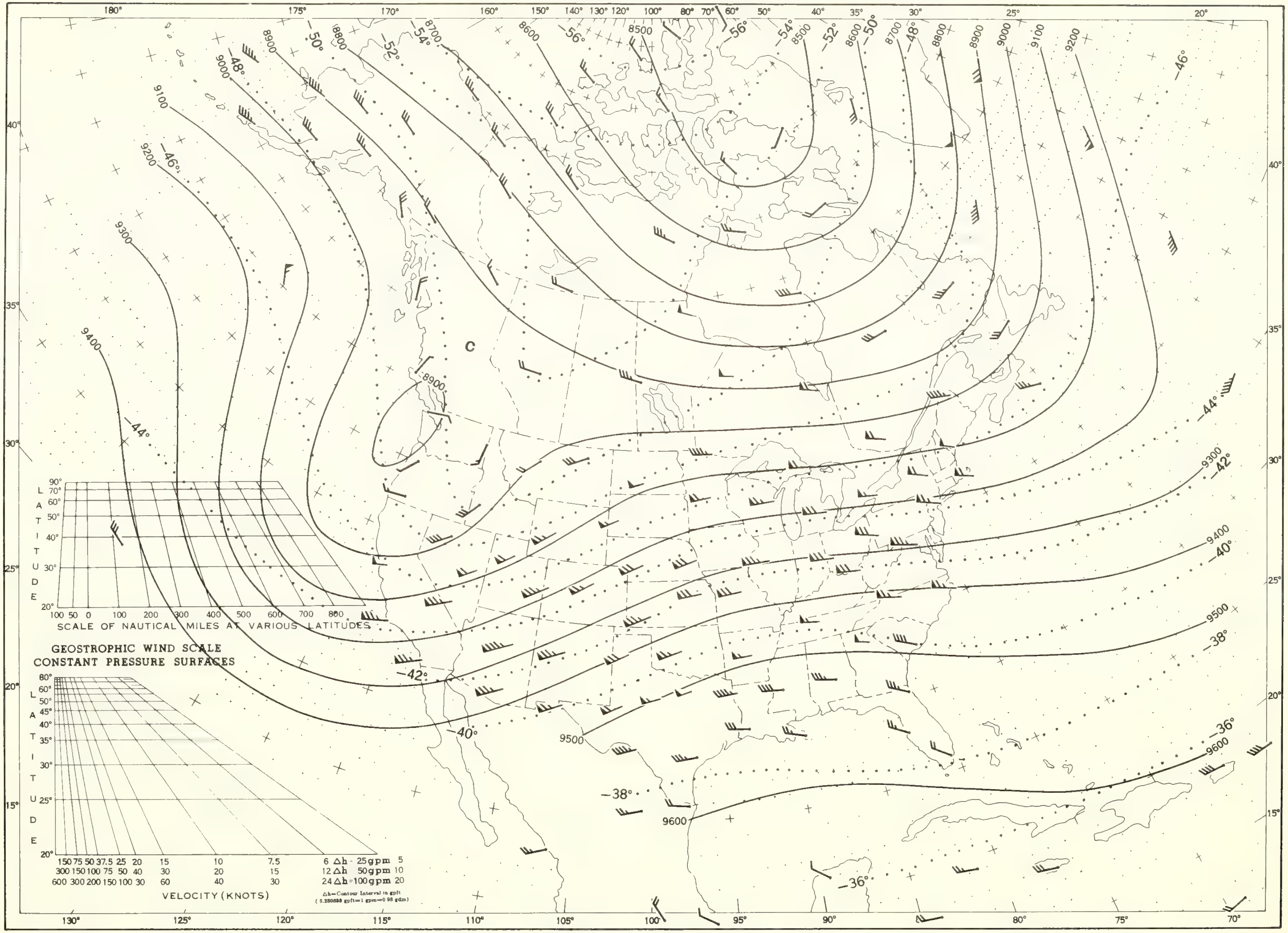
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.



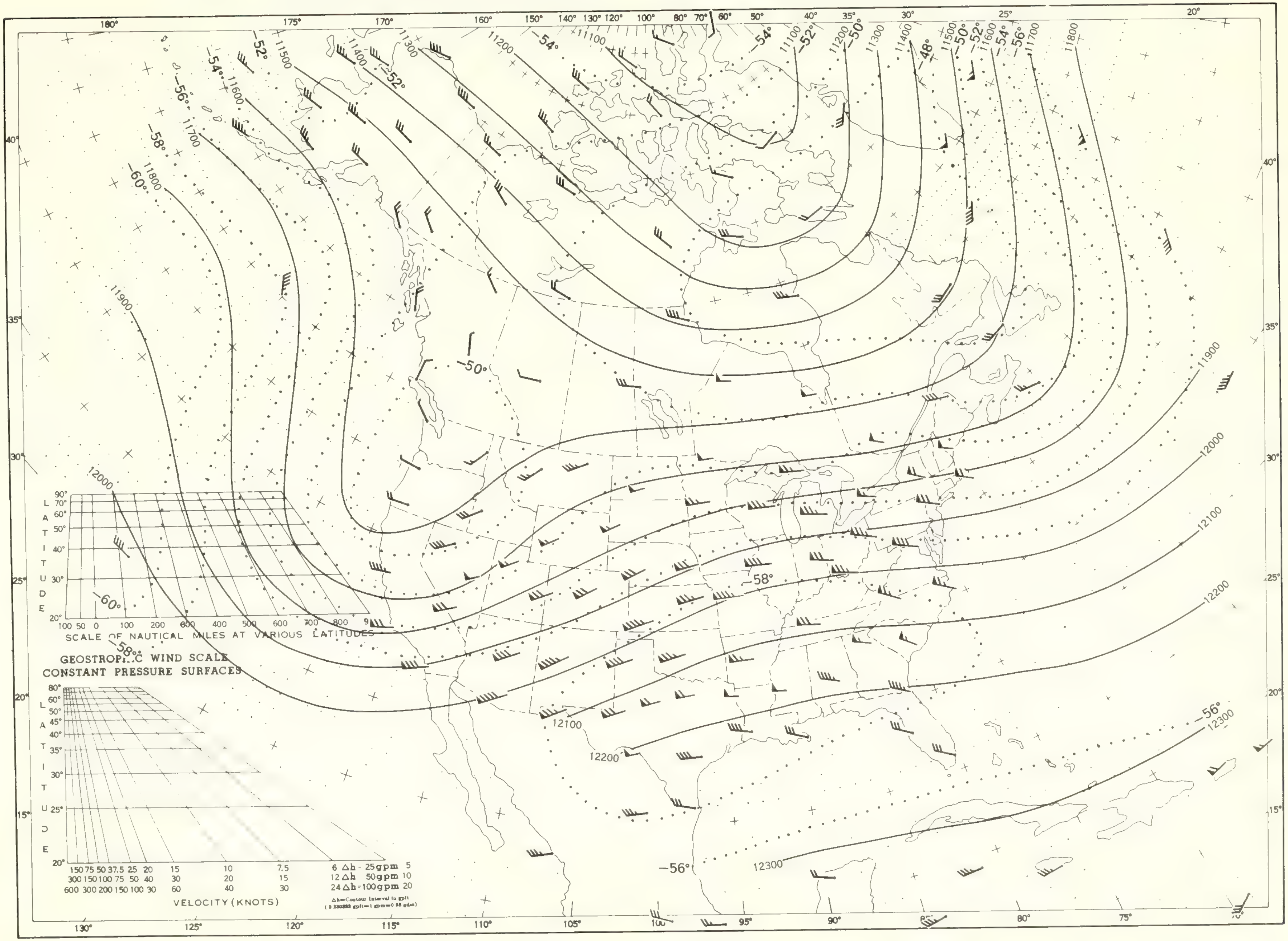
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.



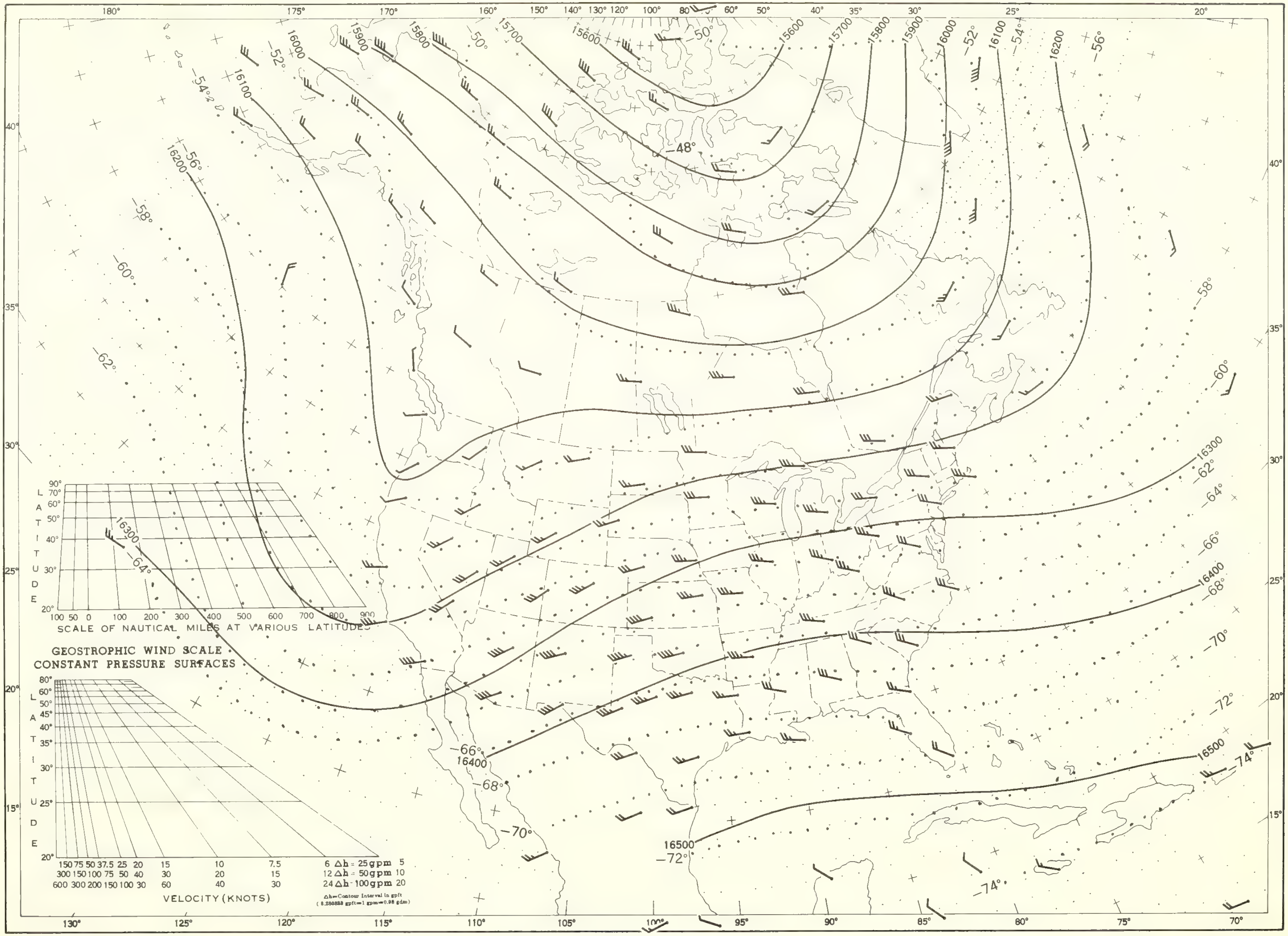
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.



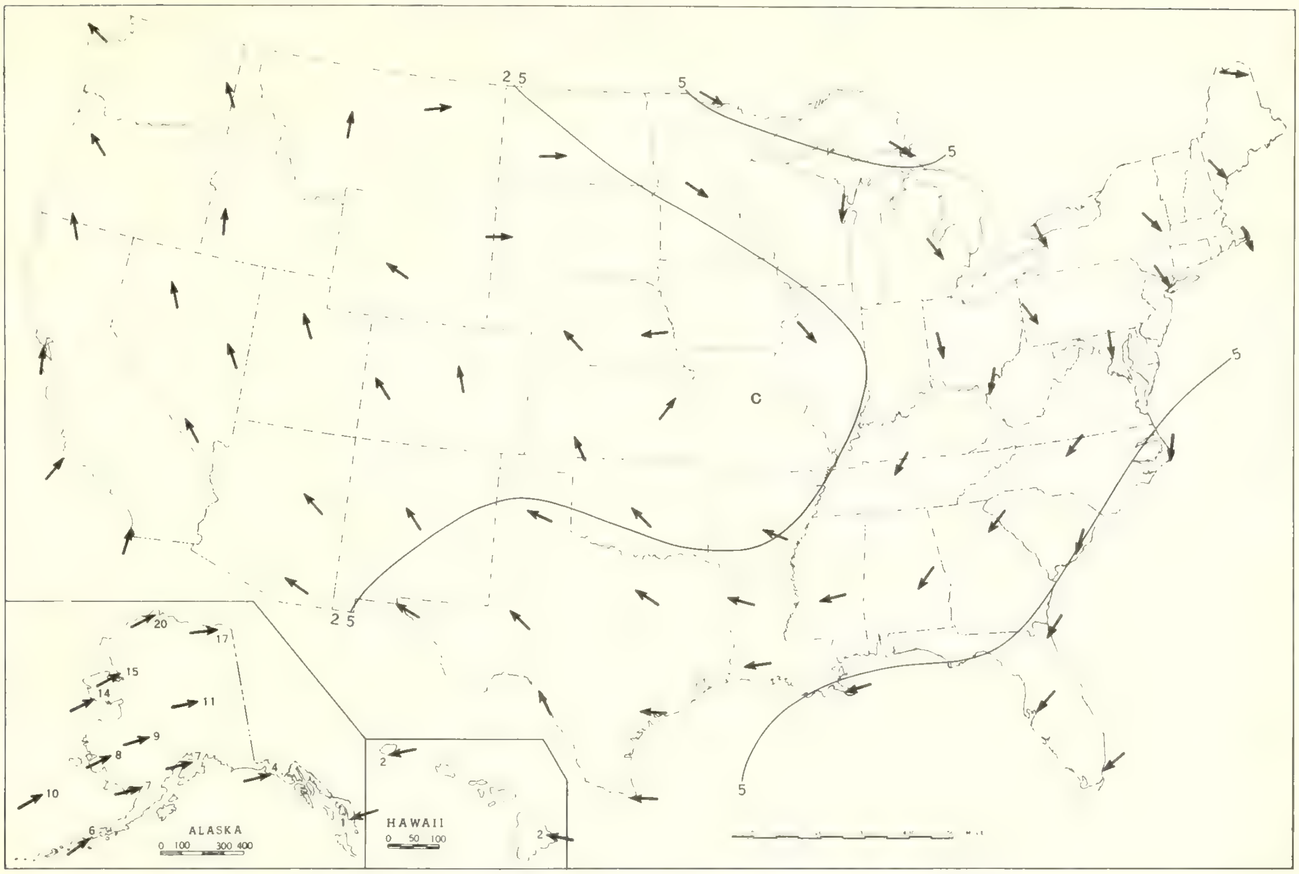
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, April 1967. Average Height and Temperature, and Resultant Winds.

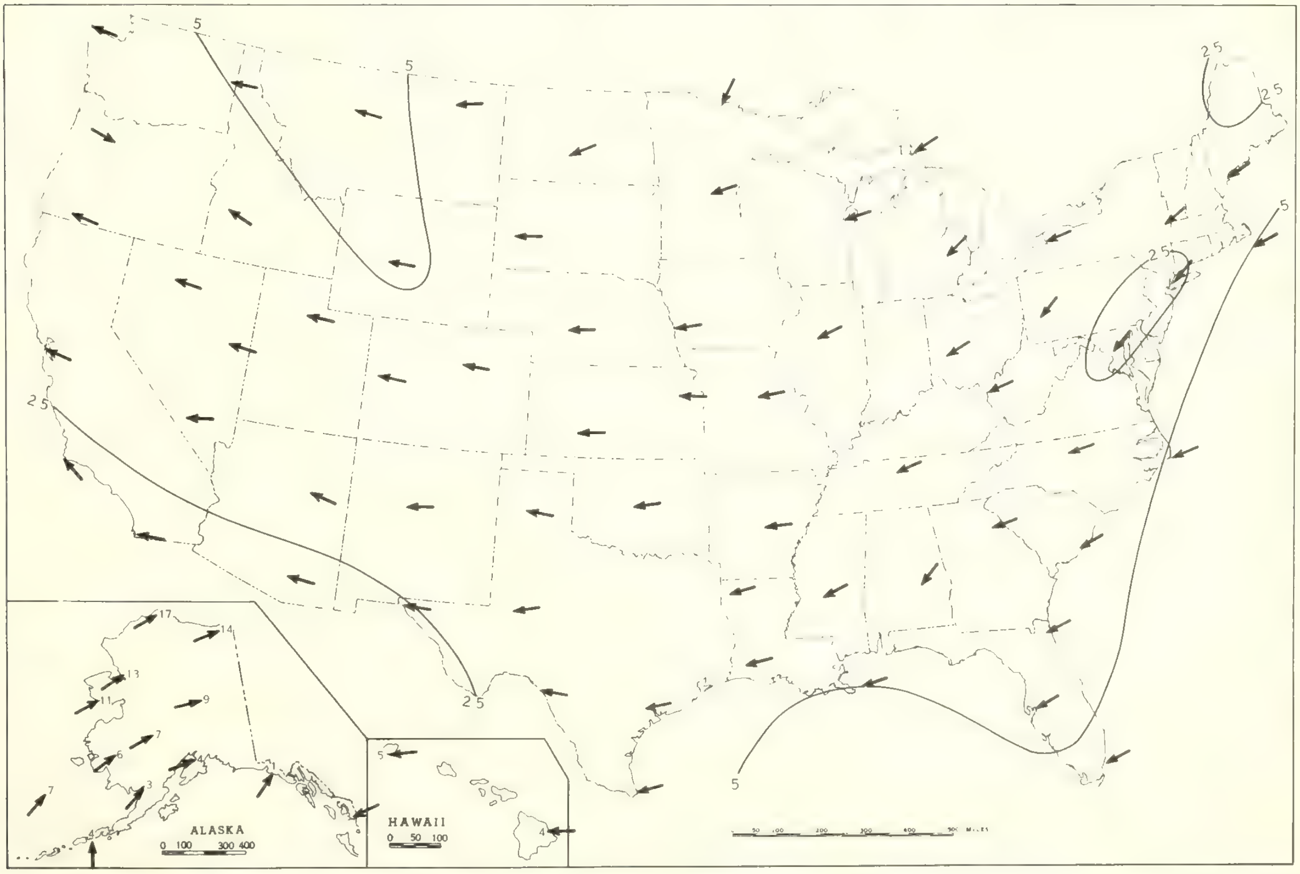


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, April 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, April 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

MAY 1967
Volume 18 No. 5

ASHEVILLE: 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 5 MAY 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Second consecutive cold, wet month most areas.
2. Numerous severe local storms.
3. Drought relief in Florida.
4. Late-season blizzard in northern Great Plains.

TEMPERATURE.--May 1967 was a cold month in most of the 48 states. Temperatures averaged above normal only in the Florida Peninsula, southern Texas, and parts of California and Nevada, and only slightly above in those areas. The month was 6° to 8° colder than normal in the Northeast and 4° or more in all northern sections east of the Rockies.

In the Northeast below-normal temperatures persisted virtually all month. At Bridgeport, Conn., the 20th was the only day warmer than normal and it was warmer by only 2°. This was the coldest May at a number of stations including Albany, N. Y., where records date back to 1820. This was also the coldest May on record at Philadelphia, Pa.; Norfolk, Va.; Harrisburg, Pa.; and the average temperature for Portland, Maine, tied with 1917 as the coldest. In addition, this was the coldest May since 1917 at many other stations among which were Boston, Mass.; Washington, D. C.; Charlotte, N. C.; Cleveland, Ohio; and Providence, R. I.

The first week was colder than normal everywhere except in Florida and southern Texas. Weekly averages were as much as 18° below normal in the Dakotas. On May 3, Larimore recorded -3°, the lowest temperature ever registered in North Dakota during May. The freeze line extended to the Mexican border in parts of the west and to the central Great Plains and southern Appalachians in the eastern half of the Country. With rising temperatures during the second week the freeze line retreated a considerable distance northward, and weekly averages were above normal from New Mexico to Florida.

Temperatures the third week rose to well above normal levels west of the Continental Divide and about midweek east of the Divide. Maxima on the 17th reached the 80's as far north as Montana and North Dakota and on the 19th rose into the 90's from Texas to Wisconsin. The rest of the month was near to above normal except cold in the upper Atlantic Coastal States.

Maximum temperatures reached record high levels for so early in the season at scattered stations. Among these were Red Bluff, Calif., 103° on the 20th; Grand Junction, Colo., 94° on the 23d; Sioux City, Iowa, 102° on the 25th; and Macon, Ga., 99° on the 28th, which also equaled the highest ever recorded there in May. This was the warmest May on record at Key West, Fla.

PRECIPITATION.--In about half the area of the 48 States precipitation was above normal and was concentrated in two main areas. One area extended eastward and northeastward from the eastern portions of the central and lower Great Plains to the Atlantic coast, and the other, covering much of the central Rockies, extended southwestward through the lower Great Basin into the Sierras, eastward into western portions of Kansas, Nebraska, and South Dakota, and in a narrow band along the Continental Divide to the Canadian border.

Elsewhere precipitation was slightly to much below normal. Monthly totals were less than 50 percent of normal in four principal areas, (1) western Washington, (2) parts of the southwestern Great Plains, (3) the extreme upper Mississippi Basin and adjacent Red River Basin, and (4) southern Florida.

The drought in Florida, the worst since 1945, covered most of the State, but was severe only on the west coast at the end of April. With near record heat and less than a third of normal precipitation during May severe drought covered a large portion of the Peninsula at the end of the month. May rainfall totaled about an inch, most of it falling during a cold front passage on the 22d and 23d. A light shower on the 5th ended a 36-day period without measurable rain at Lakeland, and 0.43 inch was the total rainfall at West Palm Beach for the April-May period. Poor pastures and scarce water supplies adversely affected cattle in the lower peninsula.

Drought was severe to extreme in much of the area from Kansas through Texas until beneficial rains fell in much of the area during the last week or 10 days of the month. Although these rains relieved the agricultural drought temporiarly, rainfall was still much below normal and the meteorological drought continued. In some north-central areas between the Great Lakes and Rockies, precipitation was less than 25 percent of normal. Minneapolis, Minn., reported the driest May since 1934 and Duluth and St. Cloud, Minn., since 1948. However, due to heavy precipitation in April and cool temperatures in May which reduced evapotransporation, no drought existed in this region and in some sections the soil was still wet.

In an area extending from the lower Mississippi Valley to West Virginia and in another area along the New England coast, heavy precipitation ranged up to more than 200 percent of normal. Some of the highest monthly totals were 15.47 inches near Daisy, Ark.; 15.00 at Natchez, Miss.; 14.46 at Broken Bow, Okla.; 14.36 at Vidalia, La.; and 14.09 inches at Karnack, Tex., and monthly totals exceeded 10 inches locally in Alabama, Illinois, Kentucky, Massachusetts, Missouri, New Hampshire, the Carolinas, Tennessee, and West Virginia.

SNOWFALL.--Snowfall was unusually heavy in many western and northern areas. Heavy snow fell in parts of Vermont on the 25-26th, and traces on the 25th at Worcester, Mass., and Hartford, Conn., were the latest for the season during records dating back to 1892 and 1904, respectively. It was also the first snowfall in May at Hartford, Conn., since 1923.

In the midcontinent area, Marquette, Mich., measured 4.2 inches of snow on the 10-11th, which was the most there for so late in spring since 1929, and 3.6 inches at North Platte, Nebr., was the most there in May since 1950. A blizzard which swept through the northern Great Plains at the end of April persisted through May 2 when Bismarck, N. Dak., measured 11 inches.

In the northern Rockies, Helena, Mont., recorded 12.5 inches in 24 hours on the 10th, a May record; and 12.7 inches for the month was the most for May since 1927.

STORMS.--May, an unusually stormy month, began with a late-season blizzard in the northern Great Plains. Although the storm raged through April 30 and May 1, greatest intensity was reached in many areas on May 1,

and the storm has already been referred to locally as the May Day Blizzard. In North Dakota winds up to 70 m.p.h. drifted heavy snowfall, that exceeded a foot locally, into drifts as much as 12 feet high. In South Dakota the blizzard was only slightly less intense than in North Dakota, but up to 30 inches of snow were reported in the Black Hills. This was South Dakota's only May blizzard. One death was directly attributed to the storm and property and livestock losses were counted in the hundreds of thousands of dollars.

Severe local storms, such as hail, high winds, and tornadoes, were particularly numerous in the mid-continent area. The worst tornado killed one person, injured 100, and caused $1 million damage in Birmingham, Ala., on the 6th. On the 19th, hailstones 4 inches in diameter were reported in Louise, W. Va., a tornado killed a person near Oakland, Md., and winds gusting to 70 m.p.h. whipped dust in Iowa.

An intense storm system over the Northeast on the 25-26th was accompanied by rain, sleet, snow, and hurricane-force winds in New England. Boats and fishing gear were heavily damaged on the southeastern New England coast and many homes were evacuated in Massachusetts due to floods from tide and surf. Total damage was estimated at several million dollars.

CONDENSED CLIMATOLOGICAL SUMMARY

MAY 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Prattville	98	28	3 Stations	36	10+	Florence	11.92	Coffee Springs 2NW	2.08
Alaska	Palmer Aaes	75	28	Anaktuvuk Pass	-12	7	Little Port Walter	12.55	Port Alsworth	.00
Arizona	Dateland	112	23	Maverick	6	2	Jerome	2.09	17 Stations	.00
Arkansas	Waldron	95	12+	Yellville	30	3	Daisy 1E	15.47	Gravette	2.52
California	Death Valley	115	23+	White Mountain 2	-5	1	Round Mountain 1NNE	3.61	59 Stations	.00
Colorado	Las Animas	101	24	2 Stations	-1	1	Limon	7.75	Parshall 10SSE	.19
Connecticut	Bulls Bridge Dam	83	19	4 Stations	27	13+	Lake Konomoc	7.75	Wigam Reservoir	3.57
Delaware	2 Stations	84	2	Selbyville	32	5	Bridgeville 1NW	5.58	Middletown 1WSW	3.17
Florida	Alexander Springs	103	14	De Funiak Springs	40	17+	Gainesville FAA AP	7.22	De Soto City 8SW	.00
Georgia	Bainbridge	101	12	3 Stations	34	17+	Ellijay	9.56	Blackbeard Island	.60
Hawaii	3 Stations	91	18+	Mauna Loa Slope Obs.	31	29+	Iliiliula Intake 1050	32.79	South Point Corral 3	.04
Idaho	Swan Falls Power House	98	21	Warren	2	1	Island Park Dam	3.20	Glenns Ferry	.21
Illinois	Carlyle Reservoir	97	28	2 Stations	27	3	Cairo WB City	10.20	Chicago University	1.07
Indiana	Shoals Hiway 50 Bridge	98	29	Greensburg 3SW	27	3	Liberty 3SSE	9.19	Hobart	1.16
Iowa	Sioux Center	104	25	Swea City 5NW	10	3	Albia Pasture Imp Farm	6.42	Rock Rapids	1.08
Kansas	Syracuse 2W	104	25+	Hoxie	19	1	Mound City	7.94	Ashland	1.10
Kentucky	Tomahawk 1WSW	93	29	5 Stations	30	5+	Brownsville	11.12	Jeremiah	1.68
Louisiana	Natchitoches	97	11	Converse	41	16	Vidalia No 2	14.36	Quarantine	1.82
Maine	2 Stations	76	20	3 Stations	21	19+	Machias	6.88	St Francis	2.30
Maryland	Cumberland	90	27	2 Stations	27	17+	Oakland 1SE	8.53	Potomac Filter Plant	1.95
Massachusetts	Knightville Dam	82	20	Hyannis 2NNE	24	7	Segreganset	10.67	Pittsfield WBAP	3.18
Michigan	Adrian 2NNE	88	27	Beechwood 7WNW	13	3	Scottville 1NE	4.36	Eagle Harbor Coast GD	.04
Minnesota	Luverne	100	25	2 Stations	6	3	Grand Meadow	3.23	Windom	.32
Mississippi	2 Stations	95	14+	3 Stations	40	16+	Natchez	15.00	Standard	1.77
Missouri	4 Stations	98	26+	2 Stations	26	3	Kennett Radio KBOA	13.38	Belleview	1.94
Montana	Miles City	93	23	Summit	2	4	Melville 4W	5.17	2 Stations	.00
Nebraska	Hartington	107	25	2 Stations	15	2+	Holdrege 3SW	6.72	Spencer 5SSE	1.36
Nevada	Sunrise Manor Las Vegas	109	22	Ruth	5	1	Eureka	3.28	2 Stations	.00
New Hampshire	3 Stations	82	20+	Mount Washington	12	13+	Mount Washington	12.68	Concord WBAP	3.92
New Jersey	Burlington	84	19	2 Stations	27	13+	Cape May 3W	5.93	Essex Fells Serv Bldg	2.11
New Mexico	Jal	102	9	Eagle Nest	-2	1	2 Stations	3.11	13 Stations	.00
New York	Watertown FAA AP	86	1	6 Stations	21	23+	Riverhead Research	6.60	Utica 2SE	2.21
North Carolina	2 Stations	97	30+	2 Stations	28	16+	Tryon	10.53	Washington Main St	1.44
North Dakota	3 Stations	92	24+	Larimore	-3	3	Selfridge	5.05	Tagus	.03
Ohio	Toledo Blade	95	28	Oberlin	24	6	Eaton	8.15	Toledo Blade	2.14
Oklahoma	2 Stations	106	10	Goodwell	25	2	Broken Bow 1N	14.46	Gate 1NNE	.80
Oregon	Ontario KSRV	96	21	Crater Lake NP HQ	11	1	Gold Beach Ranger Sta	3.84	Bend	T
Pennsylvania	Farrell Sharon	95	27	Clermont 4NW	17	23	Claysville 3W	7.72	Hanover	2.96
Puerto Rico	2 Stations	95	27+	Aibonito	54	15+	Mayaguez	11.42	7 Stations	.00
Rhode Island	Providence WBAP	76	20	Kingston	28	7	Greenville	8.53	Block Island WBAP	5.98
South Carolina	3 Stations	98	30+	2 Stations	34	10	Hogback Mountain	12.15	Crescent 1S	2.80
South Dakota	Tyndall	105	25	do	4	3	Maurine	5.17	Highmore 23NNW	.26
Tennessee	Samburg Wildlife Ref	97	28	Watauga Dam	30	11	Palmetto	13.97	Knoxville WBAP	4.10
Texas	3 Stations	110	13+	Cornudas Service Sta	23	2	Karnack	14.09	8 Stations	.00
Utah	Saint George	103	22	Blowhard Mtn Radar	2	2	Cottonwood Weir	5.70	Navajo Mountain	.17
Vermont	Enosburg Falls	82	1	Mount Mansfield	17	4	Mount Mansfield	7.13	Saint Albans Bay	2.85
Virginia	3 Stations	94	28+	Rocky Knob	27	16	Clinchco	7.05	Parramore Bch	1.97
Washington	2 Stations	94	22+	2 Stations	20	29+	Rainier Carbon Rvr Ent	6.01	Cle Elum	.02
West Virginia	Williamson	93	29+	do	24	4	Pickens 1	11.53	Harpers Ferry	2.81
Wisconsin	3 Stations	94	27+	Superior 7SE	11	3	Lake Mills	4.46	Madeline Island	.94
Wyoming	Glenrock 5ESE	94	23	Bitter Creek 4NE	-4	14	Phillips	6.61	Shell	.19

\+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	994.2	1016.6	79	56	67.7	- 4.1	91	14+	40	3	4	0	58	74	9.32	5.90	4.11	10	7	0.0	0	1.9	23	31	SW	7	9	9	13	5.8	60
HUNTSVILLE	600	993.2	1016.1	78	57	67.7	- 2.7	91	27	43	16+	3	0	55	65	6.48	3.09	1.85	14	12	0.0	0	1.8	22	36	25	7	9	10	12	5.9	
MOBILE	211	1008.8	1016.5	85	64	74.6	- 1.0	93	28+	54	16	12	0	63	72	5.05	0.17	1.50	10	7	0.0	0	1.8	21	23	22	11+	10	10	11	5.6	
MONTGOMERY	194	1009.5	1016.5	83	60	71.4	- 1.0	94	14	50	17+	8	0	60	70	5.48	2.01	2.59	7	5	0.0	0	1.6	24	31	E	22	12	9	10	5.4	59
ALASKA																																
ANCHORAGE	114	1011.5	1016.3	57	38	47.1	- 0.3	66	27+	29	7	0	3	30	53	1.07	0.55	0.60	6	0	0.0	0	1.6	23	23	15	21	13	5	13	5.4	65
ANNETTE	110	1014.2	1018.3	57	41	49.3	0.1	73	31	35	11	1	0	40	75	7.97	0.90	1.86	14	0	0.0	0	4.5	15	25	14	26	5	7	19	7.3	
BARROW	31	1016.3	1016.8	26	18	22.1	3.7	37	2	10	22	0	31	19	87	0.25	0.13	0.06	10	0	3.2	4	2.5	24	35	26	4	0	1	30	9.6	
BARTER ISLAND	39	1015.9	1017.9	30	17	23.3	2.6	42	2	4	17	0	31	19	81	1.51	1.26	0.56	12	0	7.3	4	6.4	27	48	28	4	0	5	26	9.2	
BETHEL	125	1013.2	1018.8	52	33	42.5	3.5	65	29	23	6	0	15	33	72	0.10	- 0.85	0.05	5	0	0.0	T	5.3	31	28	35	5	7	10	14	6.3	
COLD BAY	96	1012.5	1016.6	46	37	41.5	2.0	58	27	30	7+	0	3	35	80	0.62	- 1.67	0.20	8	0	0.0	0	3.3	1	39	16	8	1	2	28	9.1	
FAIRBANKS	436	999.0	1016.1	55	37	45.7	- 1.4	70	30	27	7+	1	10	29	55	0.43	- 0.28	0.15	8	0	T	6	3.1	25	22	21	30+	5	5	21	7.3	
JUNEAU	12	1016.6	1017.3	55	36	45.6	0.0	67	10+	26	1	0	9	38	81	2.94	- 0.30	0.52	18	0	0.0	0	3.4	12	30	12	16	3	5	23	8.2	38
KING SALMON	49	1014.2	1016.4	55	33	44.0	0.7	66	28	25	7	0	13	30	61	0.22	- 0.74	0.11	5	0	0.0	0	1.1	36	35	9	25	6	9	16	6.6	
KOTZEBUE	10	1018.0	1018.3	36	25	30.4	- 0.5	44	1	17	5+	0	31	27	86	0.24	- 0.09	0.10	6	0	2.1	33	4.2	27	36	31	5	3	10	18	7.5	
MC GRATH	344	1004.7	1017.7	55	35	45.0	0.9	64	23	24	7+	0	11	30	58	0.29	- 0.59	0.14	3	0	T	3	3.1	31	21	21	30+	7	11	13	6.3	
NOME	13	1018.3	1018.9	36	26	31.2	- 3.8	42	15	15	6	0	31	25	78	0.25	- 0.44	0.10	6	0	0.6	33	2.4	26	23	2	4	6	5	20	7.5	33
ST. PAUL ISLAND	22	1018.6	1019.7	42	35	38.2	3.4	46	30+	26	6	0	7	34	88	0.71	- 0.59	0.26	14	0	T	0	5.3	4	31	35	16	0	2	29	9.5	
SHEMYA	122	1016.3	1019.9	43	36	39.3	1.3	48	14	32	5	0	1	37	95	1.98	- 0.42	0.77	17	0	T	0	3.9	19	35	14	9	0	0	31	9.8	
YAKUTAT	28	1015.6	1016.7	50	35	42.5	- 2.1	65	9	25	8+	0	11	37	81	5.98	- 2.00	2.08	16	0	T	12	1.3	15	26	14	20	3	2	26	8.5	
ARIZONA																																
FLAGSTAFF	6993	788.0	1015.1	66	31	48.7	- 2.2	81	22	17	1	0	16	23	40	0.41	- 0.10	0.39	3	6	0.0	0	3.3	22	29	1	19	12	11	8	4.6	
PHOENIX	1117	972.6	1010.8	92	59	75.1	0.1	105	22+	40	2	17	0	32	23	0.05	- 0.08	0.03	2	2	0.0	0	1.3	21	35Y	ESE	25	14	8	9	4.2	89
TUCSON	2584	924.5	1011.1	88	56	71.9	- 1.6	99	22+	39	2+	13	0	27	21	0.62	0.49	0.56	3	3	0.0	0	2.7	23	37	S	23	13	9	9	4.5	96
WINSLOW	4895	851.3	1013.9	78	42	60.1	- 4.7	92	23+	24	1	2	4	18	22	0.27	- 0.05	0.25	3	3	0.0	0	5.1	23	30	23	5	16	8	7	4.1	
YUMA	194	1004.1	1011.3	92	63	77.4	- 0.6	105	20	46	1	17	0	35	25	T	- 0.01	T	0	0	0.0	0	2.6	24	30	N	13	18	7	6	3.3	94
ARKANSAS																																
FORT SMITH	447	998.3	1014.6	79	56	67.4	- 2.5	92	11	41	3+	1	0	56	68	5.79	0.53	1.73	11	9	0.0	0	0.4	24	28	W	31	10	9	12	5.7	65
LITTLE ROCK	257	1006.1	1015.4	80	57	68.6	- 1.9	92	28	45	3	6	0	57	67	8.69	3.41	2.44	12	10	0.0	0	1.8	21	29	S	31	13	7	11	5.5	61
TEXARKANA	391	1002.0	1015.2	81	59	69.9	- 1.7	92	11	46	3+	2	0	59	71	7.66	2.76	2.04	11	9	0.0	0	4.0	19				11	7	13	5.3	
CALIFORNIA																																
BAKERSFIELD	475	998.0	1015.3	83	58	70.5	0.1	102	23+	41	1	11	0	45	45	0.28	0.06	0.18	3	0	0.0	0	3.8	34	20	32	25+	18	10	3	3.3	
BISHOP	4108	873.0		80	44	61.8	- 0.8	97	22	30	1	7	1			0.02	- 0.18	0.02	1		0.0	0						15	12	4	4.1	
BLUE CANYON	5280			60	44	52.1	- 0.1	82	22	27	11	0	6			2.69	- 0.41	1.38	8		10.9	57			24	15	10	20	4	7	3.3	
EUREKA U	43			57	47	51.9	- 1.1	70	15	39	1	0	0			1.52	- 0.66	0.80	6		0.0	0			26	N	31	6	11	14	6.6	57
FRESNO	328	1003.7	1015.5	84	53	68.8	0.6	104	22	40	1	11	0	49	55	0.19	- 0.11	0.17	2	0	0.0	0	5.7	32	29	NW	31	20	7	4	2.8	89
LONG BEACH	34	1014.9	1016.1	76	55	65.3	1.8	103	16	42	1	3	0	49	63	0.02	- 0.09	0.02	1	0	0.0	0	3.4	22	20	27	14	10	9	12	5.2	
LOS ANGELES	97	1012.2	1015.7	72	57	64.3	2.3	96	16	48	1	2	0	50	64	0.03	- 0.10	0.03	1	0	0.0	0	5.6	25	32Y	W	13	12	8	11	5.3	
LOS ANGELES U	270			77	58	67.3	2.5	102	16	49	1	4	0			0.01	- 0.15	0.01	1		0.0	0			17	SW	10+	14	8	9	4.6	78
MT SHASTA R	3544			68	40	54.1	0.3	87	21	27	1	0	5			0.96	- 1.03	0.43	7		0.8	T										
OAKLAND	6	1017.6	1017.9	67	53	59.6	- 0.1	84	16	46	12	0	0	49	72	0.12	- 0.53	0.12	2	0	0.0	0	7.8	27	29	27	27	18	6	7	3.8	
RED BLUFF	342	1003.1	1015.6	81	53	66.7	- 1.6	103	20	39	1	7	0	46	51	0.35	- 0.78	0.23	4	2	0.0	0	1.4	32	36	SE	9	21	6	4	2.6	88
SACRAMENTO	17	1014.9	1015.8	81	49	65.2	1.2	101	22	40	12+	9	0	51	67	0.13	- 0.46	0.12	2	0	0.0	0	4.3	22	26	SW	9	19	9	3	2.8	90
SANDBERG R	4517	863.2		64	46	54.5	- 2.1	86	21+	30	12	0	3	36	56	0.36	0.05	0.33	2		0.0	0	7.1	34	51	32	29	13	8	10	4.8	
SAN DIEGO	13	1014.9	1015.8	70	57	63.5	- 0.5	91	16	48	1	1	0	51	67	0.05	- 0.10	0.04	3	1	0.0	0	3.8	26	23	NW	14	10	10	11	5.6	61
SAN FRANCISCO	8	1017.3	1017.8	67	50	58.5	0.2	86	16	44	1	0	0	46	69	0.26	- 0.22	0.26	2	0	0.0	0	12.6	29	41	W	30	17	7	7	3.9	
SAN FRANCISCO U	52			65	51	57.9	0.5	84	16	48	10+	0	0			0.09	- 0.54	0.08	3		0.0	0			34	W	27					86
SANTA CATALINA	1568	959.7	1016.0	68	51	59.3	0.3	96	15	44	11+	2	0	46	71	0.12	- 0.24	0.05	5	0	0.0	0	4.5	25				14	9	8	4.5	
SANTA MARIA	236			69	46	57.2	- 0.4	94	16	37	1	1	0			0.22	0.00	0.22	2		0.0	0						13	13	5	3.9	
STOCKTON	22	1015.6	1016.5	81	51	66.2	0.0	100	22	41	1	9	0	47	57	0.18	- 0.26	0.14	3	0	0.0	0	7.3	29	26	27	27	19	11	1	2.9	
COLORADO																																
ALAMOSA	7536			66	32	48.7	- 2.1	84	24	11	1	0	13			1.22	0.49	0.86	5		1.2	T						9	14	8	5.3	
COLORADO SPRINGS	6145	811.4	1014.8	65	40	52.4	- 2.6	86	24+	24	1	0	7	31	53	2.18	0.05	1.32	11	6	T	T	1.6	6	41	17	25	6	8	17	7.0	
DENVER	5283	836.1	1013.8	66	39	52.6	- 3.6	87	24	26	1	0	7	37	64	4.77	2.07	1.82	18	6	3.0	T	1.5	1	33	W	7	4	10	17	7.1	54
GRAND JUNCTION	4855	851.3	1012.6	74	45	59.5	- 2.7	94	23	29	3	3	2	29	38	1.52	0.92	0.52	8	5	T	T	1.0	5	38	SW	11	9	7	15	5.9	66

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90° F. or above	Temperature: No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	F.	F.	°F	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	855.1	1013.0	73	45	59.0	- 1.6	96	24	34	15	3	0	33	43	1.25	- 0.55	0.90	7	2	0.0	0	2.5	9	59	N	19	6	10	15	6.5	66
CONNECTICUT																																
BRIDGEPORT	7	1013.9	1014.6	59	43	51.1	- 7.6	74	28	35	7	0	0	40	69	5.12	1.41	1.35	14	0	0.0	0	3.0	33	50	8	7	7	8	16	6.9	
HARTFORD	169	1007.8	1014.3	64	43	53.7	- 6.2	80	19	31	7	0	1	36	56	6.34	2.93	2.71	10	1	T	T	3.4	33	34	NE	25	3	9	19	7.4	58
NEW HAVEN	6	1014.2		60	43	51.2	- 6.0	75	28	32	7	0	1			5.75	2.04	2.11	14		T	0			30	N	25	6	8	17	6.8	60
DELAWARE																																
WILMINGTON	78	1012.2	1015.3	65	46	55.4	- 7.3	79	28+	37	17+	0	0	43	68	3.79	0.26	1.60	13	4	0.0	0	2.2	30	31	28	19+	4	9	18	7.3	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1013.5	1015.8	71	49	60.0	- 5.8	86	2	42	17	0	0	46	64	4.27	0.13	1.82	15	3	0.0	0	0.7	33	38	SW	11	7	6	18	7.1	53
FLORIDA																																
APALACHICOLA U	13			82	67	74.7	- 0.1	92	27	57	24	2	0			0.72	- 2.16	0.66	4	1	0.0	0			30	SW	22	14	8	9	4.8	70
DAYTONA BEACH	31	1015.9	1017.4	88	63	75.5	1.3	98	12	55	18+	12	0	62	68	0.73	- 2.12	0.47	4	4	0.0	0	2.4	17	30	24	7	11	10	10	5.2	
FORT MYERS	15	1016.9	1017.2	90	68	79.0	1.6	95	28	54	1	19	0	62	60	1.46	- 2.39	0.99	6	4	0.0	0	2.6	22	29	25	23	11	18	2	4.3	
JACKSONVILLE	20	1015.6	1016.7	89	66	77.2	1.4	100	13	55	17+	13	0	60	60	1.18	- 2.29	0.64	4	2	0.0	0	3.1	22	39	SW	7	14	9	8	4.7	68
KEY WEST	4	1015.9	1016.7	87	78	82.8	3.8	90	28+	75	27	3	0	70	68	0.67	- 2.06	0.42	4	2	0.0	0	6.2	12	25	E	21+	11	19	1	4.3	91
LAKELAND U	214			88	67	77.4	0.5	96	29+	60	24	12	0			2.01	- 1.53	1.45	5		0.0	0						14	14	3	4.2	81
MIAMI	7	1016.6	1016.9	87	72	79.3	1.7	93	9	67	27+	5	0	67	70	1.68	- 4.76	1.16	5	2	0.0	0	5.3	14	25	6	18	6	21	4	5.2	
ORLANDO	108	1012.9	1017.2	90	66	78.3	0.7	97	14	57	1	18	0	62	64	1.69	- 1.88	0.92	6	4	0.0	0	2.1	21	40	19	22	12	11	8	4.8	
PENSACOLA	112	1012.9	1017.0	83	64	73.2	- 2.3	91	28+	54	24+	2	0	63	73	4.23	- 0.33	2.86	7		0.0	0	2.2	19	34	SW	22	8	12	11	5.8	69
TALLAHASSEE	55	1014.6	1016.7	88	60	74.0	- 0.9	97	28+	47	17	14	0	60	67	5.43	1.33	2.93	6	5	0.0	0	1.6	23	23	18	2	10	12	9	5.1	
TAMPA	19	1016.6	1016.9	88	66	77.3	0.5	96	31	58	18+	14	0	64	67	0.63	- 2.22	0.27	3	1	0.0	0	2.9	25	23	27	23	10	14	7	5.0	57
WEST PALM BEACH	15	1016.3	1017.1	88	68	78.1	0.5	96	9	59	1	11	0	66	70	0.39	- 4.72	0.25	4	3	0.0	0	5.1	14	25	22	23+	10	16	5	4.7	
GEORGIA																																
ATHENS	802	987.5	1016.1	78	55	66.1	- 4.0	92	29+	44	17+	4	0	55	72	5.69	2.08	3.35	14	7	0.0	0	2.6	31	22	30	8	6	10	15	6.4	
ATLANTA	1010	980.0	1016.4	77	55	66.2	- 2.9	89	28	44	10	0	0	55	69	4.95	1.79	2.18	13	6	0.0	0	2.4	29	33	W	15	10	7	14	5.8	69
AUGUSTA	145	1010.5	1015.7	81	56	68.5	- 3.1	94	29+	42	10	6	0	56	70	6.98	3.99	4.41	12	8	0.0	0	2.2	26	48	28	8	10	8	13	5.9	
COLUMBUS	385			84	59	71.6	- 0.5	94	28+	47	10	10	0	58	66	6.62	3.12	2.42	9		0.0	0	1.6	27	35	16	29	11	11	9	5.0	
MACON	354	1003.7	1016.7	85	56	70.5	- 3.4	99	28	43	17	14	0	55	62	2.73	- 0.59	1.75	8	1	0.0	0	1.7	31	30	S	29	11	11	9	5.3	68
ROME	637			78	53	65.5	- 3.2	92	26	39	10	4	0			5.77	1.97	1.58	13		0.0	0										
SAVANNAH	46	1014.6	1016.3	86	61	73.2	- 0.2	98	14	46	10	13	0	58	64	2.94	- 0.83	2.11	6	5	0.0	0	1.9	23	31	SW	7	12	8	11	5.2	71
HAWAII																																
HILO	27	1015.9	1017.0	85	70	77.1	4.1	91	18	67	25+	1	0	67	74	9.84	0.51	2.76	20	1	0.0	0	3.2	16	21	E	20	2	12	17	7.3	33
HONOLULU	7	1015.6	1016.1	85	71	78.2	2.3	88	21	68	31+	0	0	66	68	2.12	1.13	1.07	9	3	0.0	0	5.5	7	24	NE	26+	6	14	11	6.2	63
KAHULUI	48	1013.2	1015.7	85	68	76.7	1.4	90	15	64	9+	1	0	67	73	2.05	1.36	1.23	3	0	0.0	0	6.0	6	28	NE	6	4	14	13	6.5	74
LIHUE	103	1011.9	1017.0	81	70	75.8	1.3	88	17	65	17+	0	0	68	78	4.05	1.46	1.19	13	2	0.0	0	6.7	6	22	E	3	1	13	17	7.6	60
IDAHO																																
BOISE	2838	916.0	1015.7	71	42	56.5	- 1.7	90	22+	28	1	2	4	37	53	0.49	- 0.80	0.18	8	2	T	0	2.7	29	32	S	9	12	10	9	5.1	80
IDAHO FALLS 46W R	4934			67	35	50.8	- 1.8	87	22	22	13+	0	14			0.69	- 0.41	0.33	5		T	T	3.9	24	37	WSW	10					
LEWISTON	1413			71	46	58.3	- 0.1	88	21	32	1	0	1			1.17	- 0.38	0.42	8		0.0	0						5	7	19	7.4	
POCATELLO	4454	862.9	1015.2	67	39	52.9	- 2.2	88	23	22	1	0	10	33	50	1.14	0.01	0.90	6	3	0.3	3	7.2	22	34	SW	3	5	11	15	6.5	68
ILLINOIS																																
CAIRO U	314			75	58	66.4	- 2.6	91	26+	44	3	3	0			10.20	5.81	6.16	13		0.0	0			30	SW	11	11	7	13	5.7	60
CHICAGO O HARE	658	991.2	1015.6	64	44	53.8	- 4.0	92	26	31	3	1	2	39	61	1.61	- 2.15	0.90	9	3	T	T	1.8	2	37	28	19	6	15	10	6.3	
CHICAGO MIDWAY	607	992.9		64	45	54.8	- 5.2	93	26	35	3	1	0	39	58	1.39	- 2.34	0.68	9	2	0.0	0	1.4	4	39	SW	18	6	14	11	6.3	60
MOLINE	582	993.6	1015.1	68	45	56.4	- 4.8	94	25	30	3	2	2	43	63	1.70	- 2.10	0.39	10	5	0.0	0	1.0	3	50	NW	18	7	7	17	6.7	55
PEORIA	652	991.2	1015.3	67	46	56.4	- 5.1	91	25	34	3	1	0	43	63	2.80	- 1.47	0.72	10	5	0.0	0	1.2	4	33	NW	2	7	8	16	6.6	57
ROCKFORD	724	988.2	1015.2	65	41	52.9	- 6.2	90	26	29	6	1	4	37	57	2.48	- 1.35	1.75	8	4	T	T	1.6	3	46	27	18	7	12	12	6.1	
SPRINGFIELD	588	992.6	1014.8	69	49	59.3	- 4.6	95	25	38	3	3	0	45	63	4.42	0.54	1.59	13	6	0.0	0	0.6	31	38	NW	11	9	9	13	6.1	57
INDIANA																																
EVANSVILLE	381	1001.0	1015.0	72	51	61.6	- 5.2	90	27+	35	3	2	0	50	67	3.81	- 0.38	1.36	11	8	0.0	0	1.7	25	29	W	7	9	9	13	6.0	63
FORT WAYNE	791	985.8	1015.8	64	43	53.7	- 7.0	87	27	30	3	0	1	41	64	4.19	0.46	1.09	15	6	0.0	0	1.5	6	32	W	17	3	11	17	7.3	57

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
INDIANAPOLIS	792	986.1	1015.2	69	49	59.3	- 2.1	90	25	34	3	1	0	48	68	5.00	1.01	1.58	15	9	0.0	0	0.5	33	38	NW	28	10	6	15	6.2	52
SOUTH BEND	773	987.5	1015.4	64	45	54.3	- 4.4	84	25	33	3	0	0	41	61	1.57	- 2.05	0.65	7	3	0.0	0	0.7	8	30	22	18	5	12	14	6.7	
IOWA																																
BURLINGTON	692			67	46	56.6	- 5.2	92	25	34	7+	1	0	45	67	4.29	0.26		13	4	0.0		0.9	2	23	10	30+	8	7	16	6.4	
DES MOINES	938	980.7	1015.4	68	47	57.1	- 3.5	98	25	30	2	5	1	41	60	2.22	- 1.85	0.92	9	4	T	T	1.4	6	40	NW	18+	5	8	18	7.3	52
DUBUQUE	1056	976.0		65	43	54.0	- 4.1	90	26	31	7+	1	2			3.71	- 0.51	2.38	7		T	T						6	10	15	6.9	
SIOUX CITY	1095	975.3	1015.1	67	46	56.4	- 5.0	102	25	28	2	3	3	38	56	4.21	- 0.98	2.09	11	4	T	T	1.6	1	49	NW	18	5	9	17	7.2	53
WATERLOO	868	983.1	1015.0	66	43	54.6	- 5.3	94	26	29	6	3	4	37	55	1.89	- 1.85	1.49	9	5	0.0	0	1.2	4	40	34	8	6	12	13	6.7	
KANSAS																																
CONCORDIA	1470	961.7	1014.4	71	48	59.4	- 3.7	99	24	26	2	5	1	45	66	2.70	- 1.19	0.84	11	6	T	0	0.5	30	45	NW	26	6	8	17	6.7	56
DODGE CITY	2582	923.8	1013.8	74	49	61.5	- 2.2	102	24	26	1	6	2	41	55	2.24	- 0.98	0.74	10	9	0.0	0	0.2	2	40	W	10	8	6	17	6.4	71
GOODLAND	3650	888.3	1014.8	67	42	54.4	- 4.1	94	25	21	1	3	4	41	69	2.66	0.25	0.60	16	8	0.3	T	1.5	36	36	33	1	6	10	15	6.7	
TOPEKA	876	983.1	1014.6	71	50	60.8	- 3.6	91	24	34	21	2	0	46	61	5.07	0.69	1.35	8	6	0.0	0	0.5	1	49	S	27	5	9	17	7.2	48
WICHITA	1321	966.8	1014.1	76	52	64.0	- 2.0	100	10	35	2	6	0	44	55	1.42	- 2.55	0.51	7	6	0.0	0	0.2	29	49	NE	18	9	5	17	6.6	57
KENTUCKY																																
COVINGTON	869	983.7	1015.2	70	51	60.5	- 2.0	88	27	35	3	0	0	47	65	5.64	2.05	1.50	17	9	0.0	0	0.8	30	29	30	11	3	12	16	7.1	
LEXINGTON	966	980.4	1015.5	72	52	62.0	- 2.5	86	25	35	3	0	0	51	69	6.94	3.09	1.98	15	8	0.0	0	2.3	21	28	22	11	6	9	16	6.8	
LOUISVILLE	477	997.3	1014.9	73	52	62.4	- 2.0	88	28+	36	3	0	0	51	68	4.62	0.72	1.53	14	6	0.0	0	1.7	26	39	NW	6	9	9	13	6.3	58
LOUISIANA																																
ALEXANDRIA	92	1011.2	1015.4	82	59	70.5	- 2.4	89	14+	47	24	0	0	62	77	7.90	2.36	2.22	10	8	0.0	0	1.7	17	46	30	1	9	10	12	5.7	
BATON ROUGE	64	1013.5	1016.2	83	63	72.9	- 1.9	91	12	52	16	3	0	62	69	7.73	2.93	2.18	11	9	0.0	0	3.0	16	48	17	1	6	14	11	6.1	
LAKE CHARLES	9	1014.9	1015.9	84	66	74.6	- 1.0	89	13+	54	16	0	0	66	77	8.59	3.98	4.20	8	7	0.0	0	3.5	15	29	2	31	9	13	9	5.5	
NEW ORLEANS	3	1015.2	1016.2	84	64	73.8	- 0.6	91	27	51	17	2	0	64	71	3.56	- 0.82	0.88	8	5	0.0	0	2.4	16	28	30	15	10	10	11	5.5	
SHREVEPORT	254	1005.8	1015.0	82	60	71.1	- 2.0	94	11	48	16	4	0	61	73	11.78	6.99	4.42	10	8	0.0	0	3.3	17	30	31	14	12	9	10	5.3	68
MAINE																																
CARIBOU	624	990.9		52	34	42.7	- 7.2	64	1	27	19	0	16			3.95	0.92	1.05	13		10.9	2						1	11	19	7.7	
PORTLAND	47	1011.5	1014.0	58	37	47.3	- 5.7	74	20	28	7	0	6	37	69	5.34	1.93	1.38	14	0	0.1	T	1.8	35	37	NW	12	4	10	17	7.2	54
MARYLAND																																
BALTIMORE	148	1009.8	1015.4	68	46	57.0	- 7.4	85	2	37	4	0	0	43	63	3.79	- 0.19	1.89	14	1	0.0	0	2.2	30	37	NW	19	7	5	19	6.8	55
MASSACHUSETTS																																
BLUE HILL OBS R	629			60	41	50.6	- 6.1	76	20	35	8	0	0			7.91	4.43	3.85	12		T	T			60	NE	25					53
BOSTON	15	1012.9	1013.8	59	44	51.7	- 7.1	77	19	37	7	0	0	37	62	7.32	3.98	3.64	13	2	T	T	3.6	32	50	NE	25	5	8	18	7.2	58
NANTUCKET	43	1013.5	1013.9	55	40	47.5	- 5.1	67	30	32	7+	0	2	41	80	10.38	7.50	6.53	13	2	0.0	0	2.0	28	49	N	26	7	7	17	6.7	57
PITTSFIELD	1170			59	36	47.5	- 7.1	80	19	26	7	0	6			3.18	- 0.69	0.61	13		T	T										
WORCESTER	986	977.3	1014.3	58	39	48.8	- 6.4	77	19	33	25+	0	0	33	58	7.01	3.22	3.03	12	1	T	T	4.4	31	37	4	25	4	9	18	7.3	
MICHIGAN																																
ALPENA	689	990.9	1016.2	59	33	46.1	- 4.5	80	1	22	5+	0	15	31	58	1.94	- 0.97	0.71	9	3	T	0	0.2	10	27	W	19	10	12	9	5.4	73
DETROIT	619			62	44	53.4	- 5.6	82	27	35	10	0	0	35	53	1.21	- 2.32	0.39	8	1	T		1.1	36	31	30	8					
DETROIT M WAYNE CO	633	991.2	1015.5	62	42	51.9	- 6.5	84	27	31	3	0	2	38	61	1.63	- 1.91	0.65	9	1	0.0	0	1.0	3	34	SW	19	5	13	13	6.5	60
DETROIT WILLOW RUN	711	987.5	1016.0	63	40	51.5	- 7.2	84	27	30	23	0	3	34	52	1.06	- 2.42	0.60	7	2	0.0	0	0.9	36	29	28	19+	5	14	12	6.4	
FLINT	770	987.8	1015.7	61	41	50.7	- 5.7	76	18+	31	3	0	4	36	59	1.02	- 2.37	0.37	9	1	0.0	0	0.5	22	29	25	19	5	15	11	6.5	
GRAND RAPIDS	784	986.5	1015.7	63	41	51.9	- 4.9	82	27+	27	3	0	4	38	61	1.86	- 1.60	0.54	14	5	T	T	0.2	4	38	SW	18	6	11	14	6.4	53
HOUGHTON LAKE	1149	973.9	1016.3	60	37	48.4		77	1	24	5	0	10	33	60	2.41		0.79	8	3	T	T	1.0	26	23	27	19	13	10	8	5.4	
LANSING	841	983.7	1015.4	64	41	52.3	- 4.8	81	25	28	3	0	5	38	60	1.05	- 2.68	0.36	10	2	T	T	0.6	30	40	W	19	6	12	13	6.4	62
MARQUETTE U	677			55	37	45.8	- 4.1	74	26+	25	3	0	9			1.63	- 1.33	1.39	9		4.5	4			38	S	26	7	15	9	5.7	68
MUSKEGON	627	992.6	1015.8	63	42	52.5	- 3.3	84	25	26	6+	0	4	36	56	1.24	- 1.73	0.64	9	3	T	T	0.1	4	32	21	18	6	14	11	6.4	
SAULT STE MARIE	721	989.2	1016.1	56	33	44.5	- 5.1	74	26	20	4	0	16	30	59	1.62	- 1.15	1.16	8	1	2.2	1	3.0	31	32	NW	20	10	8	13	5.9	67
MINNESOTA																																
DULUTH	1428	964.4	1016.4	57	35	45.6	- 3.6	74	26	17	3	0	12	30	58	0.80	- 2.49	0.37	8	2	1.3	T	1.8	35	40	NE	30+	9	8	14	6.3	69
INTERNATIONAL FALLS	1179	972.9	1016.5	58	33	45.2	- 5.5	78	25	11	3	0	17	29	57	1.12	- 1.49	0.60	7	0	2.4	2	1.9	30	32	29	7	7	14	10	5.9	
MINNEAPOLIS	834	985.1	1015.6	64	41	52.3	- 5.0	85	18	18	3	0	7	36	56	0.61	- 2.58	0.79	7	2	0.3	T	0.5	2	37	SW	1	5	14	12	6.2	69

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature, No. of days: Max. 90 F. or above	Temperature, No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation, No. of days: .01 inch or more	Precipitation, No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind, Fastest mile: Speed	Wind, Fastest mile: Direction	Wind, Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ROCHESTER	1297	967.8	1015.8	62	40	51.3	-5.4	88	26	21	3	0	8	36	58	1.36	-2.29	0.95	10	4	0.3	T	0.7	30	40	33	18+	5	12	14	6.6	
ST CLOUD	1034	977.3	1015.4	63	38	50.4	-5.2	80	25+	19	4+	0	8		54	0.82	-2.69	0.38	6		T	T						7	12	12	6.5	
MISSISSIPPI																																
JACKSON	310	1004.4	1016.3	82	58	69.6	-3.5	90	14+	44	3	4	0	60	76	10.82	6.44	3.26	10	8	0.0	0	3.0	18	40	NW	31	14	7	10	4.8	73
MERIDIAN	290	1005.4	1016.6	83	58	70.6	-1.8	92	27+	45	3	7	0	57	65	6.96	3.05	2.16	8	5	0.0	0	2.0	20	35	17	1	12	8	11	5.3	
MISSOURI																																
COLUMBIA	778	986.5	1014.5	70	51	60.6	-3.8	92	25	37	2	1	0	46	63	5.32	0.62	2.54	12	9	0.0	0	0.4	34	34	NW	8+	9	9	13	6.2	61
KANSAS CITY	742	987.8	1014.6	71	52	61.7	-3.9	92	25+	37	2	4	0	48	66	6.04	1.64	1.90	9	6	0.0	0	0.4	10	35	NW	18	6	6	19	7.2	50
SAINT JOSEPH	811			75	49	61.7	-2.4	98	25	33	21	5	0	45	63	3.93	-0.46	1.20	9	1	0.0	0	0.7	35	32	25	27	8	6	17	6.9	
ST LOUIS	535	994.9	1015.1	71	51	60.8	-3.4	90	25	34	3	1	0	50	70	4.73	1.00	1.80	12	7	0.0	0	1.0	27	32	NW	8	7	12	12	6.0	66
SPRINGFIELD	1268	969.9	1015.0	73	49	61.3	-3.2	88	25	32	3	0	1	51	70	3.99	-1.29	2.06	11	6	0.0	0	1.7	19	32	S	10	11	8	12	5.8	61
MONTANA																																
BILLINGS	3567	891.3	1015.8	61	39	50.1	-6.7	81	17	21	4+	0	9	35	62	1.84	-0.04	0.94	11	2	7.7	8	2.4	32	40	W	6	4	11	16	7.0	72
GLASGOW	2284			63	39	50.9	-4.2	84	17	24	4+	0	9			0.68	-0.81	0.36	9		3.1	3						2	12	17	7.5	
GREAT FALLS	3662	888.6	1016.0	64	41	52.5	-0.5	88	21	19	3	0	9	32	51	2.17	0.07	0.81	11	0	8.0	2	4.4	26	38	SW	6	4	9	18	7.3	62
HAVRE	2582	923.5	1015.6	64	39	51.4	-3.3	85	21	24	5+	0	8	35	58	0.28	-1.25	0.11	8	2	1.7	T	2.1	26	38	W	17	4	10	17	7.3	57
HELENA	3828	881.5	1016.6	65	39	52.1	-0.8	86	21	23	4+	0	8	31	49	2.08	0.52	1.11	9	3	12.7	8	5.2	29	34	W	9+	7	8	16	6.6	64
KALISPELL	2965	912.0	1016.7	64	37	50.3	-1.9	83	21	23	4	0	9	35	60	0.95	-0.72	0.37	13	2	2.8	1	1.1	17	29	13	28+	3	10	18	7.4	
MILES CITY	2629	922.5	1015.8	64	41	52.6	-4.8	89	23	20	3	0	9	37	60	1.79	0.06		8	2	8.6		1.0	32								
MISSOULA	3190	905.2	1017.5	65	38	51.4	-1.2	86	21	27	26	0	11	34	57	1.33	-0.54	0.42	11	2	2.6	T	2.4	30	30	W	17	9	7	15	6.3	61
NEBRASKA																																
GRAND ISLAND	1841	949.2	1015.2	68	45	56.5	-4.1	101	24	23	2	4	4	41	63	3.40	-0.45	1.08	11	3	4.3	4	2.9	35	35	28	1	3	10	18	7.4	
LINCOLN U	1150			69	49	59.0	-3.5	100	24	30	2	5	2			4.47	0.99	1.22	12		3.0	3			44	NW	10	5	12	14	7.2	54
NORFOLK	1544			66	45	55.4	-4.8	103	25	25	2	4	3			2.27	-1.39	0.93	9		T	T						3	11	17	7.3	
NORTH PLATTE	2775	917.4	1015.4	64	39	51.9	-6.6	96	25	21	2	2	6	39	66	3.94	0.99	0.93	14	1	3.6	1	2.6	1	40	NW	1	4	8	19	7.5	43
OMAHA	977	979.7	1014.9	71	48	59.1	-3.9	97	25	31	2	4	1	42	56	2.26	-1.22	0.99	9	3	1.0	T	1.7	3	38	NW	18+	4	11	16	7.3	65
SCOTTSBLUFF	3957	879.8	1015.6	62	41	51.6	-5.2	90	24	24	1	1	4	40	70	4.42	1.72	1.10	19	4	2.6	2	3.1	3	45	31	1	4	9	18	7.1	
VALENTINE	2587			64	40	51.7	-5.4	96	24	19	3	3	6			2.73	0.06	1.24	12		0.1	T			55	NW	26	6	7	18	7.3	45
NEVADA																																
ELKO	5050	845.2	1015.5	66	37	51.4	-0.6	81	27	22	2	0	10			0.84	-0.12	0.30	8	0	1.2	T	2.1	25	25	22	10	10	8	13	5.9	
ELY	6253	809.3	1014.7	64	34	49.2	-1.1	85	23	21	2+	0	13	31	57	3.05	2.20	1.10	12	6	3.6	3	2.7	20	36	SE	31	9	8	14	6.0	59
LAS VEGAS	2162	936.3	1011.7	87	58	72.5	-1.3	104	22	41	1	12	0	28	21	0.21	0.13	0.21	1	1	0.0	0	4.1	22	38	SW	11+	16	11	4	3.8	90
RENO	4404	866.6	1015.5	74	36	54.9	1.0	95	22	21	1	3	5	32	46	0.47	-0.05	0.42	4	2	1.5	T	3.1	29	31	W	10+	17	5	9	4.2	91
WINNEMUCCA	4299	868.3	1015.3	71	36	53.6	-0.1	94	22	22	3	3	11	28	40	0.25	-0.69	0.14	4	1	T	T	2.0	30	30	W	10	10	8	13	5.6	54
NEW HAMPSHIRE																																
CONCORD	342	1001.7	1014.4	61	37	48.8	-6.7	82	19	28	7	0	11	36	63	3.92	0.75	0.91	12	0	T	T	3.7	32	29	W	20	5	9	17	7.1	60
MT WASHINGTON OBS	6262			31	20	25.3	-9.7	49	1	12	13+	0	30			12.68	6.84	4.60	23	0	52.2	7			140Y	E	8	1	6	24	8.5	29
NEW JERSEY																																
ATLANTIC CITY	64	1013.2	1015.5	64	44	54.1	-7.2	82	19	32	13	0	1	42	66	3.68	0.17	2.42	13	4	0.0	0	1.3	28	25	7	24	5	11	15	6.9	53
ATLANTIC CITY U	11			61	50	55.4	-4.1	79	20	43	13	0	0			3.33	0.17	1.97	14						40	NNW	25+					
NEWARK	7	1013.9	1015.0	63	46	54.3	-7.7	82	19	40	8+	0	0	40	62	3.57	-0.08	0.92	13	3	0.0	0	3.2	31	29	35	25	8	9	14	6.5	
TRENTON U	56			65	48	56.4	-5.9	81	19	40	6	0	0			4.01	0.39	1.30	12		0.0	0			35	NE	7	6	10	15	6.7	49
NEW MEXICO																																
ALBUQUERQUE	5311	837.5	1011.6	79	48	63.8	-1.3	91	23	28	1	2	2	19	20	0.04	-0.71	0.04	2	2	0.0	0	2.8	26	49	E	20	14	11	6	4.3	86
CLAYTON	4969			73	43	58.0	-1.8	92	24	23	2	2	4			2.68	-0.06	2.08	7		T	T						10	10	11	5.5	
RATON	6379			73	38	55.0	-0.4	89	24	23	15	0	9			0.39	-1.90	0.20	5		0.0	0						8	10	13	6.1	
ROSWELL	3617	889.9		88	49	68.5	0.5	100	9	27	2	13	1	28	26	0.11	-1.17	0.11	1	3	0.0	0	2.7	21	36	SW	28	10	9	12	5.0	81
SILVER CITY	5373			77	46	61.5	-3.2	86	20+	25	2	0	2			T	-0.28	T	0		0.0	0						14	10	7	3.9	
NEW YORK																																
ALBANY	275	1004.4	1015.2	62	39	50.4	-7.5	81	19	31	7+	0	3	37	62	3.36	-0.11	1.02	13	2	0.2	0	3.3	31	33	NW	19	4	8	19	7.3	48
BINGHAMTON	1590	956.3	1015.5	57	39	47.6	-7.5	73	1	31	23+	0	2	36	67	5.04	1.55	1.16	15	3	0.2	T	3.2	31	31	E	7	3	10	18	7.5	56

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	989.8	1015.7	59	41	50.1	- 4.7	76	27	33	23+	0	0	37	62	3.69	0.74	1.04	13	1	1.2	T	2.2	26	29	W	20+	6	7	18	6.8	50
NEW YORK U	132	1011.2	1014.4	64	47	55.2	- 7.2	81	19	39	6	0	0	39	59	4.08	0.41	1.17	14	0	0.0	0	2.4	34	38	NE	7					56
J.F. KENNEDY	13	1014.2	1014.9	58	46	51.7	- 8.5	73	20	40	8+	0	0	40	67	5.12	1.45	1.38	15	2	T	0	2.0	32	31	2	25	7	11	13	6.5	
NEW YORK LA GUARDIA	11	1013.2	1015.0	62	48	55.0	- 7.1	79	19	41	6	0	0	38	57	3.52	- 0.06	1.11	14	1	0.0	0	2.9	33	39	NW	26	8	9	14	6.6	
ROCHESTER	547	996.3	1016.7	59	40	49.1	- 7.6	78	1	31	23	0	1	37	66	2.74	- 0.03	0.75	12	2	0.3	T	2.9	29	33	SW	19	8	7	16	6.5	60
SYRACUSE	410	1000.7	1015.6	60	41	50.2	- 7.5	81	1	32	23	0	1	37	62	3.33	0.06	0.89	13	1	T	T	3.9	30	29	W	20	6	11	14	6.2	54
NORTH CAROLINA																																
ASHEVILLE	2140	940.4	1016.0	73	47	59.7	- 3.3	87	28	34	17	0	0	50	76	6.79	3.13	2.23	15	8	0.0	0	2.5	34	40	32	30	8	7	16	6.9	58
CAPE HATTERAS R	7	1015.2	1015.5	71	55	62.8	- 5.2	82	28	43	27	0	0	56	77	5.48	1.50	2.12	15	9	0.0	0	2.1	31	40	SW	7	6	10	15	6.7	63
CHARLOTTE	736	988.5	1015.6	75	53	63.7	- 5.3	92	28	40	10	2	0	53	71	4.70	1.59	1.36	15	5	0.0	0	1.4	29	32	SW	11	7	7	17	6.6	67
GREENSBORO	897	984.4	1015.9	75	53	64.0	- 2.9	93	28	42	4+	2	0	54	73	4.03	0.74	0.74	17	9	0.0	0	1.2	25	61	NW	29	5	10	16	7.0	51
RALEIGH	434	1000.0	1015.6	76	52	63.9	- 3.7	92	28	40	10	2	0	53	72	4.15	0.63	0.81	14	9	0.0	0	1.1	28	35	33	2	6	9	16	6.9	50
WILMINGTON	28	1014.6	1016.0	82	60	71.3	0.8	97	28	49	10	5	0	57	64	2.58	- 0.94	1.07	8	3	0.0	0	2.1	26	36	SW	11	8	8	15	6.4	72
NORTH DAKOTA																																
BISMARCK	1647	956.3	1016.4	62	36	49.3	- 6.6	87	22	15	3	0	10	33	58	1.67	- 0.30	1.22	6	3	8.2	11	1.6	31	52	NW	7	3	15	13	6.7	69
FARGO	896	982.7	1015.8	63	37	49.7	- 5.7	86	24	21	3+	0	16	33	57	1.00	- 1.03	0.57	5	4	T	T	1.5	2	42	N	2+	5	12	14	6.6	59
WILLISTON	1899	946.8	1015.6	64	38	51.1	- 3.6	87	24+	20	2	0	11	32	53	0.18	- 1.25	0.11	4	1	1.1	3	2.5	30	45	NW	7	4	14	13	6.4	70
OHIO																																
AKRON	1208	970.9	1015.6	63	43	53.2	- 6.5	88	27	32	23	0	1	41	67	4.43	0.58	0.69	13	5	T	T	1.8	2	46	32	27	6	10	15	6.5	
CINCINNATI OBS	761			70	50	60.0	- 4.2	90	27+	36	3	2	0			6.27	2.47	1.90	17		0.0	0			26	W	8					51
CLEVELAND	777	986.8	1016.1	61	44	52.3	- 5.7	90	27	34	8	1	0	40	65	3.82	0.30	1.10	14	3	0.0	0	2.1	1	30	NE	7	7	10	14	6.5	53
COLUMBUS	812	985.8	1015.7	65	46	55.4	- 6.1	88	27	33	3	0	0	45	70	4.59	0.59	1.20	16	8	0.0	0	0.5	36	32	NW	11	4	11	16	7.1	56
DAYTON	1002	979.3	1015.5	66	47	56.5	- 5.1	88	27	34	3	0	0	44	66	6.72	2.99	1.72	15	9	0.0	0	0.6	34	33	W	11+	5	8	18	7.1	47
MANSFIELD	1295			63	43	53.3	- 4.7	88	27	34	3	0	0	42	69	4.50	0.78	1.00	15	8	0.0	0	1.1	36				6	11	14	6.6	
TOLEDO	676	990.9	1016.2	64	41	52.4	- 5.9	89	27	30	23	0	5	38	61	2.28	- 0.76	0.87	13	4	0.0	0	1.6	4	28	SW	1	1	16	14	6.8	62
YOUNGSTOWN	1178	972.9	1015.9	61	40	50.2	- 7.7	87	27	30	23+	0	3	38	67	3.77	- 0.30	0.85	12	3	T	T	2.3	1	23	10	7	10	6	15	6.5	
OKLAHOMA																																
OKLAHOMA CITY	1285	968.2	1014.0	78	56	66.9	- 1.5	96	10	42	2	2	0	51	61	4.25	- 0.94	1.82	8	7	0.0	0	2.0	13	32	SW	18	11	8	12	5.6	66
TULSA	650	990.2	1014.5	76	54	65.2	- 2.6	90	25	41	2	1	0	53	68	5.34	0.08	2.01	10	8	0.0	0	2.3	18	37	SW	10	10	10	11	5.7	59
OREGON																																
ASTORIA	8	1020.7	1021.3	60	43	51.7	- 1.6	72	16	34	25+	0	0	47	84	1.37	- 1.83	0.53	9	0	0.0	0	3.5	29	23	21	26	0	10	21	8.1	
BURNS U	4151	874.0	1016.9	67	38	52.7	- 0.7	86	21	28	12+	0	9	33	51	0.71	- 0.18	0.42	5		0.4	T	4.4	31				14	9	8	4.7	
EUGENE	359	1006.8	1020.2	69	42	55.7	- 0.4	85	20	36	3+	0	0	45	70	1.59	- 0.55	0.78	7	0	0.0	0	2.1	34	22	35	25	6	14	11	6.2	
MEACHAM	4050	878.4	1018.1	57	37	46.7	- 1.3	76	16	24	1	0	9	33	63	1.69	- 0.76	0.81	8		7.9	6	3.2	28				5	8	18	7.3	
MEDFORD	1298	971.2	1018.8	75	43	58.9	1.4	92	20	31	1	3	1	42	58	0.96	- 0.51	0.33	6	1	T	T	2.7	31	21	29	29	17	6	8	4.0	
PENDLETON	1482	964.4	1018.0	72	45	58.5	- 1.1	90	21	35	26+	1	0	38	51	0.56	- 0.56	0.20	6	0	0.0	0	3.7	26	32	3	4	10	7	14	6.3	
PORTLAND	21	1019.0	1020.3	68	46	57.1	- 0.3	87	20	39	10	0	0	45	69	1.02	- 0.97	0.50	8	2	0.0	0	3.5	31	24	W	29	2	13	16	7.7	59
SALEM	196	1012.9	1020.4	68	41	54.4	- 1.9	85	20	32	1	0	1	43	68	1.87	- 0.24	0.61	7	1	0.0	0	1.5	33	25	25	29	3	15	13	6.7	
SEXTON SUMMIT R	3836	885.9	1018.2	62	41	51.2	1.2	82	16	27	10+	0	7			1.07	- 1.12	0.67	6		1.2	1			25	34	22+	19	4	8	3.6	
PACIFIC AREA																																
CANTON ISLAND	8			88	78	83.0	- 0.9	89	28+	75	17+	0	0			1.29	- 3.06	0.55	9		0.0	0						3	19	9	6.3	
ENIWETOK	13	1008.8	1009.3	88	78	82.9	0.5	90	20+	74	5+	3	0	76	82	7.07	2.50	1.61	19		0.0	0	11.0	7								
TAGUAC GUAM R	361			86	73	79.3	- 1.1	89	30+	67	18	0	0			3.76	- 0.43	1.57	13		0.0	0			18	E	12+					
JOHNSTON	7	1012.9	1013.4	84	76	80.1	0.9	86	27+	73	13	0	0	73	79	2.09	1.10	0.69	16	0	0.0	0	13.7	10	32	NE	25+	3	9	19	7.5	51
KOROR R	94	1005.4	1009.0	88	77	82.5	1.2	90	28+	72	31	12	0	76	85	9.91	- 4.72	2.08	25	5	0.0	0	1.9	8	23	SW	31+	0	5	26	8.7	70
KWAJALEIN	8	1008.5	1009.2	87	77	81.7	0.6	88	29+	72	19	0	0	76	83	10.35	2.17	2.63	24	1	0.0	0	9.4	8	44	11	19	0	11	20	8.2	
MAJURO	10	1009.1	1009.5	86	78	82.0	1.6	88	28+	75	24+	0	0	75	80	4.93	- 7.82	1.13	20	0	0.0	0	7.4	9	26	E	18	2	9	20	7.6	55
MARCUS ISLAND	20	1010.8	1012.8	83	74	78.5	- 0.5	88	29	70	13+	0	0	71	79	0.98	- 0.89	0.62	9	0	0.0	0	5.9	16	26	S	23+	4	10	17	7.4	66
PAGO PAGO	12	1010.8	1011.0	85	74	79.1		87	18+	70	29+	0	0	74	85	9.97		2.21	23	1	0.0	0	4.6	12	28	E	19	1	14	16	7.6	54
PONAPE R	123	1003.4	1008.8	88	74	81.1	0.7	90	23+	72	30+	7	0	75	87	13.46	- 6.85	2.99	27	3	0.0	0	3.7	11	19	SE	19	1	4	26	8.5	59
TRUK MOEN ISLAND	5	1008.8	1009.0	87	76	81.5	0.7	89	24+	72	31	0	0	76	84	15.17	1.05	4.13	22	0	0.0	0	4.3	6	27	N	30	1	5	25	8.9	81
WAKE	11	1012.5	1012.8	84	76	80.1	0.3	86	30+	73	8+	0	0	71	74	2.25	0.21	1.95	7	0	0.0	0	11.9	8	35	NE	8	5	16	10	5.8	
YAP R	62	1006.8	1008.6	88	75	81.5	- 0.5	92	24	70	9	2	0	76	84	16.00	6.48	10.06	19	0	0.0	0	3.9	8	27	S	9	0	6	25	9.0	74

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 °F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1001.4	1015.4	64	42	52.8	-7.6	80	28+	33	13+	0	0	39	62	4.44	0.36	1.21	13	2	0.0	0	2.6	31	31	27	19	4	11	16	7.2	
ERIE	731	989.2	1016.1	58	41	49.6	-6.8	79	27	31	23	0	2	38	66	3.15	-0.39	1.09	13	2	T	0	1.2	35	25	22	19+	8	8	15	6.2	
HARRISBURG	338	1002.4	1015.3	66	45	55.2	-7.5	81	27	35	17	0	0	41	62	4.32	0.42	1.03	12	4	0.0	0	1.6	31	32	W	19	4	8	19	7.2	58
PHILADELPHIA	5	1014.2	1015.1	66	46	55.9	-6.7	80	19+	37	13	0	0	43	65	3.49	-0.25	1.40	13	4	0.0	0	2.0	32	37	W	19	6	7	18	7.2	48
PITTSBURGH	1137	971.2	1015.5	65	44	54.3	-5.5	87	27	32	8	0	1	41	64	5.21	1.30	1.21	14	6	0.0	0	2.5	33	30	31	8	5	8	18	7.0	44
READING U	266			66	47	56.7	-6.6	81	28+	39	13	0	0			4.49	0.70	1.04	12		0.0	0			56	E	7	5	12	14	6.5	56
SCRANTON	930	981.0	1015.5	62	43	52.7	-6.9	79	19	35	13	0	0	39	63	4.41	0.46	0.80	12	2	0.4	T	2.6	31	39	SW	19	2	13	16	7.3	54
WILLIAMSPORT	524	996.3	1015.3	65	41	52.8	-7.6	81	27	31	13	0	2	41	68	5.50	1.42	1.04	12	4	T	T	2.5	31	32	27	19	5	11	15	6.9	
RHODE ISLAND																																
BLOCK ISLAND	110			54	43	48.5	-5.4	63	30	36	7	0	0			5.98	2.97	1.76	16		0.0	0						8	9	14	6.5	
PROVIDENCE	51	1011.9	1014.2	61	42	51.2	-6.3	76	20	32	7+	0	2	36	61	7.27	3.92	3.76	13	1	0.0	0	2.7	29	41	2	25	6	7	18	7.0	52
SOUTH CAROLINA																																
CHARLESTON	40	1014.2	1015.8	83	60	71.3	-1.6	97	28	43	10	11	0	58	68	8.91	5.30	6.23	8	5	0.0	0	2.7	22	60Y	N	31	9	9	13	5.8	63
CHARLESTON U	9			79	65	72.2	-1.1	91	28	53	24	1	0			7.56	4.47	4.85	6		0.0	0			36	SW	13					
COLUMBIA	213	1008.1	1016.1	79	55	67.0	-5.2	93	29+	39	10	4	0	56	73	8.85	5.31	5.57	11	7	0.0	0	1.2	24	35	19	29	9	7	15	6.3	63
GNVLE-SPARTANBURG	957	981.7	1016.0	78	54	66.1	-3.3	97	28	42	17	5	0	55	71	4.97	1.75	1.64	12	10	0.0	0	1.9	28	36	SW	15	6	9	16	6.7	55
SOUTH DAKOTA																																
ABERDEEN	1296	968.5	1015.5	66	40	52.7	-4.6	89	22	23	4+	0	10	35	55	0.58	-1.76	1.12	9	4	0.5	T	2.5	2	40	32	7	2	17	12	7.1	
HURON	1282	968.5	1015.3	67	39	53.0	-4.5	93	25	17	3	3	8	37	59	0.56	-1.80	0.23	9	4	0.7	T	1.5	34	40	NW	7	2	13	16	7.2	61
RAPID CITY	3162	905.2	1016.6	61	39	49.8	-5.9	86	22	24	2+	0	8	37	66	3.20	0.54	2.05	13	4	3.1	13	4.1	34	56	NW	1	2	11	18	7.4	51
SIOUX FALLS	1418	963.8	1015.2	66	40	53.1	-5.2	100	25	17	4	1	7	35	55	0.72	-2.66	0.33	9	3	0.1	T	1.7	3	32	34	18+	3	13	15	7.2	
TENNESSEE																																
BRISTOL	1507	962.4	1016.4	69	48	58.7	-7.0	85	27	36	10	0	0	51	81	6.29	2.84	1.28	17	11	0.0	0	1.6	28	32	29	8	6	4	21	7.4	
CHATTANOOGA	665	991.5	1016.0	76	54	64.9	-5.2	90	26	40	10	1	0	56	76	6.02	2.50	1.33	14	11	0.0	0	1.1	26	31	SW	31	8	7	16	6.5	48
KNOXVILLE	980	980.7	1015.4	74	54	63.5	-4.2	90	27	41	10	1	0	56	79	4.10	0.60	1.08	17	11	0.0	0	2.5	25	31	W	7	6	7	18	7.0	51
MEMPHIS	258	1005.8	1015.8	79	59	68.8	-1.5	90	28+	46	3	2	0	56	64	6.38	2.15	2.30	9	8	0.0	0	2.6	22	27	W	31	8	13	10	5.8	60
NASHVILLE	590	993.6	1015.5	76	56	66.3	-2.3	89	27+	43	16+	0	0	53	66	6.98	3.26	2.68	14	12	0.0	0	2.3	25	34	SW	6	9	7	15	6.1	57
OAK RIDGE R	905			74	51	62.7	-3.8	91	27	37	10	2	0			4.77	1.04	1.35	16		0.0	0			43Y		30	5	10	16	7.0	
TEXAS																																
ABILENE	1762	952.3	1012.5	86	59	72.5	0.8	107	10	37	2	11	0	49	47	4.39	0.06	1.50	7	7	0.0	0	5.1	17	34	NE	20+	13	8	10	4.5	77
AMARILLO	3604	889.9	1011.7	78	49	63.4	-3.1	94	24	33	1	7	0	40	51	1.40	-1.97	0.56	5	5	0.0	0	4.3	16	42	W	10	10	10	11	5.1	74
AUSTIN	597	992.2	1013.8	86	64	75.3	0.2	99	11+	52	16	10	0	60	66	3.35	-0.36	1.49	8	7	0.0	0	3.8	14	26	N	20+	7	12	12	5.8	58
BROWNSVILLE	19	1012.2	1012.6	89	72	80.9	1.9	99	31	60	24	15	0	69	71	0.64	-1.72	0.51	4	4	0.0	0	11.2	14	32	NE	2	7	17	7	5.3	73
CORPUS CHRISTI	41	1011.5	1013.2	88	70	78.5	1.0	98	8	56	23	10	0	68	74	1.83	-1.16	1.03	5	5	0.0	0	11.0	14	47	N	14	5	13	13	6.5	43
DALLAS	481	997.0	1014.0	84	62	73.0	0.1	98	11	48	2	8	0	57	60	3.63	-1.20	1.73	10	7	0.0	0	5.3	15	40	N	30	9	9	13	5.5	68
DEL RIO	1026	976.3	1011.6	92	66	79.1	0.7	103	11+	51	2	19	0	52	46	0.65	-2.08	0.65	1	2	0.0	0	6.9	12	25	4	20	8	13	10	5.3	
EL PASO	3918	881.1	1010.5	86	56	70.9	-1.0	95	9	31	2	11	1	24	19	0.05	-0.35	0.05	1	3	0.0	0	5.0	26	38	W	25+	14	10	7	4.1	88
FORT WORTH	537	993.9	1014.1	83	60	71.4	-1.3	96	11	46	2	4	0	58	65	4.02	-0.57	1.82	10	7	0.0	0	3.7	17	25	34	31+	9	9	13	5.5	
GALVESTON U	7			80	71	75.6	-0.2	84	31+	63	22+	0	0			3.33	0.54	1.90	7		0.0	0			34	SE	3					63
HOUSTON U	41			83	68	75.8	-0.4	96	8	57	3	5	0			5.05	0.62	1.91	9		0.0	0										
HOUSTON	50	1012.5	1014.7	86	66	75.9	-0.1	94	8	52	16	7	0	65	73	2.54	-1.78	1.22	6	7	0.0	0	5.1	14	26	16	29+	7	10	14	6.1	65
LUBBOCK	3254	902.1	1011.9	82	50	66.0	-2.2	97	10	30	2	5	2	39	45	3.45	0.27	2.34	3	3	0.0	0	3.8	18	35	32	27	11	10	10	4.9	
MIDLAND	2851	914.0	1010.6	89	56	72.3	-1.1	101	9	36	2	16	0	35	35	0.56	-1.52	0.49	3	4	0.0	0	5.1	19	44	32	20	15	8	8	4.2	
PORT ARTHUR	16			83	66	74.7	0.0	89	8+	53	16	0	0	64	71	5.85	0.91	2.48	11	8	0.0	0	5.1	14	49	SW	29	8	12	11	5.9	66
SAN ANGELO	1903	946.5	1011.8	90	59	74.4	0.1	106	10	35	2	18	0	48	46	1.91	-1.29	1.08	6	7	0.0	0	3.0	18	35	32	29	13	10	8	4.7	
SAN ANTONIO	788	985.8	1013.4	89	65	76.6	1.3	101	12+	46	16	11	0	60	61	2.22	-1.23	1.03	8	5	0.0	0	5.2	13	40	N	20	8	12	11	5.8	66
VICTORIA	104	1009.5	1013.6	86	67	76.8	0.6	94	8	55	16	7	0	65	72	2.38	-1.74	1.77	4	6	0.0	0	7.3	14	43Y	N	20	5	10	16	6.7	
WACO	501	995.9	1013.8	83	63	73.2	-1.1	95	11	49	2	6	0	61	68	4.17	-0.40	1.35	7	7	0.0	0	6.1	15	25	17	6+	10	10	11	5.4	
WICHITA FALLS	994	977.3	1013.3	83	56	69.6	-2.6	104	10	42	15+	10	0	52	58	6.50	1.90	1.88	10	9	0.0	0	3.5	13	35	30	30	9	7	15	5.8	
UTAH																																
MILFORD	5028	846.6		72	37	54.4	-2.1	94	23	18	2	2	9			0.55	-0.14	0.16	8		1.4	T						10	5	16	5.8	
SALT LAKE CITY	4220	871.7	1014.9	70	43	56.3	-2.6	91	23	27	1	1	5	37	54	2.15	0.75	0.76	11	7	1.0	1	2.1	16	43	NW	10	8	8	15	6.4	68
WENDOVER	4237			70	49	59.4	-2.0	89	22	29	1	0	1			1.24	0.58	0.77	8		0.1	T										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

MAY 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1002.0	1014.7	58	37	47.6	- 6.2	81	1	28	6	0	8	34	63	3.19	0.20	0.77	17	2	2.6	1	2.4	32	32	S	7	4	8	19	7.3	59
VIRGINIA																																
LYNCHBURG	916	982.1		71	47	58.7	- 6.6	91	28	37	25	1	0	47	70	3.69	- 0.48	1.05	16	8	0.0	0	1.2	31	29	SW	19+	7	8	16	6.7	57
NORFOLK	22	1014.6	1015.6	71	52	61.2	- 6.3	90	15	44	4	1	0	47	63	3.25	- 0.11	0.91	13	3	0.0	0	1.0	3	37	SW	7	7	7	17	7.0	63
RICHMOND	164	1009.8	1015.8	73	48	60.7	- 6.3	89	28+	37	4	0	0	50	71	3.71	- 0.01	1.97	15	4	0.0	0	0.9	32	32	NW	9	4	9	18	7.2	60
ROANOKE	1149	973.6	1015.5	70	48	59.0	- 6.7	89	27	35	17	0	0	46	67	3.95	0.16	1.04	16	6	0.0	0	2.8	29	35	30	7	6	6	19	7.2	
WALLOPS ISLAND	9	1015.9	1016.3	64	47	55.5		81	20	43	4	0	0	48	82	4.19		1.87	14	3	0.0	0	0.8	36	52Y	W	15	4	8	19	7.5	
WASHINGTON																																
OLYMPIA	195	1013.2	1020.5	67	41	53.6	- 1.5	87	20	31	25	0	1	44	72	0.25	- 1.76	0.10	4	0	0.0	0	3.2	23	25	25	28+	1	8	22	7.9	
QUILLAYUTE	179	1013.5	1021.1	58	44	50.9	- 1.1	70	20+	34	10	0	0	46	84	2.50	- 1.92	1.04	14	0	0.0	0	2.3	26	17	W	22	0	6	25	8.9	35
SEATTLE TACOMA	400	1004.1	1020.4	64	47	55.4	- 0.1	82	20	42	11	0	0	45	74	0.38	- 1.35	0.15	7	0	0.0	0	1.1	25	22	24	28	1	6	24	8.5	63
SPOKANE	2356	932.6	1016.5	64	41	52.8	- 3.4	82	21	32	25	0	1	38	60	1.31	0.10	0.52	6	1	3.5	T	4.6	21	29	SW	6	4	8	19	7.4	57
STAMPEDE PASS R	3958			49	36	42.8	- 1.1	72	20	27	9	0	7			2.05	- 2.20	0.50	12		8.8	29						1	7	23	8.5	
WALLA WALLA U	949			71	49	59.9	- 1.1	88	21	39	1	0	0			1.46	- 0.03	0.68	7		0.0	0			27	NE	4	7	11	13	6.3	74
YAKIMA	1052	979.0	1017.3	73	43	57.6	- 0.9	88	21	32	1	0	1	38	49	0.16	- 0.38	0.08	6	0	0.0	0	3.7	29	23	25	28+	8	9	14	6.3	
WEST INDIES																																
SAN JUAN P.R.	13	1014.9	1017.3	84	75	79.7	1.0	88	29+	72	28	0	0	71	76	4.15	- 2.97	1.40	20	0	0.0	0	10.9	9	26	E	24+	2	19	10	6.2	66
SWAN ISLAND	28			87	78	82.4	- 0.1	89	29+	74	19	0	0			0.12	- 3.18	0.05	5		0.0	0						17	10	4	4.3	
WEST VIRGINIA																																
BECKLEY	2504	927.5	1015.7	65	46	55.2		82	27	34	10	0	0	45	72	6.25		1.76	17	10	T	T	3.7	25	37	19	11+	4	5	22	8.0	
CHARLESTON	939	981.0	1015.1	69	48	58.3	- 6.5	88	27	36	10+	0	0	48	70	6.45	2.74	2.17	16	8	0.0	0	1.8	24	35	29	2	4	6	21	7.7	
ELKINS	1970	944.8	1016.0	65	41	52.7	- 6.6	82	27	29	4	0	3	44	76	7.67	3.10	1.54	18	7	T	T	3.3	29	46	30	2	3	4	24	8.2	
HUNTINGTON	827	985.4	1015.5	70	49	59.2	- 5.4	90	27	35	10	1	0	50	74	6.81	2.92	2.26	15	10	0.0	0	1.1	23	47	29	8	3	7	21	7.5	
PARKERSBURG U	615			69	49	58.9	- 5.1	88	27	39	3	0	0			6.94	3.24	1.79	15		0.0	0			29	W	7					45
WISCONSIN																																
GREEN BAY	682	990.2	1015.8	61	39	49.8	- 5.0	85	18	26	5	0	9	36	60	2.45	- 0.61	1.05	9	3	T	T	1.7	34	49	SW	18	9	11	11	5.9	62
LA CROSSE	651	990.9	1015.5	66	42	54.2	- 5.0	94	26	27	3	2	4	37	56	1.22	- 2.54	0.94	8	3	0.0	0	0.7	34	31	19	1	4	15	12	6.3	
MADISON	858	984.1	1015.7	64	37	50.2	- 5.9	90	26	25	12	1	13	36	60	3.53	0.19	1.59	9	7	T	0	1.3	35	33	SW	1	4	14	13	6.2	66
MILWAUKEE	672	990.5	1016.1	60	40	50.2	- 3.2	86	18	28	6	0	4	36	61	1.80	- 1.36	0.80	10	4	T	T	2.0	1	36	W	18	6	11	14	6.4	66
WYOMING																																
CASPER	5338	837.5	1015.2	61	37	49.1	- 4.0	86	24	20	1	0	11	33	61	1.62	- 0.41	0.47	14	6	10.2	4	1.1	29	33	24	10	5	7	19	7.3	
CHEYENNE	6126	812.4	1015.3	60	38	49.1	- 3.8	83	24+	21	1	0	8	33	61	4.04	1.52	0.94	17	5	11.0	1	4.2	31	69	NW	1	6	9	16	7.0	50
LANDER	5563	829.0	1014.8	61	39	50.0	- 2.9	84	23	19	1	0	10	35	63	3.97	1.32	0.96	16	5	24.5	12	2.3	27	43	SW	10	4	8	19	7.3	54
SHERIDAN	3964	879.1	1016.6	62	37	49.2	- 4.4	81	23+	17	4	0	11	33	57	1.33	- 1.24	1.12	14	6	7.5	14	1.5	31	35	NW	15+	2	12	17	7.6	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	994.2	1016.6	26.1	13.3	19.8	-2.3	32.8	14+	4.4	3	4	0	14.4	74	237	150	104	10	7	0	0	0.8	23	13.9	SW	7	9	9	13	5.8	60
HUNTSVILLE	183	993.2	1016.1	25.6	13.9	19.8	-1.5	32.8	27	6.1	16+	3	0	12.8	65	165	78	47	14	12	0	0	0.8	22	16.1	25	7	9	10	12	5.9	
MOBILE	64	1008.8	1016.5	29.4	17.8	23.7	-0.6	33.9	28+	12.2	16	12	0	17.2	72	128	4	38	10	7	0	0	0.8	21	10.3	22	11+	10	10	11	5.6	
MONTGOMERY	59	1009.5	1016.5	28.3	15.6	21.9	-0.6	34.4	14	10.0	17+	8	0	15.6	70	139	51	66	7	5	0	0	0.7	24	13.9	F	22	12	9	10	5.4	59
ALASKA																																
ANCHORAGE	35	1011.5	1016.3	13.9	3.3	8.4	-0.2	18.9	27+	- 1.7	7	0	3	- 1.1	53	27	14	15	6	0	0	0	0.7	23	10.3	15	21	13	5	13	5.4	65
ANNETTE	34	1014.2	1018.3	13.9	5.0	9.6	0.1	22.8	31	1.7	11	1	0	4.4	75	202	23	47	14	0	0	0	2.0	15	11.2	14	26	5	7	19	7.3	
BARROW	9	1016.3	1016.8	- 3.3	- 7.8	- 5.5	2.1	2.8	2	-12.2	22	0	31	- 7.2	87	6	3	2	10	0	81	102	1.1	24	15.6	26	4	0	1	30	9.6	
BARTER ISLAND	12	1015.9	1017.9	- 1.1	- 8.3	- 4.8	1.4	5.6	2	-15.6	17	0	31	- 7.2	81	38	32	14	12	0	185	102	2.9	27	21.5	28	4	0	5	26	9.2	
BETHEL	38	1013.2	1018.8	11.1	0.6	5.8	1.9	18.3	29	- 5.0	6	0	15	0.6	72	3	- 22	1	5	0	0	T	2.4	31	12.5	35	5	7	10	14	6.3	
COLD BAY	29	1012.5	1016.6	7.8	2.8	5.3	1.1	14.4	27	- 1.1	7+	0	3	1.7	80	16	- 42	5	8	0	0	0	1.5	1	17.4	16	8	1	2	28	9.1	
FAIRBANKS	133	999.0	1016.1	12.8	2.8	7.6	-0.8	21.1	30	- 2.8	7+	1	10	- 1.7	55	11	- 7	4	8	0	T	152	1.4	25	9.8	21	30+	5	5	21	7.3	
JUNEAU	4	1016.6	1017.3	12.8	2.2	7.6	0.0	19.4	10+	- 3.3	1	0	9	3.3	81	75	- 8	13	18	0	0	0	1.5	12	13.4	12	16	3	5	23	8.2	38
KING SALMON	15	1014.2	1016.4	12.8	0.6	6.7	0.4	18.9	28	- 3.9	7	0	13	- 1.1	61	6	- 19	3	5	0	0	0	0.5	36	15.6	9	25	6	9	16	6.6	
KOTZEBUE	3	1018.0	1018.3	2.2	- 3.9	- 0.9	-0.3	6.7	1	- 8.3	5+	0	31	- 2.8	86	6	- 2	3	6	0	53	838	1.9	27	16.1	31	5	3	10	18	7.5	
MC GRATH	105	1004.7	1017.7	12.8	1.7	7.2	0.5	17.8	23	- 4.4	7+	0	11	- 1.1	58	7	- 15	4	3	0	T	76	1.4	31	9.4	21	30+	7	11	13	6.3	
NOME	4	1018.3	1018.9	2.2	- 3.3	- 0.4	-2.1	5.6	15	- 9.4	6	0	31	- 3.9	78	6	- 11	3	6	0	15	838	1.1	26	10.3	2	4	6	5	20	7.5	33
ST. PAUL ISLAND	7	1018.6	1019.7	5.6	1.7	3.4	1.9	7.8	30+	- 3.3	6	0	7	1.1	88	18	- 15	7	14	0	T	0	2.4	4	13.9	35	16	0	2	29	9.5	
SHEMYA	37	1016.3	1019.9	6.1	2.2	4.1	0.7	8.9	14	0.0	5	0	1	2.8	95	50	- 11	20	17	0	T	0	1.7	19	15.6	14	9	0	0	31	9.8	
YAKUTAT	9	1015.6	1016.7	10.0	1.7	5.8	-1.2	18.3	9	- 3.9	8+	0	11	2.8	81	152	- 51	53	16	0	T	305	0.6	15	11.6	14	20	3	2	26	8.5	
ARIZONA																																
FLAGSTAFF	2131	788.0	1015.1	18.9	- 0.6	9.3	-1.2	27.2	22	- 8.3	1	0	16	- 5.0	40	10	- 3	10	3	6	0	0	1.5	22	13.0	1	19	12	11	8	4.6	
PHOENIX	340	972.6	1010.8	33.3	15.0	23.9	0.1	40.6	22+	4.4	2	17	0	0.0	23	1	- 2	1	2	2	0	0	0.6	21	15.6Y	ESE	25	14	8	9	4.2	89
TUCSON	788	924.5	1011.1	31.1	13.3	22.2	-0.9	37.2	22+	3.9	2+	13	0	- 2.8	21	16	12	14	3	3	0	0	1.2	23	16.5	S	23	13	9	9	4.5	96
WINSLOW	1492	851.3	1013.9	25.6	5.6	15.6	-2.6	33.3	23+	- 4.4	1	2	4	- 7.8	22	7	- 1	6	3	3	0	0	2.3	23	13.4	23	5	16	8	7	4.1	
YUMA	59	1004.1	1011.3	33.3	17.2	25.2	-0.3	40.6	20	7.8	1	17	0	1.7	25	T	0	T	0	0	0	0	1.2	24	13.4	N	13	18	7	6	3.3	94
ARKANSAS																																
FORT SMITH	136	998.3	1014.6	26.1	13.3	19.7	-1.4	33.3	11	5.0	3+	1	0	13.3	68	147	13	44	11	9	0	0	0.2	24	12.5	W	31	10	9	12	5.7	65
LITTLE ROCK	78	1006.1	1015.4	26.7	13.9	20.3	-1.1	33.3	28	7.2	3	6	0	13.9	67	221	87	62	12	10	0	0	0.8	21	13.0	S	31	13	7	11	5.5	61
TEXARKANA	119	1002.0	1015.2	27.2	15.0	21.1	-0.9	33.3	11	7.8	3+	2	0	15.0	71	195	70	52	11	9	0	0	1.8	19				11	7	13	5.3	
CALIFORNIA																																
BAKERSFIELD	145	998.0	1015.3	28.3	14.4	21.4	0.1	38.9	23+	5.0	1	11	0	7.2	45	7	2	5	3	0	0	0	1.7	34	8.9	32	25+	18	10	3	3.3	
BISHOP	1252	873.0		26.7	6.7	16.6	-0.4	36.1	22	- 1.1	1	7	1			1	- 5	1	1		0	0						15	12	4	4.1	
BLUE CANYON	1609			15.6	6.7	11.2	-0.1	27.8	22	- 2.8	11	0	6			68	- 10	35	8		277	1448			10.7	15	10	20	4	7	3.3	
EUREKA U	13			13.9	8.3	11.1	-0.6	21.1	15	3.9	1	0	0			39	- 17	20	6		0	0			11.6	N	31	6	11	14	6.6	57
FRESNO	100	1003.7	1015.5	28.9	11.7	20.4	0.3	40.0	22	4.4	1	11	0	9.4	55	5	- 3	4	2	0	0	0	2.5	32	13.0	NW	31	20	7	4	2.8	89
LONG BEACH	10	1014.9	1016.1	24.4	12.8	18.5	1.0	39.4	16	5.6	1	3	0	9.4	63	1	- 2	1	1	0	0	0	1.5	22	8.9	27	14	10	9	12	5.2	
LOS ANGELES ·	30	1012.2	1015.7	22.2	13.9	17.9	1.3	35.6	16	8.9	1	2	0	10.0	64	1	- 3	1	1	0	0	0	2.5	25	14.3Y	W	13	12	8	11	5.3	
LOS ANGELES U	82			25.0	14.4	19.6	1.4	38.9	16	9.4	1	4	0			T	- 4	T	1		0	0			7.6	SW	10+	14	8	9	4.6	78
MT SHASTA R	1080			20.0	4.4	12.3	0.2	30.6	21	- 2.8	1	0	5			24	- 26	11	7		20	T										
OAKLAND	2	1017.6	1017.9	19.4	11.7	15.3	-0.1	28.9	16	7.8	12	0	0	9.4	72	3	- 13	3	2	0	0	0	3.5	27	13.0	27	27	18	6	7	3.8	
RED BLUFF	104	1003.1	1015.6	27.2	11.7	19.3	-0.9	39.4	20	3.9	1	7	0	7.8	51	9	- 20	6	4	2	0	0	0.6	32	16.1	SE	9	21	6	4	2.6	88
SACRAMENTO	5	1014.9	1015.8	27.2	9.4	18.4	0.7	38.3	22	4.4	12+	9	0	10.6	67	3	- 12	3	2	0	0	0	1.9	22	11.6	SW	9	19	9	3	2.8	90
SANDBERG R	1377	863.2		17.8	7.8	12.5	-1.2	30.0	21+	- 1.1	12	0	3	2.2	56	9	1	8	2		0	0	3.2	34	22.8	32	29	13	8	10	4.8	
SAN DIEGO	4	1014.9	1015.8	21.1	13.9	17.5	-0.3	32.8	16	8.9	1	1	0	10.6	67	1	- 3	1	3	1	0	0	1.7	26	10.3	NW	14	10	10	11	5.6	61
SAN FRANCISCO	2	1017.3	1017.8	19.4	10.0	14.7	0.1	30.0	16	6.7	1	0	0	7.8	69	7	- 6	7	2	0	0	0	5.6	29	18.3	W	30	17	7	7	3.9	
SAN FRANCISCO U	16			18.3	10.6	14.4	0.3	28.9	16	8.9	10+	0	0			2	- 14	2	3		0	0			15.2	W	27					86
SANTA CATALINA	478	959.7	1016.0	20.0	10.6	15.2	0.2	35.6	15	6.7	11+	2	0	7.8	71	3	- 6	1	5	0	0	0	2.0	25				14	9	8	4.5	
SANTA MARIA	72			20.6	7.8	14.0	-0.2	34.4	16	2.8	1	1	0			6	0	6	2		0	0						13	13	5	3.9	
STOCKTON	7	1015.6	1016.5	27.2	10.6	19.0	0.0	37.8	22	5.0	1	9	0	8.3	57	5	- 7	4	3	0	0	0	3.3	29	11.6	27	27	19	11	1	2.9	
COLORADO																																
ALAMOSA	2297			18.9	0.0	9.3	-1.2	28.9	24	-11.7	1	0	13			31	12	22	5		30	T						9	14	8	5.3	
COLORADO SPRINGS	1873	811.4	1014.8	18.3	4.4	11.3	-1.4	30.0	24+	- 4.4	1	0	7	- 0.6	53	55	1	34	11	6	T	T	0.7	6	18.3	17	25	6	8	17	7.0	
DENVER	1610	836.1	1013.8	18.9	3.9	11.4	-2.0	30.6	24	- 3.3	1	0	7	2.8	64	121	53	46	18	6	76	T	0.7	1	14.8	W	7	4	10	17	7.1	54
GRAND JUNCTION	1480	851.3	1012.6	23.3	7.2	15.3	-1.5	34.4	23	- 1.7	3	3	2	- 1.7	38	39	23	13	8	5	T	T	0.4	5	17.0	SW	11	9	7	15	5.9	66
PUEBLO	1428	855.1	1013.0	22.8	7.2	15.0	-0.9	35.6	24	1.1	15	3	0	0.6	43	32	- 14	23	7	2	0	0	1.1	9	26.4	N	19	6	10	15	6.5	66

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1013.9	1014.6	15.0	6.1	10.6	-4.2	23.3	28	1.7	7	0	0	4.4	69	130	36	34	14	0	0	0	1.3	33	22.4	8	7	7	8	16	6.9	
HARTFORD	52	1007.8	1014.3	17.8	6.1	12.1	-3.4	26.7	19	- 0.6	7	0	1	2.2	56	161	74	69	10	1	T	T	1.5	33	15.2	NE	25	3	9	19	7.4	58
NEW HAVEN	2	1014.2		15.6	6.1	10.7	-3.3	23.9	28	0.0	7	0	1			146	52	54	14		T	0			13.4	N	25	6	8	17	6.8	60
DELAWARE																																
WILMINGTON	24	1012.2	1015.3	18.3	7.8	13.0	-4.1	26.1	28+	2.8	17+	0	0	6.1	68	96	7	41	13	4	0	0	1.0	30	13.9	28	19+	4	9	18	7.3	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1013.5	1015.8	21.7	9.4	15.6	-3.2	30.0	2	5.6	17	0	0	7.8	64	108	3	46	15	3	0	0	0.3	33	17.0	SW	11	7	6	18	7.1	53
FLORIDA																																
APALACHICOLA U	4			27.8	19.4	23.7	-0.1	33.3	27	13.9	24	2	0			18	- 55	17	4	1	0	0			13.4	SW	22	14	8	9	4.8	70
DAYTONA BEACH	9	1015.9	1017.4	31.1	17.2	24.2	0.7	36.7	12	12.8	18+	12	0	16.7	68	19	- 54	12	4	4	0	0	1.1	17	13.4	24	7	11	10	10	5.2	
FORT MYERS	5	1016.9	1017.2	32.2	20.0	26.1	0.9	35.0	28	12.2	1	19	0	16.7	60	37	- 61	25	6	4	0	0	1.2	22	13.0	25	23	11	18	2	4.3	
JACKSONVILLE	6	1015.6	1016.7	31.7	18.9	25.1	0.8	37.8	13	12.8	17+	13	0	15.6	60	30	- 58	16	4	2	0	0	1.4	22	17.4	SW	7	14	9	8	4.7	68
KEY WEST	1	1015.9	1016.7	30.6	25.6	28.2	2.1	32.2	28+	23.9	27	3	0	21.1	68	17	- 52	11	4	2	0	0	2.8	12	11.2	E	21+	11	19	1	4.3	91
LAKELAND U	65			31.1	19.4	25.2	0.3	35.6	29+	15.6	24	12	0			51	- 39	37	5		0	0						14	14	3	4.2	81
MIAMI	2	1016.6	1016.9	30.6	22.2	26.3	0.9	33.9	9	19.4	27+	5	0	19.4	70	43	-121	29	5	2	0	0	2.4	14	11.2	6	18	6	21	4	5.2	
ORLANDO	33	1012.9	1017.2	32.2	18.9	25.7	0.4	36.1	14	13.9	1	18	0	16.7	64	43	- 48	23	6	4	0	0	0.9	21	17.9	19	22	12	11	8	4.8	
PENSACOLA	34	1012.9	1017.0	28.3	17.8	22.9	-1.3	32.8	28+	12.2	24+	2	0	17.2	73	107	- 8	73	7		0	0	1.0	19	15.2	SW	22	8	12	11	5.8	69
TALLAHASSEE	17	1014.6	1016.7	31.1	15.6	23.3	-0.5	36.1	28+	8.3	17	14	0	15.6	67	138	34	74	6	5	0	0	0.7	23	10.3	18	2	10	12	9	5.1	
TAMPA	6	1016.6	1016.9	31.1	18.9	25.2	0.3	35.6	31	14.4	18+	14	0	17.8	67	16	- 56	7	3	1	0	0	1.3	25	10.3	27	23	10	14	7	5.0	57
WEST PALM BEACH	5	1016.3	1017.1	31.1	20.0	25.6	0.3	35.6	9	15.0	1	11	0	18.9	70	10	-120	6	4	3	0	0	2.3	14	11.2	22	23+	10	16	5	4.7	
GEORGIA																																
ATHENS	244	987.5	1016.1	25.6	12.8	18.9	-2.2	33.3	29+	6.7	17+	4	0	12.8	72	145	53	85	14	7	0	0	1.2	31	9.8	30	8	6	10	15	6.4	
ATLANTA	308	980.0	1016.4	25.0	12.8	19.0	-1.6	31.7	28	6.7	10	0	0	12.8	69	126	45	55	13	6	0	0	1.1	29	14.8	W	15	10	7	14	5.8	69
AUGUSTA	44	1010.5	1015.7	27.2	13.3	20.3	-1.7	34.4	29+	5.6	10	6	0	13.3	70	177	101	112	12	8	0	0	1.0	26	21.5	28	8	10	8	13	5.9	
COLUMBUS	117			28.9	15.0	22.0	-0.3	34.4	28+	8.3	10	10	0	14.4	66	168	79	61	9		0	0	0.7	27	15.6	16	29	11	11	9	5.0	
MACON	108	1003.7	1016.7	29.4	13.3	21.4	-1.9	37.2	28	6.1	17	14	0	12.8	62	69	- 15	44	8	1	0	0	0.8	31	13.4	S	29	11	11	9	5.3	68
ROME	194			25.6	11.7	18.6	-1.8	33.3	26	3.9	10	4	0			147	50	40	13		0	0										
SAVANNAH	14	1014.6	1016.3	30.0	16.1	22.9	-0.1	36.7	14	7.8	10	13	0	14.4	64	75	- 21	54	6	5	0	0	0.8	23	13.9	SW	7	12	8	11	5.2	71
HAWAII																																
HILO	8	1015.9	1017.0	29.4	21.1	25.1	2.3	32.8	18	19.4	25+	1	0	19.4	74	250	13	70	20	1	0	0	1.4	16	9.4	E	20	2	12	17	7.3	33
HONOLULU	2	1015.6	1016.1	29.4	21.7	25.7	1.3	31.1	21	20.0	31+	0	0	18.9	68	54	29	27	9	3	0	0	2.5	7	10.7	NE	26+	6	14	11	6.2	63
KAHULUI	15	1013.2	1015.7	29.4	20.0	24.8	0.8	32.2	15	17.8	9+	1	0	19.4	73	52	35	31	3	0	0	0	2.7	6	12.5	NE	6	4	14	13	6.5	74
LIHUE	31	1011.9	1017.0	27.2	21.1	24.3	0.7	31.1	17	18.3	17+	0	0	20.0	78	103	37	30	13	2	0	0	3.0	6	9.8	E	3	1	13	17	7.6	60
IDAHO																																
BOISE	865	916.0	1015.7	21.7	5.6	13.6	-0.9	32.2	22+	- 2.2	1	2	4	2.8	53	12	- 20	5	8	2	T	0	1.2	29	14.3	S	9	12	10	9	5.1	80
IDAHO FALLS 46W P	1504			19.4	1.7	10.4	-1.0	30.6	22	- 5.6	13+	0	14			18	- 10	8	5		T	T	1.7	24	16.5	WSW	10					
LEWISTON	431			21.7	7.8	14.6	-0.1	31.1	21	0.0	1	0	1			30	- 10	11	8		0	0						5	7	19	7.4	
POCATELLO	1358	862.9	1015.2	19.4	3.9	11.6	-1.2	31.1	23	- 5.6	1	0	10	0.6	50	29	0	23	6	3	8	76	3.2	22	15.2	SW	3	5	11	15	6.5	68
ILLINOIS																																
CAIRO U	96			23.9	14.4	19.1	-1.4	32.8	26+	6.7	3	3	0			259	148	156	13		0	0			13.4	SW	11	11	7	13	5.7	60
CHICAGO O HARE	201	991.2	1015.6	17.8	6.7	12.1	-2.2	33.3	26	- 0.6	3	1	2	3.9	61	41	- 55	23	9	3	T	T	0.8	2	16.5	28	19	6	15	10	6.3	
CHICAGO MIDWAY	185	992.9		17.8	7.2	12.7	-2.9	33.9	26	1.7	3	1	0	3.9	58	35	- 59	17	9	2	0	0	0.6	4	17.4	SW	18	6	14	11	6.3	60
MOLINE	177	993.6	1015.1	20.0	7.2	13.6	-2.7	34.4	25	- 1.1	3	2	2	6.1	63	43	- 53	10	10	5	0	0	0.4	3	22.4	NW	18	7	7	17	6.7	55
PEORIA	199	991.2	1015.3	19.4	7.8	13.6	-2.8	32.8	25	1.1	3	1	0	6.1	63	71	- 37	18	10	5	0	0	0.5	4	14.8	NW	2	7	8	16	6.6	57
ROCKFORD	221	988.2	1015.2	18.3	5.0	11.6	-3.4	32.2	26	- 1.7	6	1	4	2.8	57	63	- 34	44	8	4	T	T	0.7	3	20.6	27	18	7	12	12	6.1	
SPRINGFIELD	179	992.6	1014.8	20.6	9.4	15.2	-2.6	35.0	25	3.3	3	3	0	7.2	63	112	14	40	13	6	0	0	0.3	31	17.0	NW	11	9	9	13	6.1	57
INDIANA																																
EVANSVILLE	116	1001.0	1015.0	22.2	10.6	16.4	-2.9	32.2	27+	1.7	3	2	0	10.0	67	97	- 10	35	11	8	0	0	0.8	25	13.0	W	7	9	9	13	6.0	63
FORT WAYNE	241	985.8	1015.8	17.8	6.1	12.1	-3.9	30.6	27	- 1.1	3	0	1	5.0	64	106	12	28	15	6	0	0	0.7	6	14.3	W	17	3	11	17	7.3	57
INDIANAPOLIS	241	986.1	1015.2	20.6	9.4	15.2	-1.2	32.2	25	1.1	3	1	0	8.9	68	127	26	40	15	9	0	0	0.2	33	17.0	NW	28	10	6	15	6.2	52
SOUTH BEND	236	987.5	1015.4	17.8	7.2	12.4	-2.4	28.9	25	0.6	3	0	0	5.0	61	40	- 52	17	7	3	0	0	0.3	8	13.4	22	18	5	12	14	6.7	
IOWA																																
BURLINGTON	211			19.4	7.8	13.7	-2.9	33.3	25	1.1	7+	1	0	7.2	67	109	7		13	4	0		0.4	2	10.3	10	30+	8	7	16	6.4	
DES MOINES	286	980.7	1015.4	20.0	8.3	13.9	-1.9	36.7	25	- 1.1	2	5	1	5.0	60	56	- 47	23	9	4	T	T	0.6	6	17.9	NW	18+	5	8	18	7.3	52

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
IOWA																																
DUBUQUE	322	976.0		18.3	6.1	12.2	-2.3	32.2	26	-0.6	7+	1	2			94	-13	60	7		T	T						6	10	15	6.9	
SIOUX CITY	334	975.3	1015.1	19.4	7.8	13.6	-2.8	38.9	25	-2.2	2	3	3	3.3	56	107	25	53	11	4	T	T	0.7	1	21.9	NW	18	5	9	17	7.2	53
WATERLOO	265	983.1	1015.0	18.9	6.1	12.6	-2.9	34.4	26	-1.7	6	3	4	2.8	55	48	-47	38	9	5	0	0	0.5	4	17.9	34	8	6	12	13	6.7	
KANSAS																																
CONCORDIA	448	961.7	1014.4	21.7	8.9	15.2	-2.1	37.2	24	-3.3	2	5	1	7.2	66	69	-30	21	11	6	T	0	0.2	30	20.1	NW	26	6	8	17	6.7	56
DODGE CITY	787	923.8	1013.8	23.3	9.4	16.4	-1.2	38.9	24	-3.3	1	6	2	5.0	55	57	-25	19	10	9	0	0	0.1	2	17.9	W	10	8	6	17	6.4	71
GOODLAND	1113	888.3	1014.8	19.4	5.6	12.4	-2.3	34.4	25	-6.1	1	3	4	5.0	69	68	6	15	16	8	8	T	0.7	36	16.1	33	1	6	10	15	6.7	
TOPEKA	267	983.1	1014.6	21.7	10.0	16.0	-2.0	32.8	24	1.1	21	2	0	7.8	61	129	18	34	8	6	0	0	0.2	1	21.9	S	27	5	9	17	7.2	48
WICHITA	403	966.8	1014.1	24.4	11.1	17.8	-1.1	37.8	10	1.7	2	6	0	6.7	55	36	-65	13	7	6	0	0	0.1	29	21.9	NE	18	9	5	17	6.6	57
KENTUCKY																																
COVINGTON	265	983.7	1015.2	21.1	10.6	15.8	-1.1	31.1	27	1.7	3	0	0	8.3	65	143	52	38	17	9	0	0	0.4	30	13.0	30	11	3	12	16	7.1	
LEXINGTON	294	980.4	1015.5	22.2	11.1	16.7	-1.4	30.0	25	1.7	3	0	0	10.6	69	176	78	50	15	8	0	0	1.0	21	12.5	22	11	6	9	16	6.8	
LOUISVILLE	145	997.3	1014.9	22.8	11.1	16.9	-1.1	31.1	28+	2.2	3	0	0	10.6	68	117	18	39	14	6	0	0	0.8	26	17.4	NW	6	9	9	13	6.3	58
LOUISIANA																																
ALEXANDRIA	28	1011.2	1015.4	27.8	15.0	21.4	-1.3	31.7	14+	8.3	24	0	0	16.7	77	201	60	56	10	8	0	0	0.8	17	20.6	30	1	9	10	12	5.7	
BATON ROUGE	20	1013.5	1016.2	28.3	17.2	22.7	-1.1	32.8	12	11.1	16	3	0	16.7	69	196	74	55	11	9	0	0	1.3	16	21.5	17	1	6	14	11	6.1	
LAKE CHARLES	3	1014.9	1015.9	28.9	18.9	23.7	-0.6	31.7	13+	12.2	16	0	0	18.9	77	218	101	107	8	7	0	0	1.6	15	13.0	2	31	9	13	9	5.5	
NEW ORLEANS	1	1015.2	1016.2	28.9	17.8	23.2	-0.3	32.8	27	10.6	17	2	0	17.8	71	90	-21	22	8	5	0	0	1.1	16	12.5	30	15	10	10	11	5.5	
SHREVEPORT	77	1005.8	1015.0	27.8	15.6	21.7	-1.1	34.4	11	8.9	16	4	0	16.1	73	299	178	112	10	8	0	0	1.5	17	13.4	31	14	12	9	10	5.3	68
MAINE																																
CARIBOU	190	990.9		11.1	1.1	5.9	-4.0	17.8	1	-2.8	19	0	16			100	23	27	13		277	51						1	11	19	7.7	
PORTLAND	14	1011.5	1014.0	14.4	2.8	8.5	-3.2	23.3	20	-2.2	7	0	6	2.8	69	136	49	35	14	0	T	T	0.8	35	16.5	NW	12	4	10	17	7.2	54
MARYLAND																																
BALTIMORE	45	1009.8	1015.4	20.0	7.8	13.9	-4.1	29.4	2	2.8	4	0	0	6.1	63	96	-5	48	14	1	0	0	1.0	30	16.5	NW	19	7	5	19	6.8	55
MASSACHUSETTS																																
BLUE HILL OBS R	192			15.6	5.0	10.3	-3.4	24.4	20	1.7	8	0	0			201	113	98	12		T	T			26.8	NE	25					53
BOSTON	5	1012.9	1013.8	15.0	6.7	10.9	-3.9	25.0	19	2.8	7	0	0	2.8	62	186	101	92	13	2	T	T	1.6	32	22.4	NE	25	5	8	18	7.2	58
NANTUCKET	13	1013.5	1013.9	12.8	4.4	8.6	-2.8	19.4	30	0.0	7+	0	2	5.0	80	264	191	166	13	2	0	0	0.9	28	21.9	N	26	7	7	17	6.7	57
PITTSFIELD	357			15.0	2.2	8.6	-3.9	26.7	19	-3.3	7	0	6			81	-18	15	13		T	T										
WORCESTER	301	977.3	1014.3	14.4	3.9	9.3	-3.6	25.0	19	0.6	25+	0	0	0.6	58	178	82	77	12	1	T	T	2.0	31	16.5	4	25	4	9	18	7.3	
MICHIGAN																																
ALPENA	210	990.9	1016.2	15.0	0.6	7.8	-2.5	26.7	1	-5.6	5+	0	15	-0.6	58	49	-25	18	9	3	T	0	0.1	10	12.1	W	19	10	12	9	5.4	73
DETROIT	189			16.7	6.7	11.9	-3.1	27.8	27	1.7	10	0	0	1.7	53	31	-59	10	8	1	T		0.5	36	13.9	30	8					
DETROIT M WAYNE CO	193	991.2	1015.5	16.7	5.6	11.1	-3.6	28.9	27	-0.6	3	0	2	3.3	61	41	-49	17	9	1	0	0	0.4	3	15.2	SW	19	5	13	13	6.5	60
DETROIT WILLOW RUN	217	987.5	1016.0	17.2	4.4	10.8	-4.0	28.9	27	-1.1	23	0	3	1.1	52	27	-61	15	7	2	0	0	0.4	36	13.0	28	19+	5	14	12	6.4	
FLINT	235	987.8	1015.7	16.1	5.0	10.4	-3.2	24.4	18+	-0.6	3	0	4	2.2	59	26	-60	9	9	1	0	0	0.2	22	13.0	25	19	5	15	11	6.5	
GRAND RAPIDS	239	986.5	1015.7	17.2	5.0	11.1	-2.7	27.8	27+	-2.8	3	0	4	3.3	61	47	-41	14	14	5	T	T	0.1	4	17.0	SW	18	6	11	14	6.4	53
HOUGHTON LAKE	350	973.9	1016.3	15.6	2.8	9.1		25.0	1	-4.4	5	0	10	0.6	60	61		20	8	3	T	T	0.4	26	10.3	27	19	13	10	8	5.4	
LANSING	256	983.7	1015.4	17.8	5.0	11.3	-2.7	27.2	25	-2.2	3	0	5	3.3	60	27	-68	9	10	2	T	T	0.3	30	17.9	W	19	6	12	13	6.4	62
MARQUETTE U	206			12.8	2.8	7.7	-2.3	23.3	26+	-3.9	3	0	9			41	-34	35	9		114	102			17.0	S	26	7	15	9	5.7	68
MUSKEGON	191	992.6	1015.8	17.2	5.6	11.4	-1.8	28.9	25	-3.3	6+	0	4	2.2	56	31	-44	16	9	3	T	T	0.0	4	14.3	21	18	6	14	11	6.4	
SAULT STE MARIE	220	989.2	1016.1	13.3	0.6	6.9	-2.8	23.3	26	-6.7	4	0	16	-1.1	59	41	-29	29	8	1	56	25	1.3	31	14.3	NW	20	10	8	13	5.9	67
MINNESOTA																																
DULUTH	435	964.4	1016.4	13.9	1.7	7.6	-2.0	23.3	26	-8.3	3	0	12	-1.1	58	20	-63	9	8	2	33	T	0.8	35	17.9	NE	30+	9	8	14	6.3	69
INTERNATIONAL FALLS	359	972.9	1016.5	14.4	0.6	7.3	-3.1	25.6	25	-11.7	3	0	17	-1.7	57	28	-38	15	7	0	61	51	0.8	30	14.3	29	7	7	14	10	5.9	
MINNEAPOLIS	254	985.1	1015.6	17.8	5.0	11.3	-2.8	29.4	18	-7.8	3	0	7	2.2	56	15	-66	20	7	2	8	T	0.2	2	16.5	SW	1	5	14	12	6.2	69
ROCHESTER	395	967.8	1015.8	16.7	4.4	10.7	-3.0	31.1	26	-6.1	3	0	8	2.2	58	35	-58	24	10	4	8	T	0.3	30	17.9	33	18+	5	12	14	6.6	
ST CLOUD	315	977.3	1015.4	17.2	3.3	10.2	-2.9	26.7	25+	-7.2	4+	0	8		54	21	-68	10	6		T	T						7	12	12	6.5	
MISSISSIPPI																																
JACKSON	94	1004.4	1016.3	27.8	14.4	20.9	-1.9	32.2	14+	6.7	3	4	0	15.6	76	275	164	83	10	8	0	0	1.3	18	17.9	NW	31	14	7	10	4.8	73
MERIDIAN	88	1005.4	1016.6	28.3	14.4	21.4	-1.0	33.3	27+	7.2	3	7	0	13.9	65	177	77	55	8	5	0	0	0.9	20	15.6	17	1	12	8	11	5.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	986.5	1014.5	21.1	10.6	15.9	-2.1	33.3	25	2.8	2	1	0	7.8	63	135	16	65	12	9	0	0	0.2	34	15.2	NW	8+	9	9	13	6.2	61
KANSAS CITY	226	987.8	1014.6	21.7	11.1	16.5	-2.2	33.3	25+	2.8	2	4	0	8.9	66	153	42	48	9	6	0	0	0.2	10	15.6	NW	18	6	6	19	7.2	50
SAINT JOSEPH	247			23.9	9.4	16.5	-1.3	36.7	25	0.6	21	5	0	7.2	63	100	- 12	30	9	1	0	0	0.3	35	14.3	25	27	8	6	17	6.9	
ST LOUIS	163	994.9	1015.1	21.7	10.6	16.0	-1.9	32.2	25	1.1	3	1	0	10.0	70	120	25	46	12	7	0	0	0.4	27	14.3	NW	8	7	12	12	6.0	66
SPRINGFIELD	386	969.9	1015.0	22.8	9.4	16.3	-1.8	31.1	25	0.0	3	0	1	10.6	70	101	- 33	52	11	6	0	0	0.8	19	14.3	S	10	11	8	12	5.8	61
MONTANA																																
BILLINGS	1087	891.3	1015.8	16.1	3.9	10.1	-3.7	27.2	17	- 6.1	4+	0	9	1.7	62	47	- 1	24	11	2	196	203	1.1	32	17.9	W	6	4	11	16	7.0	72
GLASGOW	696			17.2	3.9	10.5	-2.3	28.9	17	- 4.4	4+	0	9			17	- 21	9	9		79	76						2	12	17	7.5	
GREAT FALLS	1116	888.6	1016.0	17.8	5.0	11.4	-0.3	31.1	21	- 7.2	3	0	9	0.0	51	55	2	21	11	0	203	51	2.0	26	17.0	SW	6	4	9	18	7.3	62
HAVRE	787	923.5	1015.6	17.8	3.9	10.8	-1.8	29.4	21	- 4.4	5+	0	8	1.7	58	7	- 32	3	8	2	43	T	0.9	26	17.0	W	17	4	10	17	7.3	57
HELENA	1167	881.5	1016.6	18.3	3.9	11.2	-0.4	30.0	21	- 5.0	4+	0	8	- 0.6	49	53	13	28	9	3	323	203	2.3	29	15.2	W	9+	7	8	16	6.6	64
KALISPELL	904	912.0	1016.7	17.8	2.8	10.2	-1.1	28.3	21	- 5.0	4	0	9	1.7	60	24	- 18	9	13	2	71	25	0.5	17	13.0	13	28+	3	10	18	7.4	
MILES CITY	801	922.5	1015.8	17.8	5.0	11.4	-2.7	31.7	23	- 6.7	3	0	9	2.8	60	45	2		8	2	218		0.4	32								
MISSOULA	972	905.2	1017.5	18.3	3.3	10.8	-0.7	30.0	21	- 2.8	26	0	11	1.1	57	34	- 14	11	11	2	66	T	1.1	30	13.4	W	17	9	7	15	6.3	61
NEBRASKA																																
GRAND ISLAND	561	949.2	1015.2	20.0	7.2	13.6	-2.3	38.3	24	- 5.0	2	4	4	5.0	63	86	- 11	27	11	3	109	102	1.3	35	15.6	28	1	3	10	18	7.4	
LINCOLN U	351			20.6	9.4	15.0	-1.9	37.8	24	- 1.1	2	5	2			114	25	31	12		76	76			19.7	NW	10	5	12	14	7.2	54
NORFOLK	471			18.9	7.2	13.0	-2.7	39.4	25	- 3.9	2	4	3			58	- 35	24	9		T	T						3	11	17	7.3	
NORTH PLATTE	846	917.4	1015.4	17.8	3.9	11.1	-3.7	35.6	25	- 6.1	2	2	6	3.9	66	100	25	24	14	1	91	25	1.2	1	17.9	NW	1	4	8	19	7.5	43
OMAHA	298	979.7	1014.9	21.7	8.9	15.1	-2.2	36.1	25	- 0.6	2	4	1	5.6	56	57	- 31	25	9	3	25	T	0.8	3	17.0	NW	18+	4	11	16	7.3	65
SCOTTSBLUFF	1206	879.8	1015.6	16.7	5.0	10.9	-2.9	32.2	24	- 4.4	1	1	4	4.4	70	112	44	28	19	4	66	51	1.4	3	20.1	31	1	4	9	18	7.1	
VALENTINE	789			17.8	4.4	10.9	-3.0	35.6	24	- 7.2	3	3	6			69	2	31	12		T	T			24.6	NW	26	6	7	18	7.3	45
NEVADA																																
ELKO	1539	845.2	1015.5	18.9	2.8	10.8	-0.3	27.2	27	- 5.6	2	0	10			21	- 3	8	8	0	30	T	0.9	25	11.2	22	10	10	8	13	5.9	
ELY	1906	809.3	1014.7	17.8	1.1	9.6	-0.6	29.4	23	- 6.1	2+	0	13	- 0.6	57	77	56	28	12	6	91	76	1.2	20	16.1	SE	31	9	8	14	6.0	59
LAS VEGAS	659	936.3	1011.7	30.6	14.4	22.5	-0.7	40.0	22	5.0	1	12	0	- 2.2	21	5	3	5	1	1	0	0	1.8	22	17.0	SW	11+	16	11	4	3.8	90
RENO	1342	866.6	1015.5	23.3	2.2	12.7	0.6	35.0	22	- 6.1	1	3	5	0.0	46	12	- 1	11	4	2	38	T	1.4	29	13.9	W	10+	17	5	9	4.2	91
WINNEMUCCA	1310	868.3	1015.3	21.7	2.2	12.0	-0.1	34.4	22	- 5.6	3	3	11	- 2.2	40	6	- 18	4	4	1	T	T	0.9	30	13.4	W	10	10	8	13	5.6	54
NEW HAMPSHIRE																																
CONCORD	104	1001.7	1014.4	16.1	2.8	9.3	-3.7	27.8	19	- 2.2	7	0	11	2.2	63	100	19	23	12	0	T	T	1.7	32	13.0	W	20	5	9	17	7.1	60
MT WASHINGTON OBS	1909			- 0.6	- 6.7	- 3.7	-5.4	9.4	1	-11.1	13+	0	30			322	174	117	23	0	1326	178			62.6Y	E	8	1	6	24	8.5	29
NEW JERSEY																																
ATLANTIC CITY	20	1013.2	1015.5	17.8	6.7	12.3	-4.0	27.8	19	0.0	13	0	1	5.6	66	93	4	61	13	4	0	0	0.6	28	11.2	7	24	5	11	15	6.9	53
ATLANTIC CITY U	3			16.1	10.0	13.0	-2.3	26.1	20	6.1	13	0	0			85	4	50	14						17.9	NNW	25+					
NEWARK	2	1013.9	1015.0	17.2	7.8	12.4	-4.3	27.8	19	4.4	8+	0	0	4.4	62	91	- 2	23	13	3	0	0	1.4	31	13.0	35	25	8	9	14	6.5	
TRENTON U	17			18.3	8.9	13.6	-3.3	27.2	19	4.4	6	0	0			102	10	33	12		0	0			15.6	NE	7	6	10	15	6.7	49
NEW MEXICO																																
ALBUQUERQUE	1619	837.5	1011.6	26.1	8.9	17.7	-0.7	32.8	23	- 2.2	1	2	2	- 7.2	20	1	- 18	1	2	2	0	0	1.3	26	21.9	E	20	14	11	6	4.3	86
CLAYTON	1515			22.8	6.1	14.4	-1.0	33.3	24	- 5.0	2	2	4			68	- 2	53	7		T	T						10	10	11	5.5	
RATON	1944			22.8	3.3	12.8	-0.2	31.7	24	- 5.0	15	0	9			10	- 48	5	5		0	0						8	10	13	6.1	
ROSWELL	1102	889.9		31.1	9.4	20.3	0.3	37.8	9	- 2.8	2	13	1	- 2.2	26	3	- 30	3	1	3	0	0	1.2	21	16.1	SW	28	10	9	12	5.0	81
SILVER CITY	1638			25.0	7.8	16.4	-1.8	30.0	20+	- 3.9	2	0	2			T	- 7	T	0		0	0						14	10	7	3.9	
NEW YORK																																
ALBANY	84	1004.4	1015.2	16.7	3.9	10.2	-4.2	27.2	19	- 0.6	7+	0	3	2.8	62	85	- 3	26	13	2	5	0	1.5	31	14.8	NW	19	4	8	19	7.3	48
BINGHAMTON	485	956.3	1015.5	13.9	3.9	8.7	-4.2	22.8	1	- 0.6	23+	0	2	2.2	67	128	39	29	15	3	5	T	1.4	31	13.9	E	7	3	10	18	7.5	56
BUFFALO	215	989.8	1015.7	15.0	5.0	10.1	-2.6	24.4	27	0.6	23+	0	0	2.8	62	94	19	26	13	1	30	T	1.0	26	13.0	W	20+	6	7	18	6.8	50
NEW YORK U	40	1011.2	1014.4	17.8	8.3	12.9	-4.0	27.2	19	3.9	6	0	0	3.9	59	104	10	30	14	0	0	0	1.1	34	17.0	NE	7					56
J.F. KENNEDY	4	1014.2	1014.9	14.4	7.8	10.9	-4.7	22.8	20	4.4	8+	0	0	4.4	67	130	37	35	15	2	T	0	0.9	32	13.9	2	25	7	11	13	6.5	
NEW YORK LA GUARDIA	3	1013.2	1015.0	16.7	8.9	12.8	-3.9	26.1	19	5.0	6	0	0	3.3	57	89	- 2	28	14	1	0	0	1.3	33	17.4	NW	26	8	9	14	6.6	
ROCHESTER	167	996.3	1016.7	15.0	4.4	9.5	-4.2	25.6	1	- 0.6	23	0	1	2.8	66	70	- 1	19	12	2	8	T	1.3	29	14.8	SW	19	8	7	16	6.5	60
SYRACUSE	125	1000.7	1015.6	15.6	5.0	10.1	-4.2	27.2	1	0.0	23	0	1	2.8	62	85	2	23	13	1	T	T	1.7	30	13.0	W	20	6	11	14	6.2	54
NORTH CAROLINA																																
ASHEVILLE	652	940.4	1016.0	22.8	8.3	15.4	-1.8	30.6	28	1.1	17	0	0	10.0	76	172	80	57	15	8	0	0	1.1	34	17.9	32	30	8	7	16	6.9	58
CAPE HATTERAS R	2	1015.2	1015.5	21.7	12.8	17.1	-2.9	27.8	28	6.1	27	0	0	13.3	77	139	38	54	15	9	0	0	0.9	31	17.9	SW	7	6	10	15	6.7	63
CHARLOTTE	224	988.5	1015.6	23.9	11.7	17.6	-2.9	33.3	28	4.4	10	2	0	11.7	71	119	40	35	15	5	0	0	0.6	29	14.3	SW	11	7	7	17	6.6	67

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	984.4	1015.9	23.9	11.7	17.8	-1.6	33.9	28	5.6	4+	2	0	12.2	73	102	19	19	17	9	0	0	0.5	25	27.3	NW	29	5	10	16	7.0	51
RALEIGH	132	1000.0	1015.6	24.4	11.1	17.7	-2.1	33.3	28	4.4	10	2	0	11.7	72	105	16	21	14	9	0	0	0.5	28	15.6	33	2	6	9	16	6.9	50
WILMINGTON	9	1014.6	1016.0	27.8	15.6	21.8	0.4	36.1	28	9.4	10	5	0	13.9	64	66	-24	27	8	3	0	0	0.9	26	16.1	SW	11	8	8	15	6.4	72
NORTH DAKOTA																																
BISMARCK	502	956.3	1016.4	16.7	2.2	9.6	-3.7	30.6	22	-9.4	3	0	10	0.6	58	42	-8	31	6	3	208	279	0.7	31	23.2	NW	7	3	15	13	6.7	69
FARGO	273	982.7	1015.8	17.2	2.8	9.8	-3.2	30.0	24	-6.1	3+	0	16	0.6	57	25	-26	14	5	4	T	T	0.7	2	18.8	N	2+	5	12	14	6.6	59
WILLISTON	579	946.8	1015.6	17.8	3.3	10.6	-2.0	30.6	24+	-6.7	2	0	11	0.0	53	5	-32	3	4	1	28	76	1.1	30	20.1	NW	7	4	14	13	6.4	70
OHIO																																
AKRON	368	970.9	1015.6	17.2	6.1	11.8	-3.6	31.1	27	0.0	23	0	1	5.0	67	113	15	18	13	5	T	T	0.8	2	20.6	32	27	6	10	15	6.5	
CINCINNATI OBS	232			21.1	10.0	15.6	-2.3	32.2	27+	2.2	3	2	0			159	63	48	17		0	0			11.6	W	8					51
CLEVELAND	237	986.8	1016.1	16.1	6.7	11.3	-3.2	32.2	27	1.1	8	1	0	4.4	65	97	8	28	14	3	0	0	0.9	1	13.4	NE	7	7	10	14	6.5	53
COLUMBUS	247	985.8	1015.7	18.3	7.8	13.0	-3.4	31.1	27	0.6	3	0	0	7.2	70	117	15	30	16	8	0	0	0.2	36	14.3	NW	11	4	11	16	7.1	56
DAYTON	305	979.3	1015.5	18.9	8.3	13.6	-2.8	31.1	27	1.1	3	0	0	6.7	66	171	76	44	15	9	0	0	0.3	34	14.8	W	11+	5	8	18	7.1	47
MANSFIELD	395			17.2	6.1	11.8	-2.6	31.1	27	1.1	3	0	0	5.6	69	114	20	25	15	8	0	0	0.5	36				6	11	14	6.6	
TOLEDO	206	990.9	1016.2	17.8	5.0	11.3	-3.3	31.7	27	-1.1	23	0	5	3.3	61	58	-19	22	13	4	0	0	0.7	4	12.5	SW	1	1	16	14	6.8	62
YOUNGSTOWN	359	972.9	1015.9	16.1	4.4	10.1	-4.3	30.6	27	-1.1	23+	0	3	3.3	67	96	-8	22	12	3	T	T	1.0	1	10.3	10	7	10	6	15	6.5	
OKLAHOMA																																
OKLAHOMA CITY	392	968.2	1014.0	25.6	13.3	19.4	-0.8	35.6	10	5.6	2	2	0	10.6	61	108	-24	46	8	7	0	0	0.9	13	14.3	SW	18	11	8	12	5.6	66
TULSA	198	990.2	1014.5	24.4	12.2	18.4	-1.4	32.2	25	5.0	2	1	0	11.7	68	136	2	51	10	8	0	0	1.0	18	16.5	SW	10	10	10	11	5.7	59
OREGON																																
ASTORIA	2	1020.7	1021.3	15.6	6.1	10.9	-0.9	22.2	16	1.1	25+	0	0	8.3	84	35	-46	13	9	0	0	0	1.6	29	10.3	21	26	0	10	21	8.1	
BURNS U	1265	874.0	1016.9	19.4	3.3	11.5	-0.4	30.0	21	-2.2	12+	0		0.6	51	18	-5	11	5		10	T	2.0	31				14	9	8	4.7	
EUGENE	109	1006.8	1020.2	20.6	5.6	13.2	-0.2	29.4	20	2.2	3+	0	0	7.2	70	40	-14	20	7	0	0	0	0.9	34	9.8	35	25	6	14	11	6.2	
MEACHAM	1234	878.4	1018.1	13.9	2.8	8.2	-0.7	24.4	16	-4.4	1	0	9	0.6	63	43	-19	21	8		201	152	1.4	28				5	8	18	7.3	
MEDFORD	396	971.2	1018.8	23.9	6.1	14.9	0.8	33.3	20	-0.6	1	3	1	5.6	58	24	-13	8	6	1	T	T	1.2	31	9.4	29	29	17	6	8	4.0	
PENDLETON	452	964.4	1018.0	22.2	7.2	14.7	-0.6	32.2	21	1.7	26+	1	0	3.3	51	14	-14	5	6	0	0	0	1.7	26	14.3	3	4	10	7	14	6.3	
PORTLAND	6	1019.0	1020.3	20.0	7.8	13.9	-0.2	30.6	20	3.9	10	0	0	7.2	69	26	-25	13	8	2	0	0	1.6	31	10.7	W	29	2	13	16	7.7	59
SALEM	60	1012.9	1020.4	20.0	5.0	12.4	-1.1	29.4	20	0.0	1	0	1	6.1	68	47	-6	15	7	1	0	0	0.7	33	11.2	25	29	3	15	13	6.7	
SEXTON SUMMIT R	1169	885.9	1018.2	16.7	5.0	10.7	0.7	27.8	16	-2.8	10+	0	7			27	-28	17	6		30	25			11.2	34	22+	19	4	8	3.6	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.6	28.3	-0.5	31.7	28+	23.9	17+	0	0			33	-78	14	9		0	0						3	19	9	6.3	
ENIWETOK	4	1008.8	1009.3	31.1	25.6	28.3	0.3	32.2	20+	23.3	5+	3	0	24.4	82	180	64	41	19		0	0	4.9	7								
TAGUAC GUAM R	110			30.0	22.8	26.3	-0.6	31.7	30+	19.4	18	0	0			96	-11	40	13		0	0			8.0	E	12+					
JOHNSTON	2	1012.9	1013.4	28.9	24.4	26.7	0.5	30.0	27+	22.8	13	0	0	22.8	79	53	28	18	16	0	0	0	6.1	10	14.3	NE	25+	3	9	19	7.5	51
KOROR R	29	1005.4	1009.0	31.1	25.0	28.1	0.7	32.2	28+	22.2	31	12	0	24.4	85	252	-120	53	25	5	0	0	0.8	8	10.3	SW	31+	0	5	26	8.7	70
KWAJALEIN	2	1008.5	1009.2	30.6	25.0	27.6	0.3	31.1	29+	22.2	19	0	0	24.4	83	263	55	67	24	1	0	0	4.2	8	19.7	11	19	0	11	20	8.2	
MAJURO	3	1009.1	1009.5	30.0	25.6	27.8	0.9	31.1	28+	23.9	24+	0	0	23.9	80	125	-199	29	20	0	0	0	3.3	9	11.6	E	18	2	9	20	7.6	55
MARCUS ISLAND	6	1010.8	1012.8	28.3	23.3	25.8	-0.3	31.1	29	21.1	13+	0	0	21.7	79	25	-23	16	9	0	0	0	2.6	16	11.6	S	23+	4	10	17	7.4	66
PAGO PAGO	4	1010.8	1011.0	29.4	23.3	26.2		30.6	18+	21.1	29+	0	0	23.3	85	253		56	23	1	0	0	2.1	12	12.5	E	19	1	14	16	7.6	54
PONAPE R	37	1003.4	1008.8	31.1	23.3	27.3	0.4	32.2	23+	22.2	30+	7	0	23.9	87	342	-174	76	27	3	0	0	1.7	11	8.5	SE	19	1	4	26	8.5	59
TRUK MOEN ISLAND	2	1008.8	1009.0	30.6	24.4	27.5	0.4	31.7	24+	22.2	31	0	0	24.4	84	385	27	105	22	0	0	0	1.9	6	12.1	N	30	1	5	25	8.9	81
WAKE	3	1012.5	1012.8	28.9	24.4	26.7	0.2	30.0	30+	22.8	8+	0	0	21.7	74	57	5	50	7	0	0	0	5.3	8	15.6	NE	8	5	16	10	5.8	
YAP R	19	1006.8	1008.6	31.1	23.9	27.5	-0.3	33.3	24	21.1	9	2	0	24.4	84	406	165	256	19	0	0	0	1.7	8	12.1	S	9	0	6	25	9.0	74
PENNSYLVANIA																																
ALLENTOWN	118	1001.4	1015.4	17.8	5.6	11.6	-4.2	26.7	28+	0.6	13+	0	0	3.9	62	113	9	31	13	2	0	0	1.2	31	13.9	27	19	4	11	16	7.2	
ERIE	223	989.2	1016.1	14.4	5.0	9.8	-3.8	26.1	27	-0.6	23	0	2	3.3	66	80	-10	28	13	2	T	0	0.5	35	11.2	22	19+	8	8	15	6.2	
HARRISBURG	103	1002.4	1015.3	18.9	7.2	12.9	-4.2	27.2	27	1.7	17	0	0	5.0	62	110	11	26	12	4	0	0	0.7	31	14.3	W	19	4	8	19	7.2	58
PHILADELPHIA	2	1014.2	1015.1	18.9	7.8	13.3	-3.7	26.7	19+	2.8	13	0	0	6.1	65	89	-6	36	13	4	0	0	0.9	32	16.5	W	19	6	7	18	7.2	48
PITTSBURGH	347	971.2	1015.5	18.3	6.7	12.4	-3.1	30.6	27	0.0	8	0	1	5.0	64	132	33	31	14	6	0	0	1.1	33	13.4	31	8	5	8	18	7.0	44
READING U	81			18.9	8.3	13.7	-3.7	27.2	28+	3.9	13	0	0			114	18	26	12		0	0			25.0	E	7	5	12	14	6.5	56
SCRANTON	283	981.0	1015.5	16.7	6.1	11.5	-3.8	26.1	19	1.7	13	0	0	3.9	63	112	12	20	12	2	10	T	1.2	31	17.4	SW	19	2	13	16	7.3	54
WILLIAMSPORT	160	996.3	1015.3	18.3	5.0	11.6	-4.2	27.2	27	-0.6	13	0	2	5.0	68	140	36	26	12	4	T	T	1.1	31	14.3	27	19	5	11	15	6.9	
RHODE ISLAND																																
BLOCK ISLAND	34			12.2	6.1	9.2	-3.0	17.2	30	2.2	7	0	0			152	75	45	16		0	0						8	9	14	6.5	
PROVIDENCE	16	1011.9	1014.2	16.1	5.6	10.7	-3.5	24.4	20	0.0	7+	0	2	2.2	61	185	100	96	13	1	0	0	1.2	29	18.3	2	25	6	7	18	7.0	52

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1014.2	1015.8	28.3	15.6	21.8	-0.9	36.1	28	6.1	10	11	0	14.4	68	226	135	158	8	5	0	0	1.2	22	26.8Y	N	31	9	9	13	5.8	63
CHARLESTON U	3			26.1	18.3	22.3	-0.6	32.8	28	11.7	24	1	0			192	114	123	6		0	0			16.1	SW	13					
COLUMBIA	65	1008.1	1016.1	26.1	12.8	19.4	-2.9	33.9	29+	3.9	10	4	0	13.3	73	225	135	141	11	7	0	0	0.5	24	15.6	19	29	9	7	15	6.3	63
GNVLE SPARTANBURG	292	981.7	1016.0	25.6	12.2	18.9	-1.8	36.1	28	5.6	17	5	0	12.8	71	126	44	42	12	10	0	0	0.8	28	16.1	SW	15	6	9	16	6.7	55
SOUTH DAKOTA																																
ABERDEEN	395	968.5	1015.5	18.9	4.4	11.5	-2.6	31.7	22	- 5.0	4+	0	10	1.7	55	15	- 45	28	9	4	13	T	1.1	2	17.9	32	7	2	17	12	7.1	
HURON	391	968.5	1015.3	19.4	3.9	11.7	-2.5	33.9	25	- 8.3	3	3	8	2.8	59	14	- 46	6	9	4	18	T	0.7	34	17.9	NW	7	2	13	16	7.2	61
RAPID CITY	964	905.2	1016.6	16.1	3.9	9.9	-3.3	30.0	22	- 4.4	2+	0	8	2.8	66	81	14	52	13	4	79	330	1.8	34	25.0	NW	1	2	11	18	7.4	51
SIOUX FALLS	432	963.8	1015.2	18.9	4.4	11.7	-2.9	37.8	25	- 8.3	4	1	7	1.7	55	18	- 68	8	9	3	T	T	0.8	3	14.3	34	18+	3	13	15	7.2	
TENNESSEE																																
BRISTOL	459	962.4	1016.4	20.6	8.9	14.8	-3.9	29.4	27	2.2	10	0	0	10.6	81	160	72	33	17	11	0	0	0.7	28	14.3	29	8	6	4	21	7.4	
CHATTANOOGA	203	991.5	1016.0	24.4	12.2	18.3	-2.9	32.2	26	4.4	10	1	0	13.3	76	153	64	34	14	11	0	0	0.5	26	13.9	SW	31	8	7	16	6.5	48
KNOXVILLE	299	980.7	1015.4	23.3	12.2	17.5	-2.3	32.2	27	5.0	10	1	0	13.3	79	104	15	27	17	11	0	0	1.1	25	13.9	W	7	6	7	18	7.0	51
MEMPHIS	79	1005.8	1015.8	26.1	15.0	20.4	-0.8	32.2	28+	7.8	3	2	0	13.3	64	162	55	58	9	8	0	0	1.2	22	12.1	W	31	8	13	10	5.8	60
NASHVILLE	180	993.6	1015.5	24.4	13.3	19.1	-1.3	31.7	27+	6.1	16+	0	0	11.7	66	177	83	68	14	12	0	0	1.0	25	15.2	SW	6	9	7	15	6.1	57
OAK RIDGE R	276			23.3	10.6	17.1	-2.1	32.8	27	2.8	10	2	0			121	26	34	16		0	0			19.2Y		30	5	10	16	7.0	
TEXAS																																
ABILENE	537	952.3	1012.5	30.0	15.0	22.5	0.4	41.7	10	2.8	2	11	0	9.4	47	112	2	38	7	7	0	0	2.3	17	15.2	NE	20+	13	8	10	4.5	77
AMARILLO	1098	889.9	1011.7	25.6	9.4	17.4	-1.7	34.4	24	0.6	1	7	0	4.4	51	36	- 50	14	5	5	0	0	1.9	16	18.8	W	10	10	10	11	5.1	74
AUSTIN	182	992.2	1013.8	30.0	17.8	24.1	0.1	37.2	11+	11.1	16	10	0	15.6	66	85	- 9	38	8	7	0	0	1.7	14	11.6	N	20+	7	12	12	5.8	58
BROWNSVILLE	6	1012.2	1012.6	31.7	22.2	27.2	1.1	37.2	31	15.6	24	15	0	20.6	71	16	- 44	13	4	4	0	0	5.0	14	14.3	NE	2	7	17	7	5.3	73
CORPUS CHRISTI	12	1011.5	1013.2	31.1	21.1	25.8	0.6	36.7	8	13.3	23	10	0	20.0	74	46	- 29	26	5	5	0	0	4.9	14	21.0	N	14	5	13	13	6.5	43
DALLAS	147	997.0	1014.0	28.9	16.7	22.8	0.1	36.7	11	8.9	2	8	0	13.9	60	92	- 30	44	10	7	0	0	2.4	15	17.9	N	30	9	9	13	5.5	68
DEL RIO	313	976.3	1011.6	33.3	18.9	26.2	0.4	39.4	11+	10.6	2	19	0	11.1	46	17	- 53	17	1	2	0	0	3.1	12	11.2	4	20	8	13	10	5.3	
EL PASO	1194	881.1	1010.5	30.0	13.3	21.6	-0.6	35.0	9	- 0.6	2	11	1	- 4.4	19	1	- 9	1	1	3	0	0	2.2	26	17.0	W	25+	14	10	7	4.1	88
FORT WORTH	164	993.9	1014.1	28.3	15.6	21.9	-0.7	35.6	11	7.8	2	4	0	14.4	65	102	- 14	46	10	7	0	0	1.7	17	11.2	34	31+	9	9	13	5.5	
GALVESTON U	2			26.7	21.7	24.2	-0.1	28.9	31+	17.2	22+	0	0			85	14	48	7		0	0			15.2	SE	3					63
HOUSTON U	12			28.3	20.0	24.3	-0.2	35.6	8	13.9	3	5	0			128	16	49	9		0	0										
HOUSTON	15	1012.5	1014.7	30.0	18.9	24.4	-0.1	34.4	8	11.1	16	7	0	18.3	73	65	- 45	31	6	7	0	0	2.3	14	11.6	16	29+	7	10	14	6.1	65
LUBBOCK	992	902.1	1011.9	27.8	10.0	18.9	-1.2	36.1	10	- 1.1	2	5	2	3.9	45	88	7	59	3	3	0	0	1.7	18	15.6	32	27	11	10	10	4.9	
MIDLAND	869	914.0	1010.6	31.7	13.3	22.4	-0.6	38.3	9	2.2	2	16	0	1.7	35	14	- 39	12	3	4	0	0	2.3	19	19.7	32	20	15	8	8	4.2	
PORT ARTHUR	5			28.3	18.9	23.7	0.0	31.7	8+	11.7	16	0	0	17.8	71	149	23	63	11	8	0	0	2.3	14	21.9	SW	29	8	12	11	5.9	66
SAN ANGELO	580	946.5	1011.8	32.2	15.0	23.6	0.1	41.1	10	1.7	2	18	0	8.9	46	49	- 33	27	6	7	0	0	1.3	18	15.6	32	29	13	10	8	4.7	
SAN ANTONIO	240	985.8	1013.4	31.7	18.3	24.8	0.7	38.3	12+	7.8	16	11	0	15.6	61	56	- 31	26	8	5	0	0	2.3	13	17.9	N	20	8	12	11	5.8	66
VICTORIA	32	1009.5	1013.6	30.0	19.4	24.9	0.3	34.4	8	12.8	16	7	0	18.3	72	60	- 44	45	4	6	0	0	3.3	14	19.2Y	N	20	5	10	16	6.7	
WACO	153	995.9	1013.8	28.3	17.2	22.9	-0.6	35.0	11	9.4	2	6	0	16.1	68	106	- 10	34	7	7	0	0	2.7	15	11.2	17	6+	10	10	11	5.4	
WICHITA FALLS	303	977.3	1013.3	28.3	13.3	20.9	-1.4	40.0	10	5.6	15+	10	0	11.1	58	165	48	48	10	9	0	0	1.6	13	15.6	30	30	9	7	15	5.8	
UTAH																																
MILFORD	1533	846.6		22.2	2.8	12.4	-1.2	34.4	23	- 7.8	2	2	9			14	- 4	4	8		36	T						10	5	16	5.8	
SALT LAKE CITY	1286	871.7	1014.9	21.1	6.1	13.5	-1.4	32.8	23	- 2.8	1	1	5	2.8	54	55	19	19	11	7	25	25	0.9	16	19.2	NW	10	8	8	15	6.4	68
WENDOVER	1291			21.1	9.4	15.2	-1.1	31.7	22	- 1.7	1	0	1			31	15	20	8		T	T										
VERMONT																																
BURLINGTON	101	1002.0	1014.7	14.4	2.8	8.7	-3.4	27.2	1	- 2.2	6	0	8	1.1	63	81	5	20	17	2	66	25	1.1	32	14.3	S	7	4	8	19	7.3	59
VIRGINIA																																
LYNCHBURG	279	982.1		21.7	8.3	14.8	-3.7	32.8	28	2.8	25	1	0	8.3	70	94	12	27	16	8	0	0	0.5	31	13.0	SW	19+	7	8	16	6.7	57
NORFOLK	7	1014.6	1015.6	21.7	11.1	16.2	-3.5	32.2	15	6.7	4	1	0	8.3	63	83	- 3	23	13	3	0	0	0.4	3	16.5	SW	7	7	7	17	7.0	63
RICHMOND	50	1009.8	1015.8	22.8	8.9	15.9	-3.5	31.7	28+	2.8	4	0	0	10.0	71	94	0	50	15	4	0	0	0.4	32	14.3	NW	9	4	9	18	7.2	60
ROANOKE	350	973.6	1015.5	21.1	8.9	15.0	-3.7	31.7	27	1.7	17	0	0	7.8	67	100	4	26	16	6	0	0	1.3	29	15.6	30	7	6	6	19	7.2	
WALLOPS ISLAND	3	1015.9	1016.3	17.8	8.3	13.1		27.2	20	6.1	4	0	0	8.9	82	106		47	14	3	0	0	0.4	36	23.2Y	W	15	4	8	19	7.5	
WASHINGTON																																
OLYMPIA	59	1013.2	1020.5	19.4	5.0	12.0	-0.8	30.6	20	- 0.6	25	0	1	6.7	72	6	- 45	3	4	0	0	0	1.4	23	11.2	25	28+	1	8	22	7.9	
QUILLAYUTE	55	1013.5	1021.1	14.4	6.7	10.5	-0.6	21.1	20+	1.1	10	0	0	7.8	84	64	- 49	26	14	0	0	0	1.0	26	7.6	W	22	0	6	25	8.9	35
SEATTLE TACOMA	122	1004.1	1020.4	17.8	8.3	13.0	-0.1	27.8	20	5.6	11	0	0	7.2	74	10	- 34	4	7	0	0	0	0.5	25	9.8	24	28	1	6	24	8.5	63
SPOKANE	718	932.6	1016.5	17.8	5.0	11.6	-1.9	27.8	21	0.0	25	0	1	3.3	60	33	3	13	6	1	89	T	2.1	21	13.0	SW	6	4	8	19	7.4	57
STAMPEDE PASS R	1206			9.4	2.2	6.0	-0.6	22.2	20	- 2.8	9	0	7			52	- 56	13	12		224	737						1	7	23	8.5	
WALLA WALLA U	289			21.7	9.4	15.5	-0.6	31.1	21	3.9	1	0	0			37	- 1	17	7		0	0			12.1	NE	4	7	11	13	6.3	74

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	°C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	979.0	1017.3	22.8	6.1	14.2	-0.5	31.1	21	0.0	1	0	1	3.3	49	4	- 10	2	6	0	0	0	1.7	29	10.3	25	28+	8	9	14	6.3	
WEST INDIES																																
SAN JUAN P.R.	4	1014.9	1017.3	28.9	23.9	26.5	0.6	31.1	29+	22.2	28	0	0	21.7	76	105	- 75	36	20	0	0	0	4.9	9	11.6	E	24+	2	19	10	6.2	66
SWAN ISLAND	9			30.6	25.6	28.0	-0.1	31.7	29+	23.3	19	0	0			3	- 81	1	5		0	0						17	10	4	4.3	
WEST VIRGINIA																																
BECKLEY	763	927.5	1015.7	18.3	7.8	12.9		27.8	27	1.1	10	0	0	7.2	72	159		45	17	10	T	T	1.7	25	16.5	19	11+	4	5	22	8.0	
CHARLESTON	286	981.0	1015.1	20.6	8.9	14.6	-3.6	31.1	27	2.2	10+	0	0	8.9	70	164	70	55	16	8	0	0	0.8	24	15.6	29	2	4	6	21	7.7	
ELKINS	600	944.8	1016.0	18.3	5.0	11.5	-3.7	27.8	27	- 1.7	4	0	3	6.7	76	195	79	39	18	7	T	T	1.5	29	20.6	30	2	3	4	24	8.2	
HUNTINGTON	252	985.4	1015.5	21.1	9.4	15.1	-3.0	32.2	27	1.7	10	1	0	10.0	74	173	74	57	15	10	0	0	0.5	23	21.0	29	8	3	7	21	7.5	
PARKERSBURG U	187			20.6	9.4	14.9	-2.8	31.1	27	3.9	3	0	0			176	82	45	15		0	0			13.0	W	7					45
WISCONSIN																																
GREEN BAY	208	990.2	1015.8	16.1	3.9	9.9	-2.8	29.4	18	- 3.3	5	0	9	2.2	60	62	- 15	27	9	3	T	T	0.8	34	21.9	SW	18	9	11	11	5.9	62
LA CROSSE	198	990.9	1015.5	18.9	5.6	12.3	-2.8	34.4	26	- 2.8	3	2	4	2.8	56	31	- 65	24	8	3	0	0	0.3	34	13.9	19	1	4	15	12	6.3	
MADISON	262	984.1	1015.7	17.8	2.8	10.1	-3.3	32.2	26	- 3.9	12	1	13	2.2	60	90	5	40	9	7	T	0	0.6	35	14.8	SW	1	4	14	13	6.2	66
MILWAUKEE	205	990.5	1016.1	15.6	4.4	10.1	-1.8	30.0	18	- 2.2	6	0	4	2.2	61	46	- 35	20	10	4	T	T	0.9	1	16.1	W	18	6	11	14	6.4	66
WYOMING																																
CASPER	1627	837.5	1015.2	16.1	2.8	9.5	-2.2	30.0	24	- 6.7	1	0	11	0.6	61	41	- 10	12	14	6	259	102	0.5	29	14.8	24	10	5	7	19	7.3	
CHEYENNE	1867	812.4	1015.3	15.6	3.3	9.5	-2.1	28.3	24+	- 6.1	1	0	8	0.6	61	103	39	24	17	5	279	25	1.9	31	30.8	NW	1	6	9	16	7.0	50
LANDER	1696	829.0	1014.8	16.1	3.9	10.0	-1.6	28.9	23	- 7.2	1	0	10	1.7	63	101	34	24	16	5	622	305	1.0	27	19.2	SW	10	4	8	19	7.3	54
SHERIDAN	1208	879.1	1016.6	16.7	2.8	9.6	-2.4	27.2	23+	- 8.3	4	0	11	0.6	57	34	- 31	28	14	6	191	356	0.7	31	15.6	NW	15+	2	12	17	7.6	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	65	2824	2551
HUNTSVILLE	66	3025	3070
MOBILE	3	1415	1560
MONTGOMERY	16	2056	2291
ALASKA			
ANCHORAGE	547	11123	10366
ANNETTE	480	6499	6748
BARROW	1321	18430	19217
BARTER ISLAND	1283	18274	18938
BETHEL	692	12171	12794
COLD BAY	717	9332	9289
FAIRBANKS	594	14406	14057
JUNEAU	592	9235	8694
KING SALMON	643	11502	10935
KOTZEBUE	1067	14494	15469
MC GRATH	613	13942	14025
NOME	1039	13278	13598
ST. PAUL ISLAND	824	9581	10473
SHEMYA	787	8914	8991
YAKUTAT	691	10246	8657
ARIZONA			
FLAGSTAFF	498	6681	6972
PHOENIX	10	1442	1765
TUCSON	20	1452	1800
WINSLOW	182	4676	4782
YUMA	1	883	1217
ARKANSAS			
FORT SMITH	48	3123	3292
LITTLE ROCK	33	2913	3219
TEXARKANA	27	2328	2533
CALIFORNIA			
BAKERSFIELD	48	2495	2122
BISHOP	160	4713	4191
BLUE CANYON	415	5657	5312
EUREKA U	399	4479	4358
FRESNO	59	2680	2492
LONG BEACH	64	1498	1693
LOS ANGELES	64	1229	1745
LOS ANGELES U	43	929	1331
MT SHASTA R	342	5796	5563
OAKLAND	171	2639	2780
RED BLUFF	92	2732	2515
SACRAMENTO	98	2982	2767
SANDBERG U	362	4594	4152
SAN DIEGO	72	1352	1403
SAN FRANCISCO	208	3085	2889
SAN FRANCISCO U	230	2953	2821
SANTA CATALINA	224	2024	1947
SANTA MARIA	244	3032	2802
STOCKTON	77	2839	2676
COLORADO			
ALAMOSA	498	7941	8361
COLORADO SPRINGS	401	5906	6339
DENVER	388	5529	6217
GRAND JUNCTION	213	5174	5620
PUEBLO	213	5070	5447
CONNECTICUT			
BRIDGEPORT	424	5869	5590
HARTFORD	349	6043	6148
NEW HAVEN	422	5980	5852
DELAWARE			
WILMINGTON	295	5270	4924
DIST.OF COLUMBIA			
WASH NATL AP	178	4224	4224
FLORIDA			
APALACHICOLA U	3	1241	1308
DAYTONA BEACH	0	710	879
FORT MYERS	0	311	442
JACKSONVILLE	0	1212	1239
KEY WEST	0	25	108
LAKELAND U	0	545	661
MIAMI	0	137	214
ORLANDO	0	542	766
PENSACOLA	4	1525	1463
TALLAHASSEE	2	1448	1485
TAMPA	0	617	683
WEST PALM BEACH	0	247	253
GEORGIA			
ATHENS	77	2812	2929
ATLANTA	78	2926	2983
AUGUSTA	49	2486	2397
COLUMBUS	17	2037	2383
MACON	37	2203	2136
ROME	88	3268	3326
SAVANNAH	12	1827	1819
IDAHO			
BOISE	279	5502	5728
IDAHO FALLS 46W R	434	8063	8283
LEWISTON	217	4760	5452
POCATELLO	372	6768	6892
ILLINOIS			
CAIRO U	63	3707	3821
CHICAGO O HARE	362	6535	6567
CHICAGO MIDWAY	330	6111	6107
MOLINE	305	6342	6369
PEORIA	291	6088	5992
ROCKFORD	385	6932	6770
SPRINGFIELD	230	5522	5411
INDIANA			
EVANSVILLE	161	4544	4435
FORT WAYNE	357	6611	6166
INDIANAPOLIS	219	5366	5660
SOUTH BEND	337	6332	6379
IOWA			
BURLINGTON	299	6031	6081
DES MOINES	308	6516	6769
DUBUQUE	360	7243	7298
SIOUX CITY	320	6875	6912
WATERLOO	357	7302	7266
KANSAS			
CONCORDIA	253	5436	5461
DODGE CITY	205	4845	4977
GOODLAND	359	5754	6099
TOPEKA	205	4984	5170
WICHITA	143	4284	4614
KENTUCKY			
COVINGTON	175	5124	5241
LEXINGTON	138	4530	4683
LOUISVILLE	139	4429	4651
LOUISIANA			
ALEXANDRIA	11	2099	1921
BATON ROUGE	9	1515	1560
LAKE CHARLES	2	1307	1459
NEW ORLEANS	3	1436	1385
SHREVEPORT	13	2080	2184
MAINE			
CARIBOU	682	9757	9584
PORTLAND	544	7766	7400
MARYLAND			
BALTIMORE	254	4989	4654
MASSACHUSETTS			
BLUE HILL OBS R	440	6523	6299
BOSTON	403	5868	5598
NANTUCKET	537	6250	5762
PITTSFIELD	534	7724	7473
WORCESTER	493	7158	6891
MICHIGAN			
ALPENA	575	8533	8350
DETROIT	360	6312	6190
DETROIT M WAYNE CO	406	6433	6236
DETROIT WILLOW RUN	415	6935	6213
FLINT	444	7356	6810
GRAND RAPIDS	410	6642	6927
HOUGHTON LAKE	510	8337	
LANSING	395	7104	6840
MARQUETTE U	587	8429	8216
MUSKEGON	395	6769	6618
SAULT STE MARIE	631	9415	8847
MINNESOTA			
DULUTH	592	9974	9802
INTERNATIONAL FALLS	608	11015	10432
MINNEAPOLIS	404	8467	8301
ROCHESTER	439	8335	8202
ST CLOUD	446	9189	8774
MISSISSIPPI			
JACKSON	26	2388	2203
MERIDIAN	21	2223	2289
MISSOURI			
COLUMBIA	209	4728	5034
KANSAS CITY	193	4427	4711
ST JOSEPH	188	4990	5469
ST LOUIS	188	4726	4885
SPRINGFIELD	177	4500	4555
MONTANA			
BILLINGS	461	6773	6947
GLASGOW	429	9073	8846
GREAT FALLS	396	7492	7564
HAVRE	418	8777	8538
HELENA	396	7161	7934
KALISPELL	449	7631	7984
MILES CITY	402	7788	7624
MISSOULA	416	6799	7906
NEBRASKA			
GRAND ISLAND	331	6154	6485
LINCOLN U	264	5788	5834
NORFOLK	352	6856	6931
NORTH PLATTE	427	6578	6627
OMAHA	249	5742	6188
SCOTTSBLUFF	428	6210	6598
VALENTINE	439	6967	7341
NEVADA			
ELKO	413	7102	7241
ELY	485	7201	7508
LAS VEGAS	25	2389	2709
RENO	317	5761	6143
WINNEMUCCA	358	6180	6608
NEW HAMPSHIRE			
CONCORD	496	7575	7308
MT WASHINGTON OBS	1224	13623	13214
NEW JERSEY			
ATLANTIC CITY	341	5221	4797
ATLANTIC CITY U	293	4805	4717
NEWARK	331	5158	5058
TRENTON U	266	5025	4968
NEW MEXICO			
ALBUQUERQUE	109	4123	4348
CLAYTON	249	4746	5137
RATON	309	5708	6165
ROSWELL	52	3143	3793
SILVER CITY	132	3633	3705
NEW YORK			
ALBANY	447	7240	6830
BINGHAMTON	531	7390	7187
BUFFALO	457	6933	6984
NEW YORK U	305	5167	4862
J.F. KENNEDY	408	5580	5207
NEW YORK LA GUARDIA	308	5014	4805
ROCHESTER	486	6653	6700
SYRACUSE	453	6840	6711
NORTH CAROLINA			
ASHEVILLE	185	4445	4457
CAPE HATTERAS R	107	2792	2612
CHARLOTTE	122	3346	3191
GREENSBORO	111	3475	3805
RALEIGH	105	3324	3393
WILMINGTON	15	2136	2347
NORTH DAKOTA			
BISMARCK	491	9376	8734
FARGO	480	9745	9127
WILLISTON	435	9298	9102
OHIO			
AKRON	368	6088	5998
CINCINNATI OBS	195	4942	4797
CLEVELAND	393	6152	6285
COLUMBUS	300	5674	5633
DAYTON	277	5658	5592
MANSFIELD	364	6393	6343
TOLEDO	390	6566	6434
YOUNGSTOWN	453	6760	6357
OKLAHOMA			
OKLAHOMA CITY	77	3162	3725
TULSA	101	3513	3860
OREGON			
ASTORIA	404	4963	4955
BURNS U	381	6703	6780
EUGENE	285	4751	4591
MEACHAM	557	7695	7535
MEDFORD	206	4630	4930
PENDLETON	218	4496	5064
PORTLAND	246	4284	4530
SALEM	323	4542	4610
SEXTON SUMMIT R	434	6309	5975
PENNSYLVANIA			
ALLENTOWN	375	6261	5786
ERIE	471	6296	6391
HARRISBURG	306	5500	5239
PHILADELPHIA	280	5278	5089
PITTSBURGH	332	5881	5948
PITTSBURGH U	296	5366	5277
READING U	264	5157	4945
SCRANTON	379	6256	6221
WILLIAMSPORT	371	6460	5910
RHODE ISLAND			
BLOCK ISLAND	507	5948	5705
PROVIDENCE	424	6179	5903
SOUTH CAROLINA			
CHARLESTON	29	2004	2033
CHARLESTON U	12	1739	1794
COLUMBIA	71	2641	2484
GNVLE-SPARTANBURG	85	3032	3044
SOUTH DAKOTA			
ABERDEEN	395	8481	8383
HURON	393	7890	8136
RAPID CITY	473	7027	7219
SIOUX FALLS	399	7826	7761
TENNESSEE			
BRISTOL	216	4280	4143
CHATTANOOGA	93	3492	3254
KNOXVILLE	121	3500	3494
MEMPHIS	35	3130	3232
NASHVILLE	69	3389	3578
OAK RIDGE R	135	3836	3817
TEXAS			
ABILENE	23	2181	2624
AMARILLO	135	3666	3985
AUSTIN	2	1498	1711
BROWNSVILLE	0	658	600
CORPUS CHRISTI	0	908	914
DALLAS	19	1994	2363
DEL RIO	0	1323	1504
EL PASO	25	2571	2700
FORT WORTH	21	2087	2405
GALVESTON U	0	1081	1235
HOUSTON U	0	1114	1278
HOUSTON	0	1193	1396
LUBBOCK	84	3149	3578
MIDLAND	22	2462	2591
PORT ARTHUR	2	1399	1447
SAN ANGELO	19	2094	2255
SAN ANTONIO	0	1560	1546
VICTORIA	0	1094	1173
WACO	14	1828	2030
WICHITA FALLS	41	2460	2832
UTAH			
MILFORD	336	6377	6410
SALT LAKE CITY	287	5620	5968
WENDOVER	223	5718	5727
VERMONT			
BURLINGTON	533	8123	8179
VIRGINIA			
LYNCHBURG	212	4319	4166
NORFOLK	157	3596	3421
RICHMOND	171	4179	3865
ROANOKE	206	4223	4150
WALLOPS ISLAND	295	4718	
WASHINGTON			
OLYMPIA	350	5284	5059
QUILLAYUTE	431	5518	5469
SEATTLE TACOMA	292	4761	4986
SPOKANE	370	6157	6520
STAMPEDE PASS R	683	8594	8800
WALLA WALLA U	182	4060	4760
YAKIMA	228	4982	5872
WEST VIRGINIA			
BECKLEY	306	5469	
CHARLESTON	217	4533	4467
ELKINS	378	5990	5627
HUNTINGTON	194	4556	4434
PARKERSBURG U	202	4849	4748
WISCONSIN			
GREEN BAY	467	8172	7930
LA CROSSE	355	7530	7520
MADISON	462	7730	7761
MILWAUKEE	458	7398	7500
WYOMING			
CASPER	488	7112	7281
CHEYENNE	490	6466	7176
LANDER	466	7300	7717
SHERIDAN	482	7464	7533

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

MAY 1967

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS
Alabama	2	2	1	25	6	0	0	4	5	0	3	6	0													0	0	4	0
Alaska *																													
Arizona *																													
Arkansas	4	3	0	1	5	0	2	6	6	0	1	4	0																
California	1	1	0	0	3									0	0	3	0												
Colorado	7	4	0	0	3	0	0	3	3																				
Connecticut										0	0	4	0													0	0	5	0
Delaware										0	0	5	0																
Florida	4	4	0	2	4	0	0	3	4	0	0	4	0																
Georgia	8	6	0	0	5	0	0	?	5	0	1	5	0	0	2	4	0												
Hawaii																										0	0	°4	C
Idaho *																													
Illinois	3	3	0	0	4	0	0	0	4	0	2	4	0	0	0	?	0												
Indiana	2	1	0	0	4	0	0	4	3	0	0	4	3																
Iowa	3	2	0	0	5					0	3	6	4	0	0	5	0									0	13	5	0
Kansas	1	1	0	0	4	0	0	6	6	0	0	4	5	0	0	5	3									0	0	R4	4
Kentucky	5	5	0	2	6	0	0	?	?	0	?	6	?	0	0	5	0									0	RF1	°7	C
Louisiana	7	3	0	8	5					0	0	5		0	0	5	0												
Maine										0	1	5	0					0	0	3	0								
Maryland	1	1	1	0	4	0	0	0	3	2	0	5	0	0	0	4	0												
Massachusetts										0	1	7	4					0	0	6	0					0	0	R5	0
Michigan										0	0	3	0	0	0	3	0												
Minnesota										0	0	4	0													0	0	0	4
Mississippi	2	2	0	0	4	0	0	0	5	0	3	5	0	0	0	?	0									0	0	5	5
Missouri	6	6	0	1	4	0	0	4	4																				
Montana *																													
Nebraska	1	1	0	0	0	0	0	5	5	0	0	5	0													0	0	4	0
Nevada	1	1	0	0	0																								
New Hampshire										0	1	6	0					0	0	4	0					0	0	R4	0
New Jersey *																													
New Mexico						0	0	?	?																				
New York											2	4				3													F4
North Carolina	3	2	0	0	5	0	0	4	6	0	1	6	5	0	0	5	0												
North Dakota						0	0	0	3													0	0	6	0				
Ohio										0	4	4		1	2	5													
Oklahoma	4	3	0	0	5	0	0	6	6	0	3	6	0	1	0	0	0												
Oregon *																													
Pacific Area *																													
Pennsylvania										0	0	5	0	0	0	5	0												
Puerto Rico *																													
Rhode Island										0	6	5	0	0	0	3	0									0	0	6	4
South Carolina	4	4	0	3	4					1	4	5	4	0	0	4	0												
South Dakota	1	1	0	0	3													1	?	7	0					0	D ?	?	?
Tennessee	6	5	1	4	6	0	0	6	6	0	1	6	5	1	4	5	0									R1	0	6	7
Texas	34	9	0	2	5	0	4	7	5					0	0	5	0									0	0	4	0
Utah N																													
Vermont *																													
U. S. Virgin Is. *																													
Virginia	1	1	0	1	4	0	0	3	0	0	12	6	0	0	0	4	0												
Washington *																													
West Virginia	2	2	0	3	4	0	0	2	0	0	0	3	0	0	0	5	0												
Wisconsin	4	1	0	0	4					0	0	5	0																
Wyoming																		0	0	°6	C								

° Includes crop damage
C Crop damage
RF Rain, flooding
R Rain
F Flooding
D Dust Storm
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

MAY 1967

Elmer R. Nelson, Office of Hydrology

The most significant flooding during May was in the Ohio Basin. Damages along the lower Ohio River were estimated at about $5 million.

Flash flood occurred in Hawaii on the island of Oahu on the afternoon of May 30, resulting in the loss of one life. The Halawa stream is especially susceptible to flash flooding and the Salt Lake Bridge has been damaged on several occasions. An isolated afternoon thundershower was the apparent cause of the flood. This was the 7th drowning victim in May on Oahu and the 17th this year. There were 29 drownings on Oahu during 1966.

HUDSON BAY DRAINAGE

Red River of the North Basin.--Minor flooding occurred along the Red Lake River at Crookston, Minn., from the 2d to the 5th. The crest on the 2d was 2 feet above flood stage and 6.5 feet lower than the crest of April.

The Red River of the North at Drayton, N. Dak., continued in flood from April 24 to May 11. The crest on April 29 was 3.4 feet above flood stage and 1.3 feet lower than the crest in April.

A complete report of the Spring Flood of 1967 is given in the April issue.

ST. LAWRENCE DRAINAGE

Lake Erie.--Minor flooding occurred along the St. Marys River at Decatur, Ind., from the 12th to the 14th. The crest on the 12th was 2.1 feet above flood stage. The high water delayed farm operations.

Minor flooding occurred on the Sandusky River at Tiffin, Ohio, on the 8th. No damage was reported.

ATLANTIC SLOPE DRAINAGE

Flash flooding occurred on small rivers and streams in Rhode Island, eastern Massachusetts, and parts of Connecticut late on the 25th and 26th. This flooding was due to heavy rain, ranging from more than 2 inches in southern New England to over 6-1/2 inches at Nantucket, Mass. Considerable damage occurred in Rhode Island in the Olneyville section of Providence from the Woonasgautucket River. Some damages were reported in the Blackstone River Basin. Large rivers in Connecticut, Massachusetts, and Rhode Island remained below bankfull stage except the Charles River at Charles River Village, Mass., which rose slightly over bankfull stage. Some lowland flooding occurred, but no damage was reported.

EAST GULF OF MEXICO DRAINAGE

Heavy rainfall over the upper Tombigbee Basin in Mississippi early in May caused minor flooding along Old Town Creek, East Fork, and the upper Tombigbee. The highest overflow occurred along Old Town Creek at Tupelo, Miss., where the crest on the 7th was 2.8 feet above flood stage. Only minor damage was reported.

Heavy rains (5 to 6 inches) over the Pearl River Watershed during the first four days of May caused minor flooding at and below Monticello, Miss. The highest overflow occurred at Bogalusa, La., where the crest on the 10th was 3.7 feet above flood stage. The inundation was not high enough to cause any damage. Over 3 inches of rain on the 22d caused minor flooding on the Pearl at Jackson, Miss., on the 24-28th.

Heavy rains during the first week of the month caused minor flooding along the Pearl River from Monticello, Miss., to Pearl River, La., between the 3d and 15th. More than 5 inches of rain fell in the Jackson, Miss., area and almost 6 inches in the Monticello area during the first week of May. The river heights reached were not sufficient to cause any damage. Over 3 inches of rain in the Jackson area on the 22d caused the Pearl River to rise 2 feet above flood stage at Jackson between the 24th and 28th.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--The Illinois River at Havana and Meredosia, Ill., was in light flood the beginning of the month. The Big River at Byrnsville, Mo., crested nearly 3 feet above flood stage on May 1. The flooding on the Illinois at Havana and on the Big River was due to heavy rains during the latter part of April. Additional heavy rains on the 5th and 6th produced additional flooding on the Illinois at Beardstown, Ill., beginning on the 6th. The Sangamon reached flood stage at Riverton, Ill., on the 8th and the Kaskaskia at Carlyle Dam, Ill., on the 10th. The Salt River at New London, Mo., was out of its banks on the 7th and 8th, cresting nearly 2 feet above flood stage on the 8th. Excessive rainfall ranging from 1 to 4 inches on the 13th produced sharp rises and some flooding on streams in southern Missouri and southern Illinois. The streams crested up to 5.5 feet above flood stage between the 10th and 17th and were all back within their banks by the 29th. Flood damage was light and limited to farm crops in bottom-land areas.

Missouri Basin.--The Big Hole River in Montana rose to above flood stage twice during the last week in May. The first rise from the 24th to the 27th, was due almost entirely to snowmelt at low to middle elevations (6500 to 8000 feet). The second rise (May 29 into June) was aided by rainfall averaging about 0.35 inch per day during the last 3 days of the month. Considerable pastureland was inundated; irrigation works were damaged to some extent, and county roads were flooded in a few low sections.

Very shallow flooding occurred on the Yellowstone River 5 miles downstream from Livingston, Mont., on the 25th. Cooler temperatures reduced the snowmelt, causing the river to begin falling slowly.

A minor rise was in progress most of the month along the James River from Jamestown, N. Dak., downstream to below Huron, S. Dak. The rise was due mostly to discharge from the Jamestown reservoir and slightly to rains from above Ashton, S. Dak. The river remained around three-fourths bankfull most of the month.

Moderate to heavy rain on the 5-7th caused a slight overflow along the Little Blue River at Lake City, Mo., on the 7th. Minor rises occurred along the Missouri River and tributaries on the 7th and 8th. Heavy rain on the 29th-31st caused considerable flooding on the Blackwater River at Valley City, Mo., on May 30 - June 1. The crest on May 30 was 6.3 feet above flood stage. Light flooding occurred on the Lamine River at Clifton City, Mo.

Ohio Basin.--Moderate to heavy rain on the 6th and the 7th caused light flooding on the West Fork at Weston and Clarksburg, W. Va., on the 7th and 8th. Near bankfull stages resulted on the Cheat and Tygart Rivers in West Virginia. On the Monongahela, flood stage was exceeded by 4.1 feet at Maxwell Lock & Dam, Pa., on the 8th. Downstream crests ranged up to 1.7 feet above flood stage at McKeesport, Pa.

Flooding occurred along the entire length of the Little Kanawha River in West Virginia on the 7-9th. The crests on the 8th ranged up to about 5 feet above flood stage. This flooding was due to rainfall that averaged 1.9 inches during the 24-hour period ending at 7 a.m.,

the 7th. Runoff was heavy as the ground was saturated from the moderate to heavy rains during the first 3 days of the month. Preliminary damages, as estimated by the Corps of Engineers, were $150,000. Minor to moderate flooding occurred along small creeks in eastern Kentucky and southern West Virginia during the evening of the 14th. The most severe flooding occurred in Paintsville, Ky., on Paint Creek where the rainfall averaged nearly 1.5 inches during the 24-hour period ending at 7 a.m. on the 14th. Damage on Paint Creek was estimated at $23,000 by Johnson County Civil Defense.

Minor flooding occurred at several points along the Scioto River in Ohio between the 8th and 18th. This flooding was due to persistent rainfall interspersed with thunderstorms and locally high intensity rainfall during the first half of the month. The tributaries ran bankfull and overflowed frequently during the wet period. Low-lying fields were under water much of the time, delaying spring farm operations.

Minor flooding occurred on the Red River at Clay City, Ky., on the 15th. Flash flooding occurred along the Licking River in the vicinity of Salyersville, Ky., on the 14th. Several hundred acres were reported flooded along the Licking River around and upstream from Salyersville. Many houses were flooded. The chief damage resulted from 3 inches of rain in 2 hours over two minor tributaries which empty into the Licking at Salyersville.

Heavy rain (2 to 4.5 inches) on the 14-15th caused 2 feet of overflow on the Rolling Fork of the Salt River at Boston, Ky., between the 16th and 18th. Some damage resulted to roads and bridges in the Boston-Bardstown, Ky., area.

Two- to 4-inch rains on the 15th caused general overflow along the Green River in Kentucky. The overflow was not as extensive as that experienced in March. Corn planting will be delayed until mid-June or later.

Heavy rain on the 1st, 2d, 7th, 9th, 14th, and 15th caused minor flooding on streams in the Wabash River Basin in Indiana. The biggest rise occurred on the Muscatatuck River near Austin, Ind., where a crest of nearly 8 feet above flood stage occurred on the 3d. Two or three crests occurred at numerous points on both the Wabash and White Rivers during the month. These crests ranged mostly from 2 to 4 feet above flood stage. Numerous state and county roads were closed, particularly in the Austin - Seymour area. Flooding delayed planting operations as most corn had not yet been seeded.

Minor flooding occurred on the Harpeth River at Kingston Springs, Tenn., on the 15th from rainfall averaging near 4 inches. Little or no damage resulted from this overflow.

Heavy rainfall on the 12th and 13th caused flooding on the Elk and Duck Rivers in Tennessee. The Elk River at Fayetteville crested 3.9 feet above flood stage on the 14th. Some farmlands were inundated but due to the time of the year little or no damage resulted. The Duck River crested at bankfull stage at Shelbyville, Tenn., on the 13th and nearly 8 feet above flood stage at Columbia, Tenn., on the 14th. Considerable damage and evacuation of a number of people occurred along Bigsbee Creek just below Columbia in a residential development.

General rains on the 6-8th and 14-16th over the Ohio Basin resulted in flooding along the lower Ohio River on the 11-29th. These rains were generally heavier in the lower basin below Louisville, Ky. The crests were generally less than 5.5 feet above flood stage, except at Fords Ferry, Ky., where the crest was 11.1 feet above flood stage on the 23d. The flooding was not as extensive as in March when there was general flooding along the entire Ohio River except in the reach below Pittsburgh, Pa., to Wheeling, W. Va. Damages along the main stem were estimated by the Corps of Engineers at about $5 million as compared to $25 million during March.

White Basin.--There were two periods of flooding on the Cache River at Patterson, Ark., during May. The first overflow occurred on the 3d-12th and the second began on the 16th and continued into June. The upper Cache was severely flooded. The lower Black River was in flood from the 13th to the 25th. At Black Rock, Ark., the crest on the 15th was 6.6 feet above flood stage. Damage from flooding along the main Black, according to preliminary reports, was not heavy. The heaviest damage occurred along the Spring River in Fulton County, Ark., (a tributary of the Black) where damages were estimated at $800,000.

Arkansas Basin.--Heavy rain (2.07 inches) over the Poteau River Basin on the 6th resulted in lowland flooding at Panama, Okla., on the 6-8th. The crest at Panama on the 7th was 3.1 feet above flood stage and at Poteau, Okla., 1.5 feet below flood stage. No damage was reported.

Red Basin.--The Sulphur River at Naples, Tex., was above flood stage in the beginning of the month but falling slowly. It continued above flood stage at Naples, Tex., until the 13th. Upstream at Hagansport, Tex., the stream rose above flood stage on the 1st and continued out of its banks until the 6th. Heavy rain (3 to 5 inches) after the middle of the month caused additional flooding along the Sulphur at Hagansport on the 20th-23d and at Naples on the 26-29th. Additional heavy rain during the last few days of the month caused a third overflow at Hagansport from the 30th into June.

Heavy rains (3 to 5 inches) over the upper portions of the Ouachita Basin in Arkansas on April 30 and May 1 resulted in light flooding on the Caddo, Saline, and the Ouachita Rivers. Additional heavy rains (3 inches) on the 6th caused another overflow along the Caddo and Ouachita Rivers. Light flooding occurred on the Little Missouri at Boughton, Ark., on the 7-8th. Damages from the flooding was light.

Lower Mississippi Basin.--Heavy rain on the 13th and 14th resulted in light flooding on the St. Francis River at St. Francis, Ark., on the 15th. An unusually heavy inflow from Dudley Ditch, Drainage Ditch #12, and from the Mingo Swamp area caused the St. Francis to rise slowly again to above flood stage on the 20th. It continued out of its banks until the 23d. Only minor damage resulted from the overflows.

Light flooding occurred on the Coldwater River at Sarah, Miss., on the 7th. No damage was reported.

Heavy rains on the 14th and 15th over the lower Ohio, Tennessee, Wabash, and Cumberland Basins resulted in light flooding on the Mississippi River at Caruthersville, Mo., on the 17-27th. It crested on the 21st to 23d one foot above flood stage. Damage from overflow was minor.

WEST GULF OF MEXICO DRAINAGE

Light flooding occurred on the Calcasieu River at Hineston, La., on the 5-10th. The crest on the 7th was 2.4 feet above flood stage. The Calcasieu reached bankfull stage downstream to Old Town Bay, La.

Locally heavy showers on the 20th caused brief flash flooding on Whiterock Creek north of Dallas, Tex.

GREAT BASIN

Snowmelt runoff and 3 days of record high temperatures in the Reno, Nev., area caused heavy flow between the 20th and 30th. Some overflow occurred in the low areas along the Truckee river east of Vista, Nev., near the areas of overflow along the Carson River near Minden, Nev.

A rapid warming trend during the third week of May, culminating in 2 days with record high temperatures, caused a rapid rise in all mountain streams in Utah, filling many intermediate and low-level streams to near capacity. The streams reached their highest levels during the night of the 25-26th. Some minor tributaries overflowed their banks, especially in the Timpanogos Cave area near American Fork, Utah, where the Alpine Loop Road was cut in a number of places. The North Fork of the Provo River was the highest for many years and caused damage to the canyon road with some overflow near the highway where it meets the Provo River. Slight damages were reported in this area to a park and summer cabins. In the American Fork area, surging waters out of Pine Hollow damaged a section of highway U-80. Slight damage resulted to fields near Morgan, Utah, when Cottonwood Creek, tributary to Weber River, overflowed its banks. South Fork of Ogden River overflowed a park in Huntsville, Utah.

PACIFIC SLOPE DRAINAGE

The Merced River above Exchecker Dam flooded some meadows in Yosemite National Park in California on the 22d-25th due to snowmelt. Some flooding was reported in the Tulare Lake Basin.

The overflow along the Sacramento River at Tisdale Weir, Calif., which began on April 18 continued until May 3. No further overflow occurred at any of the other weirs during May.

Henry's Fork at Rexburg, Idaho, reached bankfull stage on the 26th and 31st. No damage was reported.

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red River of the North Basin					
Red Lake: Crookston, Minn.	15	2	5	17.0	2
Red River of the North: Drayton, N. Dak.	32	Apr. 24	11	35.4	Apr. 29
ST. LAWRENCE DRAINAGE					
Lake Erie					
St. Marys Decatur, Ind.	15	12	14	17.1	12
Sandusky: Tiffin, Ohio	8	8	8	8.1	8
EAST GULF OF MEXICO DRAINAGE					
Old Town Creek: Tupelo, Miss.	21	7	7	23.8	7
East Fork Tombigbee: Fulton, Miss.	16	8	10	18.1	8
Tombigbee: Amory, Miss.	20	9	11	21.4	10,11
Pearl: Jackson, Miss.	18	24	28	20.1	25
Monticello, Miss.	19	5	8	20.85	6
Bogalusa, La.	15	3	13	18.7	10
Pearl River, La.	12	7	15	14.4	9
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Salt: New London, Mo.	19	7	8	20.9	8
Sangamon: Riverton, Ill.	13	8	17	16.2	10
Illinois: Havana, Ill.	14	Apr. 30	22	15.4	12
Beardstown, Ill.	14	6	22	16.1	14
Meredosia, Ill.	10	Mar. 22	29	14.7 14.7	Apr. 9-11, 13
Bourbeuse: Union, Mo.	15	17	17	16.7	17
Big: Byrnsville, Mo.	E16	1 15	1 16	18.8 18.7	1 15
Meramec: Sullivan, Mo.	15	15	15	15.2	15
Pacific, Mo.	11	16	18	16.5	17
Kaskaskia: Carlyle Dam, Ill.	423.5	10	21	425.5	10
Missouri Basin					
Big Hole: Melrose, Mont.	6	25 30	26 Jun. 15	6.0 6.4	26 31
Divide, Mont.	6	24 29	27 1/	6.8 7.0	25 30
Little Blue: Lake City, Mo.	18	7	7	18.2	7
Lamine: Clifton City, Mo.	19	31	31	19.2	31
Blackwater: Valley City, Mo.	20	30	Jun. 1	26.3	30
Ohio Basin					
West Fork: Weston, W. Va.	17	7	7	17.0	7
Clarksburg, W. Va.	7	7	8	8.2	8
Monongahela: Maxwell Lock & Dam, Pa.	31	7	9	35.1	8
Lock 5, Brownsville, Pa.	23	7	8	23.9	8
Lock 4, Charleroi, Pa.	24	8	8	24.9	8
Lock 3, Elizabeth, Pa.	23	8	8	23.2	8
McKeesport, Pa.	12	8	8	13.7	8
Lock 2, Braddock, Pa.	26	8	8	27.6	8
Little Kanawha: Glenville, W. Va.	23	7	8	27.0	8
Creston, W. Va.	20	7	9	24.7	8
Scioto: La Rue, Ohio	11	8	9	G	
Prospect, Ohio	10	9	10	#10.6	10
Circleville, Ohio	14	12	12	14.0	12
Piketon, Ohio	16	8 16	8 18	16.45 17.15	8 17
Red: Clay City, Ky.	19	15	15	19.7	15
Rolling Fork(Salt): Boston, Ky.	40	16	18	41.8	20
Rough: Dundee, Ky.	25	16	16	M	16
Green: Munfordville, Ky.	28	16	17	29.4	16
Lock 6, Brownsville, Ky.	18	16	17	18.7	17
Lock 4, Woodbury, Ky.	33	15	19	#36.9	17

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Green (Cont'd.): Lock 2, Calhoun, Ky.	23	16	24	#26.6	21
Eagle Creek: Zionsville, Ind.	71	7	7	#7.5	7
Muscatatuck: Austin, Ind.	16T	2 7 16	4 10 17	#23.8 #21.8 #18.4	3 8 16
East Fork White: Seymour, Ind.	14	8 16	9 16	14.4 14.9	8 16
White: Anderson, Ind.	10	8	8	10.3	8
Spencer, Ind.	14	9	10	14.6	9
Elliston, Ind.	18	9 16	11 16	20.1 18.4	10 16
Edwardsport, Ind.	15	10 15	13 19	17.1 16.8	11 17
Petersburg, Ind.	16	4 8	4 22	16.1 19.3	4 18
Skillet Fork: Wayne City, Ill.	15	14	17	18.9	15-16
Little Wabash: Wilcox, Ill.	16	7 14	12 20	#18.6 #19.45	9 16
Wabash: Lafayette, Ind.	11	9 11	10 14	12.8 14.5	9 13
Covington, Ind.	16	10 13	11 15	16.4 17.95	10 14
Montezuma, Ind.	14	8	16	15.9	10
Terre Haute, Ind.	14	9	17	15.1	15
Mt. Carmel, Ill.	17	12	21	19.4	17-19
New Harmony, Ind.	15	16	21		
Harpeth: Kingston Springs, Tenn.	15	15	15	15.2	15
Elk: Fayetteville, Tenn.	659	12	14	662.9	14
Duck: Shelbyville, Tenn.	719	13	13	719.0	14
Columbia, Tenn.	32	13	16	39.75	14
Ohio: Dam 44, Leavenworth, Ind.	53	17	21	54.9	20
Dam 45, Addison, Ky.	47	17	21	48.9	20
Tell City, Ind.	38	15	23	#41.6	20
Dam 47, Newburgh, Ind.	38	11	25	43.6	21
Dam 48, Cypress, Ind.	38	13	26	43.1	22
Mt. Vernon, Ind.	35	13	27	#40.6	22
Dam 49, Uniontown, Ky.	37	14	27	#42.4	23
Shawneetown, Ill.	33	11	28	#42.2	23
Dam 50, Fords Ferry, Ky.	34	11	29	45.1	23
Dam 51, Golconda, Ill.	40	19	26	42.1	24
Paducah, Ky.	39	23	25	39.2	24
Dam 52, Brookport, Ill.	37	15	28	41.0	24
Dam 53, Grand Chain, Ill.	42	15	28	45.8	24
Cairo, Ill.	40	15	28	43.6	20
White Basin					
Black: Pocahontas, Ark.	17	14	21	18.5	16
Black Rock, Ark.	14	13	25	20.6	15
Cache: Patterson, Ark.	7	3 16	12 1/	7.8 8.5	7 21-22
Arkansas Basin					
Poteau: Panama, Okla.	24	6	8	27.1	7
Red Basin					
Sulphur: Hagansport, Tex.	38	1 20 30	6 23 Jun. 5	44.1 43.8 45.7	5 22 Jun. 1,2
Naples, Tex.	22	Apr. 17 26	13 29	27.8 24.0	Apr. 30 27
Caddo: Glenwood, Ark.	15	1 6	1 6	16.75 16.6	1 6
Little Missouri: Boughton, Ark.	20	7	8	20.6	7
Saline: Benton, Ark.	20	1	2	20.9	2
Ouachita: Arkadelphia, Ark.	17	2 6	3 8	22.05 23.4	2 7
Camden, Ark.	26	4	15	34.0	10-11

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM	*Ft.*			*Ft.*	
Lower Mississippi Basin					
St. Francis: St. Francis, Ark.	18	15	15	18.2	15
		20	23	18.5	21
Coldwater: Sarah, Miss.	18	7	7	19.3	7
Mississippi: Caruthersville, Mo.	32	17	27	33.0	21-23
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Hineston, La.	12	5	10	14.4	7
PACIFIC SLOPE DRAINAGE	*Ft.*			*Ft.*	
Sacramento: Tisdale Weir, Calif.	45	Apr. 18	3	47.5	Apr. 25
Henrys Fork: Rexburg, Idaho	9	26	26	9.0	26
		31	31	9.0	31

* Provisional
\# Highest stage observed
E Estimated
T Tentative
M Missing
1/ Continued at the end of month
G Water level above highest value on gage

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	7.2	3.2	30	1.5
1000	31	133			31	1.1
950	31	554	5.9	-1.3	31	4.0
900	31	996	3.6	-3.8	32	5.3
850	31	1,455	1.3	-6.3	32	5.6
800	31	1,945	-.9	-9.1	31	7.8
750	31	2,460	-2.5	-11.3	30	9.5
700	31	3,005	-4.9	-14.6	29	9.4
650	31	3,582	-7.5	-18.2	29	12.0
600	31	4,205	-10.5	-22.5	28	13.9
550	31	4,867	-14.7	-27.2	28	15.2
500	31	5,586	-19.2	-31.9	28	16.7
450	31	6,357	-24.4	-36.3	27	18.5
400	31	7,210	-30.4	-41.4	27	20.5
350	31	8,146	-36.9	-46.1	27	21.4
300	31	9,198	-43.9	-51.8	27	25.5
250	31	10,400	-51.4		27	26.4
200	31	11,833	-55.6		28	26.1
175	31	12,683	-55.0		28	22.6
150	31	13,669	-54.7		28	18.3
125	31	14,837	-54.6		28	15.1
100	31	16,262	-55.3		27	10.9
80	31	17,689	-54.4		27	7.2
70	31	18,544	-54.2		26	4.8
60	31	19,534	-53.7		26	2.8
50	31	20,707	-52.9		26	.6
40	31	22,148	-52.3		08	1.7
30	30	24,011	-51.1		08	2.5
25	28	25,202	-50.1		08	2.8
20	26	26,665	-48.3		07	4.0
15	25	28,570	-45.3		06	3.4
10	15	31,275	-40.8		08	4.1
7						
5						

ALBUQUERQUE, N. MEX. 838 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	11.1	-7.6	08	1.4
1000	31	113				
950	31	548				
900	31	1,015				
850	31	1,501				
800	31	2,009	11.8	-6.3	30	2.7
750	31	2,543	8.3	-8.6	29	3.5
700	31	3,111	4.1	-11.3	27	5.9
650	31	3,702	-.3	-15.2	27	8.3
600	31	4,344	-5.0	-18.4	26	9.9
550	31	5,016	-9.7	-22.6	26	11.9
500	31	5,751	-14.4	-27.8	26	14.7
450	31	6,537	-19.4	-32.7	25	16.3
400	31	7,407	-25.6	-38.6	25	18.4
350	31	8,360	-32.9	-44.7	25	20.5
300	31	9,424	-41.6	-48.2	25	23.4
250	31	10,636	-50.7		26	26.7
200	31	12,062	-58.7		26	28.9
175	31	12,896	-60.5		26	29.6
150	31	13,854	-61.3		26	27.6
125	31	14,984	-62.1		26	23.2
100	31	16,359	-63.1		27	17.6
80	31	17,726	-63.8		27	11.0
70	31	18,546	-62.3		28	6.3
60	31	19,502	-60.2		29	3.0
50	30	20,645	-57.7		33	.8
40	29	22,065	-54.8		03	1.2
30	29	23,911	-52.7		04	1.6
25	28	25,090	-51.4		04	1.0
20	27	26,545	-48.9		01	.6
15	25	28,448	-45.4		29	1.2
10	25	31,176	-40.4		26	4.8
7	12	33,624	-35.9			
5						

AMARILLO, TEXAS 891 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	11.0	3.9	19	1.6
1000	31	114				
950	31	553				
900	31	1,014				
850	31	1,487	12.9	2.7	21	4.2
800	31	1,995	11.5	-1.6	25	6.7
750	31	2,529	8.9	-6.0	26	8.3
700	31	3,100	5.1	-9.8	26	9.0
650	31	3,698	.7	-13.7	26	9.9
600	31	4,337	-4.1	-17.6	26	12.1
550	31	5,011	-8.7	-23.0	26	13.5
500	31	5,750	-13.7	-27.9	26	14.7
450	31	6,534	-19.4	-32.9	26	16.8
400	31	7,407	-25.7	-39.2	26	19.8
350	31	8,361	-33.1	-44.4	26	22.5
300	31	9,426	-41.4	-48.5	26	25.0
250	31	10,641	-50.0		26	28.4
200	31	12,069	-58.7		26	30.7
175	31	12,903	-61.0		27	31.0
150	31	13,859	-61.5		27	28.9
125	30	14,982	-62.4		27	25.0
100	30	16,354	-63.4		27	20.2
80	30	17,723	-63.5		27	12.6
70	30	18,544	-62.0		28	7.1
60	30	19,501	-59.9		29	3.1
50	29	20,647	-57.2		32	.7
40	29	22,065	-54.8		05	1.1
30	29	23,913	-52.3		02	.7
25	29	25,096	-50.6		36	.5
20	26	26,560	-48.9		35	1.1
15	21	28,476	-45.7		28	2.6
10	17	31,195	-40.8		27	6.1
7	7	33,637	-37.2			
5						

ANCHORAGE, ALASKA 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	5.3	-1.6	19	1.8
1000	31	143	6.4	-1.8	20	1.5
950	31	567	5.2	-3.5	21	1.6
900	31	1,003	2.5	-5.4	19	1.2
850	31	1,462	-.5	-7.4	13	.2
800	31	1,944	-3.4	-11.3	01	.6
750	31	2,451	-6.5	-13.6	33	.8
700	31	2,989	-9.2	-17.7	34	1.2
650	31	3,553	-12.5	-21.1	34	1.7
600	31	4,166	-16.3	-26.2	33	1.9
550	31	4,811	-20.5	-30.6	33	2.3
500	31	5,514	-25.3	-34.2	32	3.5
450	31	6,265	-30.5	-38.9	32	4.5
400	31	7,098	-36.7	-45.4	32	5.3
350	31	8,009	-43.3		32	6.3
300	31	9,030	-50.3		32	7.5
250	31	10,204	-55.2		31	7.1
200	31	11,633	-52.7		30	5.7
175	31	12,498	-51.6		30	5.5
150	31	13,498	-51.6		30	4.5
125	31	14,679	-51.9		30	3.8
100	31	16,122	-52.1		30	2.5
80	31	17,571	-50.9		30	1.0
70	31	18,441	-50.0		29	.5
60	29	19,453	-49.1		12	.5
50	29	20,651	-48.5		09	1.7
40	29	22,120	-48.0		09	3.0
30	28	24,018	-47.1		09	6.1
25	28	25,227	-46.1		09	7.8
20	27	26,721	-44.5		09	10.5
15	27	28,658	-41.9		09	12.5
10	22	31,426	-37.9		09	16.4
7	12	33,933	-33.8			
5						

* ANNETTE, ALASKA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	6.6	4.2	14	1.7
1000	31	154	6.9	3.3	14	1.9
950	31	575	5.3	.7	17	2.6
900	31	1,015	2.7	-2.1	18	3.7
850	31	1,476	.0	-5.5	18	4.3
800	31	1,960	-2.4	-9.3	19	4.4
750	31	2,470	-5.4	-12.4	20	4.1
700	31	3,009	-8.1	-16.6	21	4.5
650	31	3,578	-11.3	-19.7	23	5.6
600	31	4,192	-15.3	-24.4	23	5.9
550	31	4,841	-19.6	-29.2	23	5.8
500	31	5,546	-24.3	-32.7	24	6.3
450	31	6,303	-29.6	-37.5	23	5.5
400	31	7,138	-35.6	-43.4	24	7.1
350	31	8,054	-42.2	-44.1	24	8.4
300	31	9,081	-49.1		24	8.7
250	31	10,261	-54.6		26	7.3
200	31	11,686	-54.8		27	6.8
175	31	12,542	-53.7		26	5.4
150	31	13,533	-53.5		28	4.4
125	31	14,705	-53.9		27	3.6
100	31	16,139	-53.2		25	3.3
80	31	17,578	-52.6		25	3.4
70	31	18,440	-52.4		25	2.1
60	31	19,437	-52.2		21	.1
50	31	20,618	-51.6		08	1.6
40	31	22,066	-51.3		09	4.1
30	31	23,938	-50.5		06	6.5
25	31	25,129	-49.6		09	7.9
20	29	26,584	-48.7		09	9.8
15	28	28,485	-45.4		09	12.9
10	26	31,220	-40.5		09	15.3
7	24	33,677	-34.7		09	17.4
5	11	36,063	-28.3			

ATHENS, GEORGIA 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	14.1	12.0	34	.8
1000	31	141				
950	31	577	16.8	9.5	29	2.8
900	31	1,038	15.1	6.3	29	4.7
850	31	1,571	12.5	2.7	28	6.7
800	31	2,027	9.9	-1.9	28	7.8
750	31	2,558	7.2	-7.7	28	9.0
700	31	3,125	3.8	-9.8	28	10.9
650	31	3,720	.2	-13.3	28	12.4
600	31	4,361	-3.7	-18.0	28	13.7
550	31	5,038	-8.2	-20.7	28	15.7
500	31	5,777	-12.8	-25.7	27	17.5
450	31	6,561	-18.2	-30.4	28	19.0
400	31	7,442	-24.6	-36.9	28	20.2
350	31	8,400	-31.8	-43.6	28	21.1
300	31	9,472	-39.9	-49.0	28	22.1
250	31	10,693	-49.1		29	25.1
200	31	12,123	-58.9		29	28.5
175	31	12,954	-61.6		29	30.1
150	31	13,904	-63.1		28	28.7
125	31	15,028	-62.7		28	21.7
100	31	16,398	-63.9		28	16.8
80	31	17,764	-63.1		28	9.3
70	30	18,585	-61.4		29	7.2
60	30	19,546	-59.2		28	3.5
50	30	20,694	-57.0		29	1.9
40	30	22,113	-54.7		35	.5
30	30	23,964	-52.2		04	.9
25	30	25,147	-50.7		04	1.2
20	29	26,605	-48.5		35	1.1
15	26	28,508	-45.4		28	3.1
10	23	31,257	-39.5		27	5.9
7	12	33,715	-34.9			
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* BARROW, ALASKA 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	-6.0	-7.5	21	1.1
1000	31	135	-6.6	-8.1	21	1.8
950	31	536	-8.8	-10.3	26	5.0
900	31	954	-8.6	-13.0	27	6.2
850	31	1,397	-9.6	-14.8	27	6.4
800	31	1,864	-11.3	-18.0	27	7.7
750	31	2,356	-13.2	-21.1	28	8.2
700	31	2,881	-15.6	-24.3	28	9.0
650	31	3,438	-18.7	-28.2	28	10.0
600	31	4,031	-21.9	-31.0	28	11.4
550	31	4,664	-25.7	-34.8	28	12.1
500	31	5,352	-30.2	-38.8	29	14.2
450	31	6,091	-35.1	-42.5	28	16.3
400	31	6,909	-40.6	-46.0	29	17.9
350	31	7,806	-46.4		29	18.8
300	31	8,819	-50.5		29	17.8
250	31	10,009	-49.6		29	14.2
200	31	11,476	-47.5		29	11.9
175	30	12,358	-47.0		29	10.1
150	30	13,378	-47.2		29	9.3
125	30	14,584	-47.4		29	7.5
100	30	16,059	-47.4		30	4.7
80	29	17,537	-46.4		28	2.6
70	29	18,424	-45.7		28	1.8
60	28	19,444	-45.0		22	.8
50	27	20,657	-44.2		16	.9
40	27	22,156	-43.3		12	2.7
30	26	24,094	-42.5		09	4.4
25	26	25,327	-41.8		08	6.8
20	25	26,843	-41.0		09	7.0
15	25	28,808	-36.8		09	8.5
10	8	31,637	-35.1			
7						
5						

BARTER IS., ALASKA 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-5.7	-8.3	28	3.3
1000	31	143	-5.5	-7.9	28	4.0
950	31	545	-6.3	-9.6	27	8.0
900	31	967	-7.7	-11.9	27	9.9
850	31	1,411	-8.8	-14.2	27	10.6
800	31	1,879	-10.8	-17.8	27	10.8
750	31	2,370	-13.0	-20.6	28	10.6
700	31	2,896	-15.7	-23.7	28	10.6
650	31	3,449	-18.7	-27.4	29	10.7
600	31	4,045	-22.3	-31.3	29	11.3
550	31	4,676	-26.4	-35.4	29	12.1
500	31	5,363	-30.8	-40.3	29	13.4
450	31	6,094	-35.8	-43.9	29	14.1
400	31	6,913	-41.3	-45.2	28	16.2
350	31	7,810	-46.4		28	16.7
300	31	8,825	-49.6		28	16.6
250	31	10,018	-49.3		28	14.2
200	31	11,490	-47.1		29	11.0
175	31	12,374	-46.6		29	8.6
150	31	13,396	-46.6		28	8.3
125	31	14,604	-46.9		28	6.7
100	31	16,080	-47.0		28	3.5
80	31	17,561	-46.2		28	1.8
70	30	18,450	-45.4		25	1.5
60	30	19,479	-44.8		19	.2
50	30	20,701	-44.0		11	2.1
40	30	22,200	-43.4		10	2.5
30	30	24,140	-42.6		10	5.7
25	30	25,372	-42.0		09	7.0
20	28	26,900	-41.2		09	8.0
15	26	28,868	-39.3		09	9.3
10	24	31,660	-36.1		09	10.1
7	17	34,187	-32.5		09	10.8
5	6	36,492	-31.9			

BETHEL, ALASKA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	2.7	.1	31	2.4
1000	31	152	3.6	-.7	32	1.9
950	31	570	3.6	-3.3	35	.6
900	31	1,007	1.7	-6.7	35	.6
850	31	1,466	-.1	-9.2	29	.5
800	31	1,950	-2.3	-12.5	30	1.3
750	31	2,456	-4.8	-15.7	32	2.1
700	31	3,001	-7.7	-18.6	35	2.1
650	31	3,568	-10.8	-20.9	34	3.0
600	31	4,186	-14.6	-26.0	34	3.4
550	31	4,834	-19.0	-29.5	34	3.5
500	31	5,542	-23.9	-34.6	33	3.9
450	31	6,295	-29.3	-38.1	32	3.2
400	31	7,134	-35.4	-43.0	32	4.5
350	31	8,050	-42.4		31	5.2
300	31	9,074	-50.1		30	6.8
250	31	10,246	-56.1		30	9.0
200	31	11,666	-54.1		31	6.5
175	31	12,527	-52.3		32	4.9
150	31	13,524	-52.5		32	4.3
125	30	14,701	-53.0		33	3.3
100	30	16,139	-53.2		34	2.5
80	30	17,578	-52.3		35	1.6
70	30	18,442	-51.6		02	.8
60	30	19,446	-50.3		11	.5
50	30	20,639	-49.3		08	1.5
40	29	22,107	-48.6		08	2.9
30	29	24,000	-48.2		09	6.2
25	29	25,202	-47.6		09	7.6
20	29	26,679	-46.6		09	8.9
15	27	28,593	-44.4		09	11.8
10	24	31,337	-40.0		09	13.5
7	12	33,750	-37.0			
5	6	36,088	-34.3			

BISMARCK, N. DAK. 956 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	505	3.8	.0	35	1.4
1000	31	136				
950	31	559			36	1.4
900	31	1,002	6.3	-2.9	30	1.9
850	31	1,469	4.0	-5.0	31	3.1
800	31	1,960	1.0	-7.4	31	4.8
750	31	2,474	-2.2	-11.4	31	6.0
700	31	3,020	-5.4	-14.4	31	7.2
650	31	3,595	-8.7	-18.1	30	9.3
600	31	4,215	-12.3	-21.8	30	11.7
550	31	4,869	-16.3	-25.4	30	13.2
500	31	5,586	-20.9	-29.4	29	13.5
450	31	6,351	-26.3	-34.7	29	15.6
400	31	7,199	-32.3	-39.8	29	17.6
350	31	8,127	-39.0	-43.6	29	19.0
300	31	9,168	-46.3		29	19.9
250	31	10,361	-52.8		29	19.5
200	31	11,788	-56.2		28	19.5
175	31	12,636	-56.1		28	17.8
150	31	13,621	-53.8		28	15.9
125	31	14,791	-54.1		28	12.4
100	31	16,222	-54.3		29	8.5
80	31	17,649	-54.6		30	5.3
70	31	18,503	-54.2		31	3.1
60	31	19,492	-54.1		33	2.2
50	29	20,666	-52.9		03	1.7
40	29	22,108	-51.8		07	2.8
30	28	23,977	-51.1		08	4.1
25	28	25,164	-50.4		08	5.3
20	27	26,621	-48.9		09	5.3
15	26	28,520	-46.2		09	6.5
10	15	31,192	-41.5			
7	8	33,560	-37.6			
5						

BOISE, IDAHO 917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	868	7.9	2.8	15	1.5
1000	31	142				
950	31	572				
900	31	1,021	10.6	1.1	35	.2
850	31	1,497	9.7	-2.0	32	3.0
800	31	1,998	6.1	-4.7	31	3.8
750	31	2,522	2.5	-7.3	30	4.2
700	31	3,080	-1.2	-11.0	29	5.2
650	30	3,656	-5.2	-14.2	28	6.1
600	30	4,287	-9.9	-18.1	28	7.0
550	30	4,947	-14.3	-23.8	28	7.8
500	30	5,669	-19.4	-28.5	27	8.0
450	30	6,438	-25.0	-34.6	27	8.4
400	30	7,290	-31.3	-40.7	27	9.3
350	30	8,222	-38.5	-46.0	27	9.8
300	30	9,264	-46.3		27	9.7
250	30	10,456	-53.7		27	9.7
200	30	11,871	-59.4		27	10.6
175	29	12,698	-58.9		27	11.5
150	28	13,663	-57.5		27	10.1
125	28	14,816	-57.0		27	9.1
100	26	16,231	-56.4		27	6.8
80	26	17,647	-56.7		28	3.9
70	26	18,492	-56.9		29	3.4
60	26	19,468	-56.7		30	2.0
50	26	20,624	-56.2		35	.9
40	26	22,046	-54.7		05	2.3
30	25	23,895	-52.9		08	3.2
25	24	25,073	-51.7		09	4.2
20	24	26,526	-49.9		08	4.5
15	22	28,435	-46.6		08	6.1
10	13	31,201	-39.9			
7						
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* BOOTHVILLE, LA. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	21.0	19.6	16	.7
1000	31	135	21.3	18.9	17	2.1
950	31	583	18.9	13.4	19	4.5
900	31	1,042	16.9	6.8	20	5.2
850	31	1,528	15.1	1.1	21	4.9
800	31	2,039	12.7	-2.5	21	4.4
750	31	2,581	10.3	-6.7	24	4.0
700	31	3,150	7.2	-10.8	26	5.0
650	31	3,755	3.2	-14.5	27	6.4
600	31	4,396	-1.2	-17.6	28	8.4
550	31	5,083	-5.8	-20.7	28	9.1
500	31	5,826	-10.7	-26.7	29	10.5
450	31	6,631	-16.1	-31.0	28	12.9
400	31	7,505	-22.4	-36.2	26	15.5
350	31	8,472	-29.6	-42.5	28	17.3
300	31	9,554	-37.7	-47.7	29	20.4
250	31	10,786	-47.1		29	22.9
200	31	12,228	-57.6		29	28.0
175	31	13,060	-62.6		29	28.2
150	31	14,003	-65.3		28	27.3
125	31	15,108	-67.2		29	23.3
100	31	16,448	-69.0		29	17.3
80	31	17,779	-68.4		29	9.9
70	30	18,587	-65.6		29	5.7
60	30	19,532	-61.7		29	2.0
50	30	20,669	-58.7		01	.8
40	29	22,079	-54.9		07	2.5
30	28	23,931	-51.5		07	3.0
25	28	25,119	-49.4		07	2.7
20	28	26,590	-46.7		35	.6
15	27	28,517	-42.6		26	3.7
10	27	31,281	-38.0		28	6.7
7	25	33,764	-33.2		27	8.7
5	9	36,148	-28.7			

* BROWNSVILLE, TEXAS 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	23.2	20.7	15	3.2
1000	31	108	23.2	20.2	14	4.7
950	31	554	21.0	16.5	16	9.4
900	31	1,023	19.4	11.8	17	9.3
850	31	1,514	18.2	5.4	18	6.7
800	31	2,032	16.0	1.3	19	4.7
750	31	2,576	13.6	-2.8	20	2.9
700	31	3,157	10.2	-5.0	26	2.3
650	31	3,763	5.9	-8.4	28	4.1
600	31	4,420	1.4	-11.8	29	5.7
550	31	5,108	-3.7	-17.1	29	7.3
500	31	5,861	-8.8	-23.4	28	7.1
450	31	6,664	-14.3	-28.8	28	7.8
400	31	7,554	-20.8	-34.7	28	11.0
350	31	8,527	-27.9	-40.4	27	14.5
300	31	9,616	-36.2	-46.9	27	18.6
250	31	10,856	-45.7		28	22.4
200	31	12,305	-56.9		28	27.8
175	31	13,139	-62.9		28	28.5
150	28	14,077	-67.6		28	26.1
125	28	15,166	-70.3		27	20.3
100	28	16,485	-72.3		28	12.4
80	28	17,796	-72.3		29	6.3
70	28	18,585	-70.0		29	3.5
60	27	19,514	-64.3		08	1.5
50	27	20,644	-59.5		10	3.9
40	27	22,052	-56.0		09	5.3
30	27	23,898	-52.4		09	7.2
25	26	25,083	-49.8		08	5.6
20	25	26,549	-46.9		09	4.7
15	25	28,475	-42.8		08	1.9
10	22	31,236	-38.1		35	1.5
7	18	33,709	-34.1		30	1.1
5	6	36,095	-30.0			

BUFFALO, N. Y. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	7.3	2.2	26	.6
1000	31	136				
950	31	555	6.3	-1.9	25	1.4
900	31	1,000	3.9	-4.7	26	2.6
850	31	1,462	1.5	-7.1	27	4.8
800	31	1,949	-.9	-10.3	29	6.6
750	31	2,463	-2.7	-13.0	29	8.4
700	31	3,008	-5.0	-15.4	28	9.9
650	31	3,586	-7.8	-19.3	28	11.7
600	31	4,206	-11.1	-22.4	28	14.7
550	31	4,866	-15.1	-26.0	28	16.7
500	31	5,584	-19.7	-31.4	28	19.1
450	31	6,355	-25.1	-37.0	28	20.4
400	31	7,203	-31.2	-42.9	28	23.1
350	31	8,137	-37.8	-46.0	28	26.0
300	31	9,183	-45.0		28	28.8
250	31	10,383	-51.3		27	30.2
200	31	11,817	-55.5		27	25.7
175	31	12,667	-55.8		28	24.5
150	31	13,649	-55.3		28	21.8
125	31	14,812	-55.1		26	16.0
100	31	16,236	-55.3		26	12.2
80	31	17,659	-55.2		28	6.7
70	31	18,511	-55.0		28	4.3
60	31	19,496	-54.3		29	2.2
50	31	20,666	-53.3		29	1.6
40	30	22,103	-52.7		36	2.0
30	30	23,963	-51.8		06	4.2
25	30	25,147	-51.0		08	4.3
20	29	26,603	-49.4		07	3.3
15	26	28,510	-46.1		08	1.5
10	19	31,250	-40.4			
7	7	33,713	-36.2			
5						

* CANTON IS. PACIFIC AREA ◆ 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	30.5	24.2	08	5.7
1000	31	83	26.1	21.5	08	6.0
950	31	530	23.0	17.2	08	7.4
900	31	1,005	20.2	13.2	09	9.5
850	31	1,497	18.0	9.1	09	9.1
800	31	2,015	16.3	3.7	09	7.4
750	31	2,560	14.2	.2	09	6.4
700	31	3,142	11.1	-3.9	08	6.2
650	31	3,753	7.8	-8.3	09	6.0
600	31	4,413	4.3	-12.5	09	5.0
550	31	5,111	.1	-17.3	09	4.0
500	31	5,873	-4.2	-21.7	09	4.6
450	31	6,693	-9.2	-26.5	10	5.2
400	31	7,599	-14.8	-31.3	10	4.0
350	31	8,596	-21.7	-37.7	12	3.4
300	31	9,713	-30.1	-44.9	15	2.1
250	31	10,983	-40.5	-52.5	23	2.1
200	31	12,466	-52.5		24	4.6
175	31	13,315	-59.6		25	6.5
150	31	14,262	-67.2		26	8.3
125	30	15,341	-75.1		26	9.4
100	30	16,613	-81.2		26	7.4
80	30	17,883	-75.1		27	11.6
70	30	18,667	-69.6		27	15.3
60	30	19,594	-65.0		27	17.7
50	30	20,714	-62.2		27	18.6
40	30	22,105	-58.1		27	16.9
30	29	23,934	-54.5		27	5.0
25	28	25,107	-52.4		10	6.1
20	28	26,565	-46.0		09	19.3
15	24	28,483	-43.3		09	26.1
10	21	31,257	-36.8		09	29.5
7	15	33,749	-32.0		09	31.0
5	9	36,131	-24.5			

NOTE: Beginning with the January 1967 publication the Dew Point temperature replaces Relative Humidity in the above table; wind direction is in tens of degrees and wind speed in meters per second.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Also, see reference notes at end of table.

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C. 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	15.4	13.1	33	1.8
1000	31	129	16.2	11.8	32	2.4
950	31	562	15.0	8.4	29	3.8
900	31	1,022	12.9	5.2	27	6.3
850	31	1,500	10.4	2.0	27	8.1
800	31	2,003	7.6	-.8	27	9.8
750	31	2,530	4.9	-4.6	27	11.0
700	31	3,093	1.7	-7.6	27	12.6
650	31	3,682	-1.6	-12.3	27	14.0
600	31	4,320	-5.5	-17.2	27	15.0
550	31	4,987	-9.5	-22.5	27	16.2
500	30	5,729	-14.1	-27.5	27	16.8
450	30	6,510	-19.4	-33.0	28	18.4
400	30	7,387	-25.4	-38.2	28	18.9
350	30	8,342	-32.3	-43.9	28	21.3
300	30	9,412	-40.3	-49.4	27	23.9
250	29	10,627	-49.4		28	24.3
200	28	12,058	-58.2		28	28.2
175	28	12,892	-61.3		28	26.5
150	28	13,848	-61.2		28	23.4
125	28	14,982	-60.7		28	18.6
100	28	16,366	-61.4		27	15.6
80	27	17,751	-60.4		28	8.5
70	27	18,585	-59.1		28	5.2
60	27	19,554	-57.7		27	2.9
50	27	20,709	-55.9		30	1.5
40	27	22,134	-54.0		11	.8
30	27	23,989	-51.7		06	1.9
25	26	25,175	-49.9		09	1.9
20	26	26,640	-47.8		01	.9
15	22	28,552	-44.9		24	1.0
10	18	31,307	-38.8		28	1.9
7	13	33,785	-33.3		28	4.0
5	5	36,194	-26.8			

* CARIBOU, MAINE 991 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	191	3.5	.2	33	1.9
1000	31	119				
950	31	531	2.0	-3.4	33	3.0
900	31	969	-.3	-5.6	33	3.3
850	31	1,425	-2.6	-8.6	33	3.4
800	31	1,904	-4.6	-11.3	32	3.9
750	31	2,408	-6.7	-13.9	29	4.1
700	31	2,948	-8.7	-18.2	29	6.4
650	31	3,517	-11.2	-21.6	28	8.2
600	31	4,131	-14.2	-25.1	27	9.1
550	31	4,782	-18.1	-29.3	27	10.1
500	31	5,492	-22.7	-34.2	27	12.0
450	31	6,251	-27.8	-40.0	27	14.3
400	31	7,093	-33.7	-44.1	27	15.9
350	31	8,017	-39.9	-47.6	26	17.7
300	31	9,057	-46.0		27	19.1
250	31	10,258	-49.9		26	19.2
200	31	11,711	-51.0		26	17.1
175	31	12,580	-51.0		26	15.1
150	31	13,583	-51.1		26	13.0
125	31	14,767	-51.5		26	10.4
100	31	16,214	-51.9		25	6.6
80	31	17,656	-52.6		24	3.8
70	31	18,519	-52.5		24	3.4
60	31	19,515	-52.3		22	.5
50	31	20,695	-52.0		16	.5
40	31	22,141	-51.6		10	2.7
30	30	24,007	-51.0		09	3.9
25	30	25,194	-50.1		09	4.8
20	30	26,656	-48.5		09	5.5
15	28	28,555	-45.1		09	6.0
10	25	31,304	-38.2		09	8.6
7	14	33,759	-32.7		10	7.6
5						

CHARLESTON, S. C. 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	17.1	14.3	31	.4
1000	31	138	18.7	14.0	25	1.3
950	31	577	18.0	10.1	27	3.9
900	31	1,042	16.3	6.6	27	4.9
850	30	1,524	13.5	3.6	27	6.5
800	30	2,032	10.5	-1.0	27	7.3
750	30	2,565	7.5	-5.4	28	8.3
700	30	3,132	4.2	-10.1	28	9.7
650	30	3,728	.6	-14.3	28	11.4
600	30	4,370	-3.5	-17.1	28	13.0
550	30	5,047	-7.8	-20.6	28	14.8
500	30	5,789	-12.4	-25.7	28	15.3
450	30	6,582	-18.1	-30.6	28	16.2
400	30	7,457	-24.4	-37.3	28	16.7
350	30	8,416	-31.5	-43.3	28	19.1
300	30	9,489	-39.5	-49.8	28	20.4
250	30	10,712	-46.7		28	23.8
200	30	12,145	-56.7		28	27.8
175	30	12,975	-62.2		29	27.6
150	30	13,923	-63.7		28	26.3
125	30	15,038	-64.3		28	21.9
100	30	16,400	-64.9		28	15.3
80	30	17,759	-64.2		28	10.5
70	30	18,579	-62.3		28	6.9
60	30	19,534	-60.3		29	4.6
50	30	20,677	-57.8		32	1.6
40	30	22,092	-55.1		08	2.2
30	30	23,942	-52.2		09	1.3
25	30	25,125	-50.4		05	1.0
20	30	26,584	-47.7		27	.8
15	30	28,500	-44.7		26	2.9
10	30	31,245	-38.8		28	7.5
7	19	33,743	-34.8			
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* COLD BAY, ALASKA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	5.6	1.4	36	1.0
1000	31	134	3.3	.4	02	1.2
950	31	547	2.1	-1.0	05	3.1
900	31	986	.7	-4.4	05	4.5
850	31	1,444	-1.0	-7.2	06	5.0
800	31	1,927	-2.8	-11.2	06	5.0
750	31	2,432	-4.8	-13.9	06	5.3
700	31	2,976	-7.4	-17.4	06	4.8
650	31	3,546	-10.6	-21.1	05	4.7
600	31	4,164	-14.2	-25.4	05	4.6
550	31	4,814	-18.4	-28.9	05	4.8
500	31	5,523	-23.3	-33.0	05	5.5
450	31	6,283	-28.6	-38.4	04	6.4
400	31	7,120	-34.5	-42.6	05	5.9
350	31	8,041	-41.0	-45.8	05	6.5
300	31	9,075	-47.9		04	6.4
250	31	10,264	-52.8		02	5.3
200	31	11,702	-52.8		34	3.6
175	31	12,565	-52.0		32	3.3
150	30	13,561	-52.3		32	2.8
125	30	14,738	-53.2		34	2.9
100	30	16,173	-53.9		35	1.8
80	30	17,609	-52.9		36	1.1
70	30	18,472	-51.9		03	.6
60	30	19,472	-51.2		06	1.3
50	29	20,659	-50.7		10	1.9
40	29	22,114	-50.2		09	2.8
30	29	23,995	-49.7		08	5.5
25	29	25,190	-49.3		09	6.7
20	29	26,656	-48.1		09	8.4
15	29	28,563	-45.7		09	11.5
10	25	31,300	-41.0		09	14.3
7	17	33,781	-34.7		09	15.5
5	12	36,142	-30.8			

COLUMBIA, MO. 986 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	238	11.4	7.7	11	.8
1000	31	122				
950	31	551	13.0	5.2	25	2.7
900	31	1,007	11.7	2.1	27	4.4
850	31	1,484	9.8	-.1	27	5.7
800	31	1,986	7.3	-3.9	28	6.7
750	31	2,510	4.2	-7.3	28	8.2
700	31	3,072	.6	-10.4	28	9.6
650	31	3,659	-3.1	-14.9	28	11.5
600	31	4,292	-6.6	-19.4	28	13.0
550	31	4,965	-11.3	-24.0	28	15.6
500	31	5,692	-15.9	-29.2	28	17.8
450	31	6,471	-21.2	-34.2	28	19.7
400	31	7,336	-27.6	-40.3	28	21.3
350	31	8,283	-34.7	-44.3	28	23.5
300	31	9,342	-42.6	-48.3	27	26.4
250	31	10,551	-51.1		27	29.8
200	31	11,978	-56.5		27	31.4
175	31	12,813	-60.3		27	30.0
150	31	13,775	-59.8		27	26.4
125	31	14,915	-59.9		28	21.5
100	31	16,308	-59.7		28	16.0
80	31	17,703	-59.5		28	10.3
70	30	18,542	-59.0		28	7.4
60	30	19,511	-57.5		29	4.6
50	29	20,666	-55.6		31	3.1
40	28	22,091	-54.1		01	1.0
30	27	23,944	-52.3		08	1.7
25	25	25,133	-51.2		08	2.2
20	24	26,591	-49.8		05	2.4
15	22	28,478	-46.9		06	2.5
10	18	31,204	-41.4		06	1.3
7	11	33,659	-36.9			
5	5	36,053	-33.3			

DAYTON, OHIO 980 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	297	9.1	6.5	06	1.5
1000	31	125				
950	31	553	9.9	4.1	05	1.2
900	31	1,001	8.5	1.7	30	3.0
850	31	1,473	6.8	-1.5	29	6.1
800	31	1,969	4.5	-4.1	28	8.9
750	31	2,491	1.8	-6.8	28	11.6
700	31	3,047	-1.2	-10.4	28	13.3
650	31	3,629	-4.6	-13.9	28	14.0
600	31	4,260	-8.3	-18.6	28	16.1
550	31	4,924	-12.4	-23.5	28	16.8
500	31	5,652	-17.1	-28.8	28	18.1
450	31	6,429	-22.6	-33.9	28	20.5
400	31	7,289	-28.6	-39.7	28	22.6
350	31	8,232	-35.4	-44.9	28	25.4
300	31	9,288	-43.2	-50.4	28	29.3
250	31	10,494	-51.2		28	31.1
200	31	11,919	-58.4		28	34.7
175	31	12,755	-59.8		28	32.2
150	31	13,720	-58.8		28	25.5
125	31	14,866	-58.5		28	20.4
100	31	16,266	-58.7		28	14.3
80	31	17,668	-58.4		28	9.3
70	30	18,513	-57.6		28	6.2
60	30	19,489	-56.2		29	3.9
50	30	20,651	-54.8		31	1.2
40	30	22,083	-53.4		01	.5
30	28	23,939	-52.0		06	1.1
25	25	25,122	-51.2		04	1.1
20	22	26,578	-49.5		06	1.9
15	20	28,480	-45.9		05	1.8
10	18	31,202	-40.0		06	1.2
7	5	33,677	-35.2			
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DENVER, COLO. 838 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	6.0	2.3	20	.8
1000	31	133				
950	31	565				
900	31	1,015				
850	31	1,490				
800	31	1,990	7.7	-.3	29	2.2
750	31	2,518	5.0	-3.5	29	3.7
700	31	3,080	1.2	-6.8	29	5.1
650	31	3,669	-2.8	-10.9	29	6.5
600	31	4,303	-7.2	-15.1	29	8.3
550	31	4,970	-11.5	-20.6	28	9.8
500	31	5,700	-16.4	-27.1	28	10.5
450	31	6,481	-21.9	-32.6	28	10.6
400	31	7,341	-28.1	-38.7	27	12.2
350	31	8,285	-35.4	-45.3	27	13.4
300	31	9,340	-43.6	-50.0	27	16.4
250	31	10,543	-52.1		26	18.1
200	30	11,972	-58.7		26	23.2
175	30	12,808	-59.7		26	22.7
150	30	13,773	-59.1		26	20.1
125	30	14,917	-58.7		27	18.0
100	30	16,315	-59.3		27	13.9
80	29	17,712	-59.6		28	8.7
70	29	18,548	-58.9		28	5.5
60	29	19,518	-57.6		29	2.6
50	29	20,672	-56.0		33	1.0
40	29	22,100	-53.8		02	1.4
30	29	23,953	-52.4		06	2.6
25	29	25,135	-51.1		07	3.1
20	27	26,588	-49.6		05	2.0
15	27	28,486	-46.4		09	1.4
10	23	31,200	-41.0		29	.3
7	15	33,623	-37.0		27	4.5
5	7	35,887	-36.1			

DODGE CITY, KANS. 924 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	10.3	4.9	34	.3
1000	31	125				
950	31	558				
900	31	1,010	11.4	3.4	25	.9
850	31	1,488	10.9	1.5	27	2.2
800	31	1,992	8.8	-1.5	25	3.7
750	31	2,523	5.8	-4.4	25	5.8
700	31	3,086	2.6	-8.0	26	7.4
650	31	3,678	-1.2	-12.3	26	9.1
600	31	4,314	-5.7	-16.8	26	11.3
550	30	4,987	-10.5	-21.3	26	13.3
500	30	5,717	-15.4	-26.8	26	14.7
450	30	6,500	-20.7	-33.1	26	15.8
400	30	7,366	-26.9	-39.0	26	17.5
350	30	8,315	-34.3	-44.8	26	19.5
300	30	9,374	-42.5	-48.6	26	22.0
250	30	10,582	-51.2		26	26.0
200	30	12,005	-58.6		26	28.4
175	30	12,839	-61.0		26	27.5
150	30	13,797	-60.5		27	25.6
125	30	14,933	-60.7		27	20.6
100	30	16,316	-60.9		27	16.5
80	29	17,705	-61.0		28	10.8
70	29	18,535	-60.4		28	6.4
60	29	19,499	-58.3		28	3.4
50	29	20,652	-56.2		30	2.1
40	29	22,075	-54.3		07	.6
30	29	23,925	-52.5		04	1.1
25	29	25,106	-51.4		01	.2
20	29	26,560	-49.5		11	.2
15	29	28,457	-46.3		24	1.0
10	28	31,177	-41.2		26	2.9
7	13	33,596	-37.9			
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EL PASO, TEXAS 882 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	14.6	-5.0	27	1.4
1000	31	106				
950	31	550				
900	31	1,017				
850	31	1,503	17.6	-2.0	27	2.7
800	31	2,018	14.4	-4.2	27	6.0
750	31	2,555	10.5	-7.1	26	8.3
700	31	3,130	6.6	-9.6	26	8.8
650	31	3,729	2.4	-12.8	25	9.0
600	31	4,375	-2.1	-16.6	25	10.1
550	31	5,057	-6.7	-22.1	25	11.5
500	31	5,799	-12.0	-25.3	25	13.4
450	31	6,592	-17.6	-29.6	25	16.1
400	31	7,469	-24.2	-34.4	25	19.0
350	31	8,429	-31.5	-40.8	25	21.4
300	31	9,503	-39.7	-46.9	26	24.6
250	31	10,726	-46.8		26	28.7
200	31	12,162	-58.0		26	35.1
175	31	12,996	-61.6		26	36.2
150	31	13,947	-63.3		26	31.6
125	31	15,064	-64.4		26	25.0
100	31	16,423	-66.2		26	18.7
80	30	17,769	-67.3		27	11.0
70	29	18,580	-65.4		28	5.7
60	29	19,525	-62.1		29	2.3
50	29	20,661	-58.5		15	.2
40	29	22,072	-55.8		13	.8
30	28	23,915	-52.4		05	1.2
25	28	25,098	-50.6		03	1.5
20	27	26,556	-48.4		31	.2
15	26	28,463	-44.6		27	4.5
10	23	31,213	-38.9		27	8.0
7	10	33,689	-33.1			
5						

ELY, NEV. 809 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	5.1	-.9	19	2.4
1000	31	157				
950	31	582				
900	31	1,035				
850	31	1,560				
800	31	2,004	6.2	-1.1	21	1.5
750	31	2,529	4.9	-4.8	28	.6
700	31	3,093	1.0	-7.9	30	3.0
650	31	3,678	-3.3	-11.7	29	4.2
600	31	4,313	-7.7	-15.8	27	5.3
550	31	4,976	-12.6	-20.6	26	5.1
500	31	5,705	-17.9	-27.0	27	6.6
450	31	6,477	-23.5	-34.1	27	6.9
400	31	7,336	-30.0	-41.1	27	7.8
350	31	8,273	-37.3	-46.0	27	7.2
300	31	9,320	-45.4		25	8.3
250	31	10,515	-53.1		26	10.8
200	31	11,933	-58.6		27	11.6
175	31	12,769	-59.3		27	13.1
150	30	13,740	-59.1		27	12.4
125	30	14,883	-59.0		27	11.1
100	30	16,279	-59.8		27	8.6
80	30	17,672	-59.5		27	5.7
70	30	18,506	-58.9		29	3.7
60	30	19,476	-58.5		31	2.5
50	30	20,625	-57.2		34	1.5
40	30	22,041	-55.6		04	1.5
30	29	23,883	-53.0		05	2.4
25	29	25,061	-51.9		07	2.5
20	26	26,523	-49.8		06	2.5
15	24	28,426	-46.0		07	3.2
10	22	31,162	-40.1		10	1.6
7	18	33,600	-34.9		35	1.5
5	13	35,966	-29.4			

EMPALME, MEXICO 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	19.0	5.7	33	1.7
1000	31	110	21.8	6.5	32	2.4
950	31	554	23.4	4.7	33	2.8
900	31	1,027	21.5	1.8	30	2.4
850	31	1,519	18.4	-1.3	24	2.9
800	31	2,036	15.2	-3.9	23	4.7
750	31	2,577	11.6	-6.4	23	5.6
700	31	3,151	7.7	-8.7	23	6.4
650	31	3,758	3.9	-12.0	24	8.3
600	31	4,403	-.4	-15.2	24	10.5
550	31	5,090	-5.1	-19.0	24	12.3
500	31	5,836	-10.4	-23.2	24	13.7
450	31	6,636	-16.0	-28.4	25	16.0
400	31	7,516	-22.3	-34.2	25	17.9
350	31	8,482	-29.8	-40.3	25	21.0
300	31	9,562	-38.3	-47.1	25	23.1
250	31	10,791	-47.2		25	27.1
200	30	12,234	-57.2		26	33.3
175	30	13,069	-61.8		25	34.5
150	30	14,014	-65.6		26	28.2
125	29	15,120	-66.9		25	22.1
100	29	16,458	-69.2		25	16.4
80	28	17,788	-69.6		26	8.4
70	28	18,585	-68.6		25	4.0
60	28	19,518	-64.1		24	1.0
50	28	20,647	-59.3		22	.4
40	27	22,052	-55.9		07	2.9
30	27	23,897	-52.1		07	1.9
25	27	25,082	-50.0		29	.4
20	27	26,549	-47.0		34	.8
15	21	28,466	-44.1		27	4.3
10						
7						
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* FAIRBANKS, ALASKA 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	4.5	-1.3	29	1.4
1000	31	134			33	1.1
950	31	554	3.7	-5.1	29	2.5
900	31	989	.7	-6.8	27	4.5
850	31	1,445	-2.3	-9.8	26	5.8
800	31	1,924	-5.4	-12.0	26	6.3
750	31	2,426	-8.5	-15.3	27	6.1
700	31	2,961	-11.4	-18.6	28	6.4
650	31	3,526	-14.6	-22.4	28	7.2
600	31	4,128	-18.2	-26.2	29	8.0
550	31	4,773	-22.4	-30.4	29	8.8
500	31	5,467	-27.1	-35.2	30	9.5
450	31	6,215	-32.4	-40.1	29	10.3
400	31	7,041	-38.0	-45.3	29	11.2
350	31	7,947	-44.7		30	11.7
300	31	8,963	-51.3		29	13.2
250	31	10,136	-54.5		29	12.7
200	31	11,575	-51.3		29	10.1
175	30	12,443	-50.5		29	9.3
150	30	13,449	-50.4		29	8.4
125	30	14,636	-50.8		30	6.1
100	30	16,088	-50.6		30	4.2
80	30	17,546	-49.4		29	1.7
70	30	18,421	-48.6		27	.9
60	30	19,437	-47.9		29	.1
50	29	20,647	-47.0		09	1.5
40	28	22,126	-46.4		09	3.3
30	28	24,039	-45.7		09	5.2
25	28	25,255	-45.0		09	7.3
20	27	26,752	-43.7		09	9.2
15	27	28,695	-41.3		09	12.1
10	23	31,473	-36.6		09	14.5
7	6	33,923	-32.7			
5						

FLINT, MICH. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	234	6.8	2.0	14	.8
1000	31	130				
950	31	554	7.1	-1.7	17	.3
900	31	996	5.1	-4.2	31	1.3
850	31	1,461	2.8	-6.7	31	3.6
800	31	1,950	.4	-10.0	30	5.6
750	31	2,464	-2.3	-11.4	29	7.5
700	31	3,012	-4.4	-13.6	29	10.0
650	31	3,588	-7.5	-17.1	28	12.5
600	31	4,213	-11.0	-20.6	28	15.0
550	31	4,873	-14.8	-25.8	28	17.3
500	31	5,592	-19.1	-30.7	28	19.8
450	31	6,362	-24.5	-36.3	28	21.3
400	31	7,215	-30.7	-41.6	28	23.6
350	31	8,149	-37.5	-45.9	28	26.1
300	31	9,196	-44.7	-49.7	28	29.9
250	31	10,396	-51.6		28	32.2
200	30	11,835	-55.3		28	30.0
175	30	12,684	-56.1		28	28.8
150	30	13,665	-55.4		28	23.0
125	30	14,828	-55.4		28	17.6
100	30	16,249	-55.4		28	12.2
80	30	17,672	-55.1		28	8.3
70	30	18,524	-55.0		28	4.8
60	30	19,511	-54.0		29	2.7
50	29	20,689	-52.8		36	.4
40	29	22,130	-52.4		09	1.2
30	28	23,993	-51.1		08	2.8
25	28	25,180	-50.2		07	3.1
20	28	26,641	-48.6		08	4.4
15	28	28,545	-45.4		08	5.2
10	27	31,282	-39.4		08	3.3
7	16	33,754	-34.5			
5						

FORT WORTH, TEXAS 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	16.9	13.7	20	1.2
1000	31	126				
950	31	568	17.3	11.5	19	4.7
900	31	1,028	16.8	8.3	22	6.1
850	31	1,515	15.2	4.2	23	6.3
800	31	2,027	12.7	-.1	24	5.4
750	31	2,572	9.7	-5.2	25	5.0
700	31	3,136	6.0	-8.4	28	5.8
650	31	3,739	1.7	-13.2	28	7.9
600	31	4,379	-2.7	-17.4	27	9.7
550	31	5,060	-7.3	-21.7	27	11.7
500	31	5,801	-12.1	-26.6	26	13.8
450	31	6,598	-17.5	-31.8	26	16.4
400	31	7,472	-23.9	-37.0	26	18.1
350	31	8,433	-31.0	-43.4	27	20.8
300	31	9,508	-39.2	-47.4	27	23.1
250	31	10,732	-48.6		27	26.6
200	31	12,167	-56.3		27	31.1
175	31	12,999	-62.0		27	32.4
150	31	13,948	-63.7		27	29.5
125	31	15,065	-64.5		28	24.0
100	31	16,424	-65.7		28	18.3
80	31	17,776	-65.9		28	11.1
70	31	18,588	-64.0		28	7.0
60	31	19,541	-60.3		28	2.8
50	30	20,688	-57.5		31	.8
40	29	22,102	-54.6		05	1.2
30	26	23,952	-52.4		07	1.5
25	23	25,135	-50.9		04	1.5
20	21	26,601	-48.6		36	.9
15	21	28,509	-44.7		26	3.3
10	17	31,260	-40.2		27	8.5
7	8	33,649	-37.4			
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GLASGOW, MONT. 934 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	5.4	.3	06	1.6
1000	31	134				
950	31	560				
900	31	1,003	7.3	-1.5	28	1.8
850	31	1,471	5.0	-4.7	30	2.5
800	31	1,988	1.6	-6.3	31	3.4
750	31	2,479	-1.9	-9.8	31	5.0
700	31	3,026	-5.1	-14.2	30	7.1
650	31	3,601	-8.6	-18.6	30	8.3
600	31	4,229	-12.4	-21.4	30	10.4
550	31	4,878	-16.6	-26.1	30	11.6
500	31	5,593	-21.4	-31.2	30	13.8
450	31	6,354	-26.5	-35.1	30	16.1
400	31	[illegible]	-32.2	-39.6	29	17.1
350	31	8,128	[illegible]	-44.7	29	19.1
300	31	9,167	-47.0		29	20.1
250	31	10,354	-53.9		29	[illegible]
200	31	11,770	-57.8		29	19.6
175	31	12,614	-56.2		29	16.4
150	31	13,595	-55.0		28	14.1
125	31	14,764	-53.8		29	11.8
100	31	[illegible]	-54.3		29	7.4
80	31	17,629	-54.3		30	6.6
70	31	[illegible]	-54.3		31	3.5
60	31	19,456	-53.8		33	2.0
50	31	20,639	-53.0		01	2.1
40	31	22,078	-52.3		07	2.4
30	31	23,942	-51.2		08	4.5
25	30	25,131	-50.3		09	4.8
20	29	26,597	-48.7		09	6.3
15	27	28,500	-45.6		08	7.0
10	24	31,241	-39.8		08	8.9
7	20	33,694	-34.9		08	10.3
5	15	[illegible]	-30.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1967

Columns: Standard pressure surface (mb) | No. of observations | Dynamic height | Temperature | Dew Point | Resultant Wind: Direction | Resultant Wind: Speed M.p.s.

* GRAND JUNCTION, COLO. 852 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	1,474	9.3	-1.5	12	2.0
1000	31	12				
950	31	552				
900	31	1,012				
850	31	1,492			12	2.2
800	31	1,997	9.2	-2.7	15	1.6
750	31	2,524	5.7	-5.0	24	1.6
700	31	3,089	1.5	-7.3	27	3.5
650	31	3,675	-2.9	-9.9	27	4.9
600	31	4,311	-7.4	-13.5	27	6.6
550	31	4,973	-12.3	-19.1	26	7.6
500	31	5,705	-17.1	-26.0	26	9.1
450	31	6,480	-22.7	-32.6	26	10.2
400	31	7,342	-28.6	-38.8	26	11.8
350	31	8,284	-35.9	-45.1	26	13.1
300	31	9,336	-44.1		26	14.8
250	31	10,536	-52.6		26	17.4
200	31	11,953	-59.0		26	20.4
175	31	12,788	-59.2		26	20.6
150	31	13,755	-56.9		26	18.6
125	31	14,894	-59.1		26	15.9
100	31	16,292	-60.2		27	12.3
80	29	17,677	-63.5		27	8.4
70	29	18,510	-59.5		27	6.0
60	29	19,478	-58.4		28	3.7
50	29	20,626	-57.1		35	1.3
40	29	22,044	-55.0		05	1.2
30	29	23,892	-52.7		05	2.0
25	29	25,070	-51.7		06	1.4
20	29	26,524	-49.8		06	1.9
15	27	28,419	-46.5		07	1.6
10	26	31,144	-40.3		36	.7
7	19	33,607	-34.3		26	1.6
5	5	36,064	-27.0			

* GREAT FALLS, MONT. 888 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	1,123	6.2	-.6	24	2.7
1000	31	131				
950	31	560				
900	31	1,011				
850	31	1,479	6.3	-3.6	26	5.8
800	31	1,974	3.4	-5.7	28	5.3
750	31	2,497	-.1	-8.7	30	4.9
700	31	3,043	-4.0	-11.1	29	5.4
650	31	3,624	-7.8	-14.7	29	7.0
600	31	4,243	-11.6	-19.1	29	8.7
550	31	4,903	-15.7	-23.8	29	10.6
500	31	5,618	-20.1	-29.1	29	11.3
450	31	6,389	-25.5	-34.0	28	12.9
400	31	7,237	-31.4	-39.0	28	14.4
350	31	8,169	-38.4	-44.2	29	15.5
300	31	9,211	-46.4		28	16.3
250	31	10,401	-54.3		28	15.9
200	31	11,814	-58.5		28	15.9
175	31	12,651	-57.2		28	14.5
150	31	13,634	-55.5		28	12.2
125	31	14,794	-55.0		28	9.0
100	31	16,228	-54.4		29	7.1
80	30	17,655	-55.0		30	3.6
70	30	18,507	-55.0		32	2.0
60	29	19,492	-54.4		33	1.6
50	29	20,662	-53.3		01	1.6
40	29	22,103	-52.2		05	2.4
30	28	23,961	-51.2		07	3.9
25	27	25,150	-50.5		08	5.9
20	27	26,612	-48.7		08	6.6
15	26	28,522	-45.3		08	6.7
10	22	31,271	-38.7		09	9.7
7	18	33,709	-33.4		08	10.1
5	5	36,089	-28.6			

GREEN BAY, WIS. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	210	5.4	1.6	32	.4
1000	31	128				
950	31	550	6.5	-1.3	30	1.8
900	31	991	4.9	-4.3	29	3.2
850	31	1,456	2.5	-6.6	30	4.5
800	31	1,943	-.4	-9.1	29	6.4
750	31	2,455	-3.1	-13.2	29	9.0
700	31	3,001	-5.6	-16.1	29	11.2
650	31	3,573	-8.6	-18.7	28	12.4
600	31	4,196	-12.1	-22.4	28	14.5
550	31	4,850	-16.1	-26.0	28	16.9
500	31	5,567	-21.0	-31.1	28	19.0
450	31	6,331	-26.1	-36.7	28	22.2
400	31	7,179	-32.0	-42.1	28	23.9
350	31	8,111	-38.2	-44.4	28	27.2
300	31	9,156	-45.1	-48.8	28	30.8
250	31	10,355	-51.5		28	30.5
200	31	11,793	-54.5		28	29.2
175	30	12,652	-55.2		28	26.0
150	30	13,638	-54.4		28	21.6
125	30	14,805	-54.7		28	16.7
100	29	16,225	-54.8		29	12.8
80	29	17,652	-54.8		28	7.6
70	29	18,505	-54.6		29	6.0
60	29	19,495	-53.7		31	2.8
50	29	20,670	-52.6		02	1.5
40	29	22,115	-51.9		07	3.0
30	28	23,982	-51.5		08	5.0
25	28	25,168	-50.6		08	5.1
20	27	26,629	-48.9		08	5.6
15	26	28,529	-45.9		09	5.0
10	20	31,257	-39.6		09	5.2
7	12	33,676	-35.6			
5	6	36,032	-31.5			

GREENSBORO, N. C. 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	273	13.3	11.4	01	.7
1000	31	141				
950	31	573	13.8	6.4	30	1.8
900	31	1,028	12.2	4.2	28	4.4
850	31	1,506	10.0	1.0	28	6.9
800	31	2,009	8.0	-3.4	28	9.2
750	31	2,537	5.0	-6.4	28	10.9
700	31	3,100	1.9	-10.6	28	12.4
650	31	3,694	-1.7	-14.7	28	14.4
600	31	4,327	-5.7	-19.2	28	15.7
550	31	5,001	-9.9	-23.3	28	16.5
500	31	5,734	-14.3	-29.5	28	17.5
450	31	6,521	-20.1	-34.6	28	19.1
400	31	7,387	-26.2	-40.6	28	20.4
350	31	8,339	-33.2	-45.2	28	23.0
300	31	9,406	-41.2	-49.9	28	23.7
250	31	10,620	-50.4		28	26.0
200	31	12,045	-59.0		28	30.4
175	31	12,877	-60.9		29	27.7
150	31	13,833	-61.3		29	23.5
125	31	14,964	-61.5		28	18.9
100	31	16,346	-61.8		28	14.5
80	31	17,728	-60.8		28	9.0
70	31	18,560	-59.6		29	5.0
60	31	19,527	-58.0		28	3.0
50	30	20,681	-56.2		26	1.1
40	30	22,104	-54.2		12	.6
30	30	23,955	-52.4		06	1.2
25	29	25,140	-50.8		04	.7
20	28	26,599	-48.7		31	.9
15	26	28,499	-45.6		26	3.0
10	23	31,224	-40.5		29	6.7
7	9	33,671	-36.4			
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GUAM, MARIANA IS. 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	111	24.7	23.4	10	2.8
1000	31	95				
950	31	548	22.9	21.0	10	6.8
900	31	1,016	20.3	17.1	11	6.2
850	31	1,509	17.9	13.2	11	4.4
800	31	2,027	15.3	6.4	11	3.1
750	31	2,572	12.9	3.2	10	3.1
700	31	3,151	10.0	-1.0	09	2.1
650	31	3,762	6.6	-5.3	07	1.8
600	31	4,416	2.8	-10.3	07	1.5
550	31	5,110	-1.4	-14.0	08	.9
500	31	5,869	-5.7	-17.8	11	.1
450	31	6,686	-10.5	-23.8	13	1.0
400	31	7,585	-16.3	-28.4	25	.9
350	31	8,577	-22.9	-34.2	26	3.2
300	31	9,688	-31.2	-42.5	27	5.1
250	31	10,952	-41.5		26	7.1
200	31	12,425	-53.9		27	8.1
175	31	13,268	-60.9		28	8.8
150	31	14,209	-66.3		28	9.5
125	30	15,282	-75.5		29	7.3
100	27	16,555	-79.6		36	2.5
80	26	17,819	-78.1		07	3.9
70	25	18,588	-73.7		08	3.8
60	24	19,507	-66.7		08	3.4
50	23	20,618	-63.2		08	3.8
40	22	22,007	-57.8		09	6.7
30	20	23,644	-53.0		09	11.0
25	20	25,025	-51.1		09	14.4
20	19	26,485	-47.6		08	19.1
15	16	28,398	-44.8		09	23.2
10	13	31,143	-40.9		09	27.3

HILO, HAWAII 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	11	21.3	18.9	21	2.2
1000	31	149	22.2	19.2	20	2.2
950	31	596	18.8	16.6	14	3.4
900	31	1,057	15.6	13.7	12	3.6
850	31	1,54[illegible]	12.7	10.2	12	3.5
800	31	2,04[illegible]	10.8	5.0	11	3.9
750	31	2,591	8.9	-3.4	11	3.4
700	31	3,157	6.6	-8.4	13	2.5
650	31	3,762	3.8	-12.7	14	1.3
600	31	4,4[illegible]	.5	-16.6	22	1.0
550	31	5,09[illegible]	-3.7	-21.3	27	1.9
500	31	5,84[illegible]	-6.4	-24.7	27	4.0
450	31	6,655	-13.9	-28.8	28	5.9
400	31	7,543	-19.9	-34.3	29	9.0
350	31	8,52[illegible]	-27.1	-40.3	29	12.2
300	31	9,613	-35.5	-47.7	29	15.2
250	31	10,856	-45.5		29	18.1
200	31	12,307	-57.0		29	22.7
175	29	13,143	-63.0		29	23.6
150	29	14,08[illegible]	-68.5		28	24.9
125	29	15,162	-72.4		28	23.1
100	29	16,468	-73.8		28	15.1
80	28	17,782	-70.2		27	5.8
70	28	18,582	-66.5		29	.6
60	28	19,522	-63.2		12	2.9
50	28	20,650	-60.9		09	5.6
40	28	22,050	-56.8		10	8.6
30	28	23,891	-52.7		09	11.7
25	28	25,074	-50.3		09	12.0
20	27	26,544	-47.2		09	13.2
15	27	28,461	-44.1		09	13.1
10	23	31,203	-40.6		09	15.2
7	7	33,619	-37.1			
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HUNTINGTON, W. VA. 986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	246	10.9	9.1	18	.7
1000	31	128				
950	31	561	11.8	6.2	23	2.7
900	31	1,011	10.9	4.2	26	6.6
850	31	1,486	8.5	2.3	27	9.3
800	31	1,986	5.8	-2.2	27	10.8
750	31	2,512	3.1	-6.4	28	11.8
700	31	3,07[illegible]	.0	-8.9	28	13.6
650	31	3,66[illegible]	-3.5	-12.7	28	14.4
600	31	4,29[illegible]	-7.4	-17.6	28	16.3
550	31	4,959	-11.5	-23.2	27	17.0
500	31	5,689	-15.8	-27.4	28	19.0
450	31	6,472	-21.3	-33.0	28	20.5
400	31	7,336	-27.4	-39.0	28	21.7
350	31	8,284	-34.5	-44.5	28	23.6
300	31	9,344	-42.2	-49.6	28	27.1
250	31	10,555	-50.7		28	29.0
200	31	11,981	-58.6		28	32.0
175	30	12,818	-61.2		28	30.7
150	30	13,779	-59.8		28	26.1
125	30	14,920	-59.6		28	19.2
100	30	16,314	-59.6		28	14.1
80	29	17,706	-59.3		28	8.8
70	29	18,544	-58.0		28	6.0
60	29	19,521	-56.6		28	3.8
50	29	20,682	-54.8		28	1.4
40	29	22,113	-53.7		06	1.3
30	29	23,970	-51.6		05	1.3
25	29	25,155	-50.6		06	1.2
20	28	26,618	-48.7		07	1.4
15	24	28,528	-44.8		07	1.7
10	20	31,292	-38.9		10	.8
7	9	33,754	-35.8			

* INTERNATIONAL FALLS, MINN. 973 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	360	1.8	-5.4	29	.7
1000	31	135				
950	31	551	4.1	-4.6	27	1.3
900	31	991	2.7	-6.1	29	2.9
850	31	1,451	.1	-8.2	30	3.6
800	31	1,934	-2.8	-11.4	31	4.7
750	31	2,438	-5.7	-14.6	31	6.1
700	31	2,982	-8.7	-18.5	31	7.4
650	31	3,548	-11.7	-22.2	30	8.8
600	31	4,163	-15.2	-26.3	30	10.0
550	31	4,811	-19.1	-29.8	30	12.1
500	31	5,519	-23.6	-33.7	30	14.3
450	31	6,277	-28.7	-39.0	29	15.2
400	31	7,115	-34.6	-43.9	30	18.0
350	31	8,035	-41.2	-47.0	30	20.1
300	31	9,067	-47.8		30	23.4
250	31	10,256	-52.3		29	23.4
200	31	11,693	-53.5		29	21.7
175	31	12,553	-53.0		29	19.2
150	31	13,549	-52.1		29	15.0
125	31	14,730	-52.1		29	11.9
100	31	16,172	-52.7		30	8.8
80	31	17,610	-53.3		30	5.9
70	31	18,470	-53.0		31	3.8
60	31	19,466	-52.2		35	2.1
50	31	20,647	-51.6		05	1.5
40	31	22,095	-51.5		08	2.8
30	31	23,963	-51.0		08	4.2
25	30	25,156	-50.1		08	5.2
20	30	26,619	-48.4		09	6.5
15	29	28,518	-45.3		08	8.5
10	27	31,265	-38.6		09	10.3
7	20	33,751	-32.5		09	11.0
5	8	36,077	-27.7			

JACKSON, MISS. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	94	16.8	15.0	16	.1
1000	31	136			27	.1
950	31	573	17.3	10.3	24	2.7
900	31	1,037	15.7	6.1	24	4.7
850	31	1,521	14.0	.9	25	5.8
800	31	2,031	11.8	-2.6	25	6.4
750	31	2,565	8.8	-6.5	26	7.0
700	31	3,136	5.3	-10.4	26	7.6
650	31	3,734	1.5	-13.0	27	8.6
600	31	4,377	-2.8	-17.4	28	10.9
550	31	5,055	-7.1	-21.9	28	12.6
500	31	5,798	-12.2	-26.0	28	13.7
450	31	6,589	-17.9	-29.7	28	16.0
400	31	7,467	-24.0	-36.2	26	17.6
350	31	8,428	-31.1	-43.1	28	19.4
300	31	9,503	-39.4	-46.9	26	22.2
250	31	10,726	-48.7		28	26.5
200	31	12,159	-58.7		28	31.0
175	31	12,989	-62.9		28	32.2
150	31	13,933	-64.3		28	29.9
125	31	15,046	-65.2		26	24.2
100	31	16,399	-66.5		28	17.1
80	31	17,749	-65.0		28	9.8
70	31	18,565	-63.5		28	6.5
60	31	19,517	-60.2		29	2.9
50	29	20,664	-58.1		36	1.4
40	29	22,079	-54.6		08	1.5
30	27	23,929	-52.2		06	1.5
25	26	25,111	-50.6		02	1.4
20	24	26,576	-48.1		36	2.0
15	23	28,489	-44.8		28	2.9
10	21	31,234	-39.2		28	8.9
7	10	33,700	-35.0			

* JACKSONVILLE, FLA. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	5	19.3	16.5	27	1.3
1000	31	161	20.2	15.2	25	2.2
950	31	602	19.1	10.4	25	4.4
900	31	1,067	16.8	6.2	25	4.6
850	31	1,552	14.1	3.4	25	4.3
800	31	2,062	11.7	-2.4	26	4.8
750	31	2,594	8.8	-7.8	27	5.5
700	31	3,166	5.7	-11.1	27	6.7
650	31	3,764	1.9	-15.6	27	7.5
600	31	4,408	-2.3	-18.4	28	9.1
550	31	5,083	-7.1	-21.1	28	10.1
500	31	5,829	-12.1	-26.5	28	11.9
450	31	6,617	-17.2	-31.3	28	13.5
400	31	7,500	-23.1	-36.9	28	15.1
350	31	8,464	-30.2	-43.8	28	17.4
300	31	9,542	-38.5	-50.2	28	19.9
250	31	10,770	-47.8		28	21.1
200	31	12,208	-57.9		29	25.2
175	31	13,041	-62.1		29	27.7
150	31	13,988	-64.2		29	23.9
125	31	15,100	-65.8		28	21.6
100	31	16,450	-67.3		26	16.2
80	31	17,796	-65.7		28	8.5
70	31	18,611	-63.3		28	5.7
60	31	19,564	-60.6		31	3.4
50	31	20,704	-58.0		02	1.3
40	31	22,120	-54.9		08	2.2
30	31	23,972	-51.3		11	2.6
25	31	25,161	-49.5		09	.5
20	31	26,629	-47.1		30	.5
15	30	28,551	-43.4		27	2.2
10	27	31,312	-37.7		28	7.6
7	17	33,796	-33.1		28	9.4

JOHN F. KENNEDY INT. AP NY 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	5	9.9	3.9	34	2.9
1000	31	134	9.5	2.7	34	4.0
950	31	559	7.6	-.2	34	5.1
900	31	1,003	5.8	-2.9	32	5.4
850	31	1,469	3.8	-5.3	31	6.1
800	31	1,960	1.8	-6.6	30	7.9
750	31	2,483	-.2	-9.5	29	10.3
700	31	3,030	-2.7	-13.2	29	12.0
650	31	3,615	-5.2	-17.1	28	14.4
600	31	4,240	-8.6	-21.1	28	16.5
550	31	4,907	-12.9	-24.7	28	17.9
500	31	5,630	-17.7	-28.8	28	20.0
450	31	6,409	-22.9	-33.4	27	23.4
400	31	7,265	-28.9	-38.9	27	25.9
350	31	8,207	-36.0	-44.1	28	28.1
300	31	9,260	-43.9	-51.8	28	30.4
250	31	10,464	-51.5		28	33.2
200	31	11,884	-57.7		28	33.0
175	31	12,731	-57.6		28	28.7
150	31	13,704	-57.4		28	24.4
125	31	14,858	-57.2		28	19.3
100	31	16,270	-56.8		28	12.3
80	31	17,683	-56.8		28	8.5
70	31	18,529	-56.3		27	6.2
60	30	19,510	-55.6		27	3.3
50	30	20,674	-54.7		24	.4
40	29	22,107	-53.6		10	1.7
30	29	23,96[illegible]	-52.1		09	1.7
25	29	25,144	-51.1		06	2.8
20	29	26,60[illegible]	-48.9		08	3.5
15	28	28,514	-44.7		09	4.6
10	18	31,243	[illegible]		09	2.6
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JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	3	25.8	22.8	10	6.2
1000	31	122	24.8	22.2	09	6.6
950	31	570	21.3	19.6	09	8.0
900	31	1,040	18.5	15.7	10	7.9
850	31	1,529	15.9	12.0	09	6.6
800	31	2,044	13.9	7.3	09	5.5
750	31	2,585	11.4	2.8	09	4.1
700	31	3,161	8.4	-.7	11	2.1
650	31	3,766	5.2	-4.3	14	1.1
600	31	4,420	1.4	-8.9	27	.1
550	31	5,110	-2.6	-14.2	27	1.7
500	31	5,866	-7.0	-19.2	27	2.5
450	31	6,675	-12.0	-25.5	27	3.8
400	31	7,573	-17.9	-30.4	28	7.0
350	31	8,558	-24.9	-36.4	28	9.8
300	31	9,660	-33.2	-43.6	28	14.0
250	31	10,914	-43.4		28	18.6
200	30	12,377	-55.8		27	24.3
175	30	13,213	-62.7		27	25.7
150	30	14,147	-67.6		28	26.0
125	29	15,218	-74.7		28	22.2
100	29	16,503	-77.7		28	13.7
80	29	17,785	-75.0		30	5.2
70	29	18,568	-70.0		01	.5
60	29	19,496	-64.9		09	2.1
50	29	20,616	-61.6		10	4.8
40	29	22,069	-58.2		09	8.4
30	29	23,634	-53.5		09	11.1
25	29	25,017	-51.3		09	13.8
20	29	26,475	-48.7		09	16.0
15	28	28,383	-44.9		09	19.1
10	24	31,116	-41.3		09	21.0
7	11	33,524	-36.7			

KEY WEST, FLA. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	28	3	24.4	18.7	13	2.7
1000	28	147	23.2	16.5	12	3.3
950	28	592	19.8	15.9	14	4.0
900	28	1,059	17.6	11.4	14	2.3
850	28	1,546	15.0	7.1	10	1.3
800	28	2,058	12.7	1.8	15	.7
750	28	2,594	10.8	-2.9	15	.7
700	28	3,170	7.7	-5.7	33	.5
650	28	3,772	4.2	-9.1	30	1.7
600	28	4,424	.4	-13.6	32	2.6
550	28	5,106	-4.0	-17.9	32	4.3
500	28	5,861	-9.2	-22.3	32	6.4
450	28	6,659	-14.6	-27.1	31	7.9
400	28	7,549	-21.0	-32.1	30	9.5
350	28	8,522	-28.0	-38.3	30	11.1
300	28	9,610	-36.4	-45.6	30	14.3
250	28	10,850	-45.7		30	18.8
200	28	12,303	-56.2		30	22.0
175	28	13,141	-61.4		29	24.1
150	28	14,086	-66.2		29	24.7
125	28	15,181	-70.0		29	19.0
100	28	16,504	-71.5		29	14.0
80	28	17,823	-71.0		29	7.0
70	28	18,618	-67.9		30	4.5
60	28	19,555	-63.1		02	2.1
50	28	20,691	-59.4		07	5.2
40	28	22,102	-55.4		08	6.2
30	28	23,955	-51.4		10	8.2
25	28	25,147	-48.8		09	6.3
20	25	26,628	-45.8		09	6.4
15	24	28,562	-42.3		08	5.6
10	16	31,323	-37.2		07	4.3
7	9	33,783	-33.7			

KING SALMON, ALASKA 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	15	2.7	-1.7	08	.5
1000	31	136	4.8	-1.3	04	1.4
950	31	554	4.3	-4.2	05	3.2
900	31	993	2.2	-5.8	06	3.6
850	31	1,453	-.4	-7.6	07	3.6
800	31	1,936	-2.9	-10.7	07	3.1
750	31	2,443	-5.5	-14.2	06	3.7
700	31	2,985	-8.3	-18.4	05	3.9
650	31	3,552	-11.7	-22.0	05	4.2
600	31	4,167	-15.1	-26.6	04	4.4
550	31	4,815	-19.3	-32.0	04	4.3
500	31	5,522	-24.2	-36.1	04	4.6
450	31	6,280	-29.5	-40.4	03	4.7
400	31	7,114	-35.4	-44.9	02	4.3
350	31	8,031	-42.2		01	5.2
300	31	9,058	-49.4		01	6.4
250	31	10,236	-54.9		36	7.2
200	31	11,665	-53.1		33	5.3
175	31	12,529	-52.0		32	3.6
150	31	13,527	-52.1		32	3.4
125	31	14,706	-52.5		32	2.7
100	31	16,146	-53.1		32	2.0
80	31	17,587	-51.9		32	1.1
70	30	18,453	-51.1		32	.9
60	30	19,457	-50.3		06	.4
50	30	20,648	-49.8		10	1.0
40	30	22,110	-49.3		09	3.4
30	29	24,001	-48.5		09	5.2
25	28	25,205	-48.0		09	6.7
20	28	26,679	-47.1		09	8.0
15	27	28,588	-44.9		09	10.9
10	24	31,332	-41.1		09	14.6
7	15	33,770	-38.1			
5	5	35,932	-39.7			

* KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	30	29.5	25.9	06	1.6
1000	31	86	27.6	24.0	07	1.6
950	31	535	23.5	20.0	08	2.2
900	31	1,011	20.8	15.9	08	2.6
850	31	1,505	18.3	12.4	09	2.6
800	31	2,023	15.8	8.6	10	2.7
750	31	2,566	13.0	5.2	09	3.2
700	31	3,148	9.9	1.7	09	3.3
650	31	3,757	6.6	-2.6	09	3.8
600	31	4,414	2.8	-6.6	09	4.2
550	31	5,110	-1.0	-11.9	10	4.1
500	31	5,870	-5.1	-17.4	10	3.4
450	31	6,687	-9.8	-22.4	12	2.5
400	31	7,593	-15.2	-28.9	14	1.6
350	31	8,589	-22.0	-35.4	18	1.7
300	31	9,704	-30.4	-43.4	16	2.7
250	31	10,972	-40.7	-52.6	20	3.4
200	31	12,451	-53.2		19	3.4
175	31	13,297	-60.3		22	2.0
150	31	14,242	-67.5		25	1.6
125	31	15,319	-74.9		31	2.2
100	30	16,595	-80.5		06	3.4
80	30	17,863	-76.0		06	2.7
70	30	18,643	-71.1		30	1.4
60	30	19,565	-66.0		26	4.9
50	30	20,682	-61.5		28	4.8
40	30	22,077	-57.9		31	1.2
30	29	23,908	-53.7		10	7.6
25	29	25,083	-51.9		09	15.4
20	29	26,538	-46.6		09	23.0
15	26	28,449	-44.0		09	27.9
10	24	31,206	-38.3		09	34.5
7	13	33,646	-34.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KOTZEBUE, ALASKA — 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-2.0	-4.3	26	1.2
1000	31	148	.0	-5.4	26	1.8
950	31	557	-.8	-7.3	26	2.9
900	31	990	-1.9	-9.0	26	3.6
850	31	1,443	-3.2	-11.8	27	4.7
800	31	1,922	-5.0	-13.7	27	5.5
750	31	2,424	-7.4	-15.5	28	6.1
700	31	2,964	-9.9	-19.3	28	7.7
650	30	3,529	-13.0	-22.9	28	8.1
600	30	4,138	-17.0	-27.0	28	8.5
550	30	4,779	-21.3	-32.2	28	9.4
500	30	5,482	-26.0	-35.7	28	10.4
450	30	6,232	-31.5	-40.0	29	10.7
400	30	7,060	-37.6	-44.3	29	11.8
350	30	7,968	-44.2		30	13.5
300	30	8,986	-50.9		29	14.3
250	30	10,161	-53.9		29	15.4
200	30	11,603	-50.6		29	12.4
175	30	12,475	-50.1		30	11.4
150	30	13,482	-50.3		29	9.7
125	30	14,670	-50.8		29	7.4
100	30	16,122	-51.0		30	4.7
80	30	17,575	-50.1		30	2.3
70	30	18,449	-49.1		31	1.7
60	30	19,463	-47.9		33	.7
50	30	20,669	-46.6		10	1.2
40	30	22,153	-45.6		10	3.2
30	28	24,079	-44.4		08	5.3
25	27	25,301	-43.8		08	7.6
20	25	26,806	-42.5		09	9.5
15	24	28,767	-39.9		09	11.1
10	19	31,560	-36.2		08	11.5
7	7	34,072	-34.0			

LAKE CHARLES, LA. — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	19.7	18.1	10	1.1
1000	31	135	20.7	17.6	14	2.4
950	31	578	18.0	14.4	16	4.7
900	31	1,040	17.0	5.4	20	5.8
850	31	1,527	15.0	1.1	21	5.3
800	31	2,038	12.5	-2.9	22	4.9
750	31	2,578	10.1	-6.3	23	5.5
700	31	3,147	6.9	-11.0	25	6.1
650	31	3,750	3.3	-14.1	26	7.1
600	31	4,396	-.8	-19.3	27	8.2
550	31	5,079	-5.5	-23.5	27	8.8
500	31	5,825	-10.8	-27.0	27	10.4
450	31	6,624	-16.3	-32.6	26	12.9
400	31	7,503	-22.6	-37.3	28	15.0
350	31	8,469	-29.6	-43.0	28	18.5
300	31	9,551	-37.7	-49.6	28	21.1
250	31	10,783	-47.2		28	24.8
200	31	12,224	-57.8		28	28.0
175	31	13,057	-62.5		28	29.2
150	31	14,000	-65.4		28	28.7
125	31	15,106	-66.4		28	24.5
100	30	16,452	-66.4		28	16.6
80	30	17,789	-67.7		28	10.9
70	30	18,596	-65.3		29	4.9
60	30	19,726	-62.1		28	1.2
50	30	20,675	-59.0		36	.4
40	30	22,087	-54.9		05	.8
30	30	23,938	-51.4		03	1.6
25	30	25,127	-49.3		04	1.8
20	29	26,599	-47.3		33	1.1
15	29	28,513	-44.2		26	4.0
10	25	31,256	-38.8		27	10.2
7	13	33,712	-36.1			

LANDER, WYO. — 829 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,696	5.6	.0	25	1.8
1000	31	135				
950	31	564				
900	31	1,012				
850	31	1,464				
800	31	1,987	6.0	-2.4	29	1.7
750	31	2,511	2.7	-4.6	29	2.8
700	31	3,069	-.5	-8.2	30	4.9
650	31	3,655	-4.4	-12.1	30	5.7
600	31	4,283	-8.6	-17.5	30	7.6
550	31	4,945	-13.1	-22.0	29	8.[illegible]
500	31	5,673	-18.0	-27.6	29	9.4
450	31	6,444	-23.8	-33.2	28	10.6
400	31	7,302	-30.5	-38.5	28	11.2
350	31	8,237	-38.1	-43.6	28	12.5
300	31	9,286	-46.0		27	15.6
250	31	10,471	-54.1		27	16.2
200	31	11,682	-59.5		27	16.0
175	31	12,718	-59.2		27	16.5
150	31	13,685	-58.2		27	15.7
125	31	14,834	-57.6		27	13.6
100	31	16,242	-57.6		27	9.3
80	31	17,647	-57.8		28	6.7
70	31	18,487	-57.9		29	4.8
60	31	19,462	-56.9		29	1.9
50	31	20,62[illegible]	-55.6		02	1.1
40	31	22,047	-54.2		07	3.0
30	31	23,899	-52.4		06	4.1
25	30	25,076	-51.2		08	5.0
20	29	26,536	-49.0		06	5.9
15	26	28,431	-45.8		08	4.3
10	13	31,183	-40.8		08	4.5

* LIHUE, KAUAI, HAWAII — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3[illegible]	22.6	19.5	[illegible]6	2.7
1000	31	15[illegible]	[illegible]	[illegible]	[illegible]6	4.6
950	31	58[illegible]	[illegible]	17.5	[illegible]6	5.[illegible]
900	31	1,058	16.[illegible]	14.0	[illegible]8	4.[illegible]
850	31	1,543	13.[illegible]	10.1	[illegible]9	3.5
800	31	2,053	11.2	4.3	1[illegible]	[illegible].7
750	31	2,58[illegible]	9.3	-3.[illegible]	11	1.6
700	31	3,160	6.4	-7.5	17	.7
650	31	3,759	3.1	-12.5	18	.5
600	31	4,41[illegible]	.1	-17.0	21	.7
550	31	5,096	-4.0	-21.0	27	[illegible].1
500	31	5,84[illegible]	-[illegible]	-25.[illegible]	27	[illegible].4
450	31	6,654	-13.8	-30.6	26	[illegible].5
400	31	7,54[illegible]	-20.[illegible]	-35.1	29	7.6
350	31	8,517	-27.7	-41.1	29	10.4
300	31	9,60[illegible]	-36.2	-46.[illegible]	29	13.4
250	31	10,844	-46.3		26	17.3
200	31	12,[illegible]86	-57.6		26	[illegible]
175	31	13,11[illegible]	-63.[illegible]		28	24.5
150	31	14,051	-69.0		26	[illegible]3.7
125	31	15,131	-72.4		28	21.5
100	31	16,439	-72.9		26	14.[illegible]
80	29	17,74[illegible]	-70.0		28	1[illegible].1
70	29	18,549	-66.4		28	5.[illegible]
60	29	19,490	-62.9		07	.[illegible]
50	29	20,61[illegible]	-6[illegible]		11	4.[illegible]
40	29	22,019	-56.7		10	6.7
30	29	23,861	-52.7		09	8.9
25	28	25,044	-50.[illegible]		09	10.2
20	27	26,511	-48.1		09	10.2
15	25	28,419	-45.1		09	10.5
10	21	31,140	-40.7		09	9.3
7	20	33,587	-36.4		10	8.2
5	14	35,970	-33.1		[illegible]9	9.3
4	9	37,549	-3[illegible].5			

LITTLE ROCK, ARK. — [illegible]

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	1[illegible].7	12.3	21	.[illegible]
1000	31	1[illegible]			25	1.[illegible]
950	31	57[illegible]	1[illegible]	10.2	[illegible]	4.1
900	31	1,[illegible]	[illegible]	7.0	25	[illegible]
850	31	1,51[illegible]	[illegible]	2.1	26	6.9
800	31	2,[illegible]	[illegible]	-1.6	26	7.[illegible]
750	31	2,[illegible]	7.3	-6.[illegible]	27	8.1
700	31	3,[illegible]7	4.1	-9.[illegible]	27	[illegible].3
650	31	3,7[illegible]	.3	-1[illegible]	28	11.3
600	31	4,354	-3.9	-17.[illegible]	28	1[illegible]
550	31	[illegible]	[illegible]	-21.4	2[illegible]	14.8
500	31	[illegible]	[illegible]	-26.5	27	1[illegible]
450	31	[illegible]	-18.6	-3[illegible]	27	17.5
400	31	7,43[illegible]	-2[illegible].1	-37.[illegible]	27	1[illegible].4
350	31	[illegible]	-3[illegible].1	-43.[illegible]	27	22.2
300	31	[illegible]	-4[illegible].3	-49.[illegible]	27	[illegible]
250	31	1[illegible]	-49.0		27	30.7
200	31	12,[illegible]	-56.[illegible]		27	34.[illegible]
175	3[illegible]	12,940	-[illegible]		27	32.4
150	30	13,893	-[illegible]		28	29.1
125	30	15,[illegible]	-63.0		28	23.1
100	30	16,[illegible]	-[illegible]		26	1[illegible]
80	3[illegible]	17,755	-[illegible]		26	[illegible]
70	30	18,578	-[illegible]		26	7.2
60	30	1[illegible]	-[illegible]		26	[illegible].5
50	30	[illegible]	[illegible]		3[illegible]	.[illegible]
40	30	22,11[illegible]	-54.1		[illegible]	.8
30	29	23,967	-5[illegible]		[illegible]5	1.3
25	29	25,1[illegible]	-5[illegible]		[illegible]3	.8
20	28	26,614	-4[illegible]		[illegible]3	1.[illegible]
15	2[illegible]	28,5[illegible]	-4[illegible]		28	1.4
10	21	31,[illegible]81	-3[illegible]		27	2.4
7	5	3[illegible]	-3[illegible]			

MCGRATH, ALASKA — 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	3.9	.0	30	.9
1000	31	146			31	1.5
950	31	563	5.0	-2.5	32	1.7
900	31	1,005	2.1	-5.1	28	2.1
850	31	1,464	-.7	-6.9	26	2.6
800	31	1,947	-3.2	-8.7	27	2.8
750	31	2,453	-6.0	-12.2	30	3.2
700	31	2,993	-9.0	-15.9	30	3.8
650	31	3,559	-12.4	-19.9	30	4.2
600	31	4,172	-16.0	-24.5	31	5.3
550	31	4,817	-20.2	-28.4	31	6.4
500	31	5,522	-24.8	-34.1	31	7.2
450	31	6,274	-30.2	-38.8	30	8.3
400	31	7,109	-36.4	-43.7	30	9.2
350	31	8,021	-43.3		30	10.0
300	31	9,040	-51.0		30	12.3
250	31	10,208	-56.6		30	11.6
200	31	11,634	-52.7		30	8.3
175	31	12,498	-51.6		30	6.9
150	31	13,498	-51.8		30	6.9
125	31	14,678	-52.3		31	5.0
100	31	16,120	-52.5		31	3.6
80	31	17,566	-51.1		31	1.9
70	31	18,436	-50.2		32	1.2
60	30	19,445	-49.2		02	.9
50	30	20,643	-48.4		07	1.3
40	30	22,115	-47.5		08	2.8
30	29	24,010	-46.9		09	5.7
25	27	25,220	-46.2		08	6.6
20	26	26,694	-45.0		08	8.0
15	23	28,601	-43.2		08	9.2
10	20	31,341	-39.7		08	13.6

* MAJURO, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	29.1	24.6	09	3.2
1000	31	93	27.6	22.6	10	4.0
950	31	542	23.7	18.6	10	6.0
900	31	1,018	21.3	15.2	10	6.4
850	31	1,513	18.6	12.2	10	6.3
800	31	2,032	16.2	9.0	10	6.5
750	31	2,578	13.6	5.2	10	6.3
700	31	3,159	10.7	1.4	09	6.0
650	31	3,771	7.1	-1.8	09	5.4
600	31	4,428	3.3	-5.6	09	5.6
550	31	5,118	-.7	-10.1	09	4.8
500	31	5,886	-4.8	-16.7	10	2.5
450	31	6,701	-9.6	-22.0	15	1.2
400	31	7,612	-15.1	-27.4	16	1.3
350	31	8,609	-21.7	-35.0	22	1.6
300	31	9,726	-30.6	-42.7	24	2.6
250	31	10,999	-40.1	-51.7	23	4.5
200	31	12,465	-52.5		25	6.9
175	31	13,331	-59.6		26	8.0
150	31	14,279	-66.9		27	10.3
125	31	15,361	-73.9		26	10.6
100	31	16,644	-79.4		27	7.5
80	31	17,916	-75.7		29	5.5
70	31	18,696	-70.3		26	6.9
60	31	19,626	-64.9		27	7.5
50	31	20,750	-60.9		27	5.8
40	31	22,150	-56.8		26	1.4
30	30	23,989	-53.0		09	8.3
25	30	25,175	-50.3		09	13.4
20	29	26,645	-46.9		09	21.5
15	28	28,567	-44.6		09	27.5
10	21	31,332	-37.4		09	33.9
7	6	33,771	-35.3			

* MARCUS IS., N. PACIFIC — 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	26.7	22.1	15	2.7
1000	31	11[illegible]	24.7	19.7	15	3.2
950	31	55[illegible]	20.7	16.[illegible]	18	3.9
900	31	1,026	17.7	12.0	20	4.1
850	31	1,514	15.1	8.4	22	4.1
800	31	2,027	13.3	2.0	23	4.0
750	31	2,565	11.3	-1.6	23	4.6
700	31	3,143	8.6	-5.8	24	5.6
650	31	3,751	5.3	-9.0	24	6.4
600	31	4,40[illegible]	1.4	-11.2	25	7.2
550	31	5,094	-2.7	-15.7	25	7.8
500	31	5,849	-6.8	-20.0	25	8.0
450	31	6,657	-11.6	-24.7	25	8.3
400	31	7,559	-17.7	-30.6	26	8.9
350	31	8,54[illegible]	-25.0	-38.0	26	9.5
300	31	9,64[illegible]	-33.1	-46.3	27	9.6
250	31	10,900	-43.2		27	11.8
200	31	12,365	-54.6		28	15.2
175	31	13,207	-6[illegible]		28	16.5
150	31	14,[illegible]	-65.7		28	16.5
125	31	15,250	-69.5		28	13.0
100	31	16,564	-73.0		28	8.4
80	31	17,67[illegible]	-72.5		30	3.6
70	31	18,664	-69.5		02	2.0
60	31	19,594	-64.3		07	4.3
50	30	20,724	-59.3		09	5.2
40	30	22,13[illegible]	-54.4		[illegible]9	6.4
30	30	23,998	-50.3		11	7.9
25	30	25,194	-48.1		11	6.9
20	30	26,672	-45.2		11	4.7
15	28	28,600	-43.0		11	3.9
10	26	31,356	-37.6		19	1.5
7	17	33,842	-35.0		26	2.5
5	10	36,188	-33.9			

* MEDFORD, OREG. — 973 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	8.0	4.5	31	.7
1000	31	169				
950	31	599	9.0	3.9	31	1.1
900	31	1,045	6.9	2.1	30	1.3
850	31	1,516	6.6	-.9	32	.9
800	31	2,012	4.2	-6.2	30	[illegible]
750	31	2,530	1.0	-10.3	26	3.4
700	31	3,087	-2.0	-14.9	27	4.3
650	31	3,670	-5.4	-20.7	26	4.9
600	31	4,297	-9.2	-24.4	29	6.0
550	31	4,959	-13.8	-27.2	26	6.9
500	31	5,682	-18.9	-31.6	29	8.1
450	31	6,453	-24.5	-36.3	28	7.9
400	31	7,306	-30.7	-41.6	28	8.5
350	31	8,240	-37.7	-46.0	29	9.5
300	31	9,286	-45.1		29	10.2
250	31	10,482	-52.6		29	11.7
200	31	11,899	-59.0		29	12.7
175	31	12,733	-6[illegible]		28	1[illegible]
150	31	13,6[illegible]	-58.0		26	1[illegible].5
125	31	14,647	-57.0		27	1[illegible].2
100	31	16,253	-57.8		27	7.6
80	31	17,665	-57.1		27	4.6
70	31	18,507	-56.7		27	2.7
60	31	19,484	-56.0		26	1.7
50	31	20,64[illegible]	-56.1		33	1.0
40	31	22,062	-55.2		[illegible]5	1.3
30	31	23,905	-53.4		07	3.1
25	31	25,082	-52.0		07	3.5
20	29	26,526	-50.5		08	4.2
15	29	28,420	-48.0		07	3.9
10	28	31,141	-4[illegible].3		08	3.9
7	26	33,001	-34.5		[illegible]8	3.2
5	16	35,983	-2[illegible]		[illegible]5	4.1

MERIDA, MEXICO — [illegible]

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	2[illegible].7	20.8	11	2.5
1000	31	1[illegible]	[illegible]	[illegible]	12	6.2
950	31	5[illegible]	21.0	17.7	15	10.3
900	31	1,[illegible]	2[illegible]	11.3	13	8.4
850	31	1,54[illegible]	18.1	6.0	13	5.4
800	31	2,0[illegible]	15.3	1.8	12	3.3
750	31	2,[illegible]	1[illegible].6	-3.3	13	2.0
700	31	3,1[illegible]	9.4	-7.3	11	.7
650	31	3,7[illegible]	6.3	-11.6	[illegible]	1.2
600	31	4,44[illegible]	[illegible]	-17.6	[illegible]	2.0
550	31	5,1[illegible]	-1.5	-22.1	35	3.1
500	31	5,9[illegible]	-6.3	-2[illegible]	35	3.8
450	31	6,7[illegible]	-11.[illegible]	-29.7	33	4.3
400	31	7,6[illegible]	-17.8	-34.3	31	6.3
350	31	8,593	-24.9	-4[illegible].5	31	8.5
300	31	9,696	-33.3	-4[illegible]	29	9.[illegible]
250	31	1[illegible]	-43.3		30	11.7
200	31	12,413	-54.5		29	14.6
175	31	13,253	-61.1		28	13.9
150	31	14,1[illegible]	-67.3		28	14.5
125	31	15,[illegible]	-72.1		28	13.[illegible]
100	31	16,5[illegible]	-74.1		30	8.[illegible]
80	31	17,[illegible]	-73.6		33	4.[illegible]
70	31	18,672	-70.2		[illegible]	3.2
60	31	19,602	-64.5		07	3.8
50	31	20,731	-5[illegible].8		07	4.6
40	30	22,143	-55.1		08	5.[illegible]
30	29	23,9[illegible]	-5[illegible]		09	11.0
25	29	25,195	-47.[illegible]		09	12.1
20	2[illegible]	26,679	-44.3		09	11.4
15	2[illegible]	28,61[illegible]	-41.0		09	12.1
10	20	31,384	-37.4		1[illegible]	15.2

* MIAMI, FLA. — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	22.6	19.7	13	1.0
1000	31	148	22.6	18.7	14	2.3
950	31	595	19.7	15.5	16	2.6
900	31	1,058	17.1	10.5	16	2.2
850	31	1,545	14.6	5.9	15	1.4
800	31	2,056	12.6	-1.4	15	.8
750	31	2,595	10.4	-7.3	10	.4
700	31	3,167	7.4	-10.8	31	.7
650	31	3,773	3.8	-14.2	30	1.8
600	31	4,418	.0	-18.2	30	2.6
550	31	5,104	-4.6	-21.5	31	4.3
500	31	5,853	-9.7	-26.1	30	5.6
450	31	6,657	-14.9	-30.7	30	8.2
400	31	7,542	-21.0	-36.1	29	10.4
350	31	8,514	-28.1	-41.9	29	11.6
300	31	9,602	-36.7	-49.7	30	13.3
250	31	10,839	-46.2		29	15.6
200	31	12,286	-56.9		30	21.2
175	30	13,127	-62.0		29	23.5
150	26	14,072	-66.7		29	22.7
125	26	15,165	-69.4		29	19.0
100	26	16,488	-71.5		29	13.2
80	26	17,806	-70.6		28	6.9
70	25	18,602	-67.5		30	3.8
60	25	19,540	-63.0		35	2.5
50	25	20,673	-59.8		06	4.1
40	24	22,076	-55.7		09	6.2
30	21	23,935	-51.6		09	5.9
25	20	25,129	-49.0		08	4.8
20	19	26,601	-46.2		07	4.8
15	17	28,536	-42.4		10	4.1
10	16	31,306	-37.1		10	.7
7	12	33,790	-33.4			

* MIDLAND, TEXAS — 914 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	15.2	4.6	16	1.3
1000	31	103				
950	31	543				
900	31	1,007	17.4	6.1	18	2.4
850	31	1,496	17.3	1.8	21	4.3
800	31	2,011	15.0	-1.8	24	4.7
750	31	2,553	11.6	-6.2	26	5.3
700	31	3,127	7.8	-10.0	26	6.3
650	31	3,730	3.4	-13.0	26	7.8
600	31	4,377	-1.5	-16.2	25	9.8
550	31	5,058	-6.6	-21.3	25	12.7
500	31	5,801	-11.5	-26.6	26	15.0
450	31	6,594	-17.0	-31.8	26	17.4
400	31	7,473	-23.8	-37.2	26	20.6
350	31	8,435	-30.9	-42.7	26	24.6
300	31	9,510	-38.9	-49.6	26	28.2
250	31	10,735	-48.6		26	30.7
200	31	12,170	-56.0		26	35.1
175	31	13,003	-62.0		26	34.9
150	31	13,952	-63.4		26	31.0
125	31	15,067	-65.2		27	25.6
100	31	16,422	-66.5		27	15.3
80	31	17,767	-67.6		27	9.7
70	31	18,575	-64.9		27	6.2
60	31	19,525	-61.4		29	2.9
50	31	20,666	-57.9		05	1.0
40	31	22,082	-55.0		07	2.0
30	30	23,936	-52.0		07	1.6
25	30	25,121	-50.7		03	1.1
20	30	26,582	-48.2		31	1.1
15	29	28,498	-44.3		28	3.7
10	26	31,254	-38.6		27	8.1
7	19	33,746	-34.9		26	8.5
5	6	36,138	-29.0			

MONTGOMERY, ALA. — 101[illegible] MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	16.9	15.2	05	.1
1000	31	143	18.0	15.0	25	.2
950	31	583	18.2	12.0	27	2.4
900	31	1,046	16.3	6.8	27	4.0
850	31	1,531	14.3	1.3	26	4.8
800	31	2,041	11.6	-3.4	26	6.1
750	31	2,574	8.6	-7.0	26	7.0
700	31	3,145	5.4	-11.0	27	7.5
650	31	3,743	1.7	-14.3	27	9.3
600	31	4,386	-2.6	-16.7	27	10.5
550	31	5,064	-7.1	-22.6	27	10.3
500	31	5,809	-11.9	-25.7	28	12.9
450	31	6,603	-17.5	-30.9	28	14.1
400	31	7,480	-23.7	-37.8	28	16.2
350	31	8,441	-30.6	-44.6	28	17.0
300	31	9,517	-39.0	-49.8	28	18.7
250	31	10,742	-48.5		29	22.0
200	31	12,175	-58.7		29	26.3
175	31	13,005	-62.2		29	27.6
150	30	13,958	-64.3		28	25.8
125	30	15,070	-64.7		28	21.9
100	30	16,427	-66.4		28	15.0
80	30	17,774	-6[illegible].4		27	9.3
70	30	18,544	-63.5		28	6.5
60	30	19,547	-61.3		29	3.7
50	29	20,689	-57.7		33	1.6
40	29	22,105	-54.9		07	1.3
30	27	23,94[illegible]	-52.1		[illegible]4	1.2
25	27	25,133	-5[illegible].4		03	1.0
20	25	26,6[illegible]	-47.2		04	.3
15	23	28,528	-4[illegible].7		28	2.3
10	21	31,290	-37.6		28	5.4
7	5	33,751	-33.1			

* NANTUCKET, MASS. — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	8.2	5.1	33	1.4
1000	31	128	7.7	2.0	33	1.8
950	31	547	6.6	-1.4	33	3.5
900	31	993	5.0	-3.5	32	4.3
850	31	1,459	3.8	-5.4	30	5.3
800	31	1,950	1.6	-6.2	28	7.2
750	31	2,465	-.6	-11.4	28	8.3
700	31	3,018	-3.0	-15.0	28	11.0
650	31	3,598	-5.8	-18.4	28	13.9
600	31	4,226	-9.1	-22.7	27	16.7
550	31	4,890	-13.1	-26.4	27	17.9
500	31	5,614	-18.0	-31.4	27	18.9
450	31	6,385	-23.2	-35.9	27	21.3
400	31	7,246	-29.2	-41.1	27	23.7
350	31	8,188	-36.0	-4[illegible]	27	26.3
300	31	9,242	-43.7	-50.2	27	28.4
250	31	10,447	-50.9		28	30.2
200	31	11,881	-56.2		28	30.2
175	31	12,727	-56.7		27	27.5
150	31	13,707	-55.8		27	23.9
125	31	14,868	-55.8		27	21.1
100	31	16,28[illegible]	-56.1		27	1[illegible].5
80	30	17,706	-55.6		26	9.8
70	30	18,556	-55.1		26	5.8
60	29	19,54[illegible]	-54.5		26	3.4
50	29	20,714	-53.8		27	1.1
40	29	22,148	-53.0		[illegible]	1.0
30	28	24,0[illegible]	-51.5		[illegible]	3.0
25	26	25,2[illegible]	-50.6		[illegible]	3.5
20	25	26,65[illegible]	-48.6		[illegible]9	3.3
15	21	28,585	-44.9		10	4.2
10	17	31,337	-38.4		10	5.8
7	15	33,822	-32.4		12	4.[illegible]
5	8	36,270	-26.3			

* NASHVILLE, TENN. — [illegible] MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	14.1	12.4	24	.8
1000	31	134				
950	31	572	15.1	8.2	27	3.8
900	31	1,026	13.3	5.6	27	7.0
850	31	1,500	11.0	1.7	27	8.5
800	31	2,010	8.3	-.6	27	9.6
750	31	2,538	5.1	-4.5	28	10.1
700	31	3,101	1.7	-9.0	28	12.3
650	31	3,693	-1.8	-12.9	27	14.6
600	31	4,328	-5.6	-16.9	27	16.5
550	31	5,004	-9.7	-20.5	28	17.4
500	31	5,73[illegible]	-14.5	-26.6	28	18.7
450	31	6,52[illegible]	-19.7	-31.6	28	19.7
400	31	7,3[illegible]	-25.7	-38.3	27	20.8
350	31	8,344	-32.6	-44.1	28	23.8
300	31	9,41[illegible]	-40.6	-5[illegible].1	27	26.3
250	31	10,62[illegible]	-5[illegible]		27	28.1
200	31	12,0[illegible]	-5[illegible].4		28	31.0
175	31	12,88[illegible]	-6[illegible].1		26	3[illegible]
150	31	13,83[illegible]	-61.0		26	27.9
125	31	14,47[illegible]	-61.3		28	20.7
100	31	16,35[illegible]	-61.8		28	15.5
80	31	17,73[illegible]	-61.[illegible]		26	[illegible]
70	31	18,5[illegible]	-[illegible]		28	[illegible]
60	31	19,53[illegible]	-5[illegible]		28	4.0
50	31	20,68[illegible]	-5[illegible]		34	1.3
40	31	22,1[illegible]	-53.8		[illegible]	1.2
30	28	23,9[illegible]	-5[illegible]		[illegible]8	1.0
25	27	2[illegible]	-50.9		[illegible]	.7
20	24	2[illegible]	-4[illegible]		[illegible]7	1.6
15	24	28,515	-44.5		15	.9
10	21	31,265	-39.1		30	2.0
7	19	33,74[illegible]	-3[illegible]		2[illegible]	1.8
5	13	36,[illegible]	-27.1		1[illegible]	2.1
4	8	37,[illegible]	-2[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1967

NOME, ALASKA 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-1.5	-3.5	28	1.1
1000	31	151	-.2	-3.3	27	1.5
950	31	559	.0	-4.1	27	2.1
900	31	996	-.6	-7.4	26	3.3
850	31	1,452	-1.5	-10.2	27	3.6
800	31	1,933	-3.3	-11.9	27	3.6
750	31	2,437	-5.5	-14.7	27	4.2
700	31	2,981	-8.4	-18.5	28	5.1
650	31	3,546	-12.0	-21.7	28	6.4
600	31	4,161	-15.5	-26.4	28	6.9
550	31	4,807	-19.6	-30.4	28	7.7
500	31	5,514	-24.5	-35.8	29	8.9
450	31	6,266	-30.0	-40.1	29	9.6
400	31	7,102	-36.3	-44.4	29	10.6
350	31	8,015	-43.1		30	12.5
300	31	9,038	-50.3		30	14.4
250	31	10,213	-54.9		30	13.4
200	31	11,646	-52.2		30	10.1
175	31	12,512	-51.2		30	8.5
150	31	13,514	-51.4		30	7.1
125	31	14,696	-52.1		31	5.4
100	31	16,139	-52.4		31	3.5
80	31	17,585	-51.3		31	2.0
70	31	18,454	-50.2		32	.9
60	31	19,464	-48.7		06	.4
50	31	20,666	-47.7		08	1.4
40	31	22,142	-46.8		09	2.9
30	29	24,049	-46.3		09	5.0
25	26	25,264	-45.6		09	6.7
20	19	26,736	-44.6		09	8.7
15	10	28,659	-42.3			
10						
7						
5						

* NORTH PLATTE, NEBR. 917 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	848	5.4	2.6	36	.8
1000	31	134				
950	31	556				
900	31	1,004	6.0	2.4	32	1.6
850	31	1,476	7.5	-.4	31	2.2
800	31	1,975	6.1	-2.5	29	3.2
750	31	2,499	3.4	-4.6	28	5.8
700	31	3,058	-.3	-7.7	29	7.8
650	31	3,643	-4.4	-10.9	28	9.6
600	31	4,274	-8.5	-15.9	28	10.8
550	31	4,937	-12.8	-22.4	28	12.4
500	31	5,664	-17.5	-27.6	28	13.9
450	31	6,438	-23.0	-32.6	27	15.4
400	31	7,298	-29.1	-38.3	27	17.7
350	31	8,239	-36.3	-43.4	27	19.2
300	31	9,290	-44.3		27	21.7
250	31	10,490	-52.3		27	24.4
200	31	11,904	-58.7		27	26.9
175	31	12,746	-59.6		27	24.3
150	31	13,710	-58.5		28	21.6
125	31	14,858	-58.2		28	17.7
100	31	16,260	-58.7		28	12.9
80	31	17,663	-58.7		26	8.6
70	30	18,507	-58.3		29	6.0
60	30	19,480	-57.0		30	3.8
50	30	20,638	-55.2		33	1.6
40	30	22,067	-53.8		03	1.7
30	30	23,922	-52.2		07	2.5
25	30	25,104	-51.3		07	2.7
20	29	26,555	-49.7		08	3.5
15	25	28,465	-45.6		09	4.1
10	24	31,199	-39.5		09	2.8
7	21	33,668	-33.8		08	1.7
5	7	36,045	-27.6			

* OAKLAND, CALIF. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	11.4	8.5	26	1.5
1000	31	146	11.3	7.6	26	2.0
950	31	576	12.8	2.9	29	3.5
900	31	1,030	13.0	-2.3	32	5.2
850	31	1,508	10.8	-6.1	32	4.6
800	31	2,010	7.8	-10.0	31	3.6
750	31	2,535	4.9	-13.3	30	4.0
700	31	3,099	1.4	-17.2	30	3.9
650	31	3,684	-2.2	-20.5	30	4.2
600	31	4,322	-6.4	-24.1	30	5.3
550	31	4,987	-11.2	-28.1	29	6.2
500	31	5,721	-16.2	-32.2	29	7.9
450	31	6,497	-22.0	-37.1	29	9.1
400	31	7,362	-28.4	-41.7	29	10.8
350	31	8,304	-36.0	-47.2	29	11.6
300	31	9,356	-44.4		29	11.9
250	31	10,553	-53.1		29	13.9
200	31	11,969	-59.2		28	15.4
175	30	12,796	-59.7		28	14.9
150	30	13,759	-59.8		27	14.0
125	30	14,900	-59.2		27	12.4
100	30	16,293	-60.4		26	10.5
80	29	17,682	-59.5		26	6.7
70	28	18,519	-59.0		27	4.4
60	27	19,484	-58.7		27	2.0
50	27	20,631	-57.6		29	1.1
40	27	22,044	-56.1		4	.8
30	23	23,879	-54.2		04	1.3
25	22	25,054	-52.8		02	1.5
20	22	26,502	[illegible]		01	1.8
15	22	28,394	-46.8		01	1.0
10	21	31,117	-41.7		32	1.4
7	20	33,552	-35.4		30	2.6
5	13	35,931	-29.0			

OKLAHOMA CITY, OKLA. 968 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	392	14.0	9.1	08	.8
1000	31	115				
950	31	552	15.1	7.9	16	1.4
900	31	1,009	15.2	4.9	21	3.8
850	31	1,492	13.9	1.8	23	5.3
800	31	2,002	11.5	-1.7	24	6.8
750	31	2,534	8.5	-6.2	25	7.6
700	31	3,106	4.6	-9.8	26	8.5
650	31	3,701	.5	-14.2	26	9.9
600	31	4,342	-4.2	-18.0	27	12.1
550	31	5,015	-9.0	-22.3	27	13.1
500	31	5,753	-14.0	-27.7	27	14.8
450	31	6,538	-19.5	-34.4	26	15.8
400	31	7,409	-25.8	-39.0	26	18.5
350	30	8,365	-32.8	-43.8	26	20.9
300	30	9,432	-40.8	-47.0	27	25.1
250	30	10,647	-49.7		26	28.3
200	30	12,075	-59.1		26	31.7
175	30	12,926	-61.6		27	33.0
150	30	13,859	-62.4		27	29.8
125	30	14,982	-62.6		27	24.9
100	30	16,354	-63.9		28	18.0
80	30	17,722	-63.5		28	10.4
70	30	18,544	-61.8		28	6.0
60	30	19,502	-59.6		28	2.8
50	30	20,649	-57.1		33	1.1
40	30	22,069	-54.6		05	1.5
30	30	23,917	-52.6		04	.9
25	30	25,099	-51.1		03	1.6
20	30	26,556	-49.1		36	.4
15	30	28,456	-45.7		28	3.2
10	26	31,187	-40.0		27	7.1
7	16	33,619	[illegible]			
5						

OMAHA, NEBR. 967 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	403	8.8	3.3	02	.3
1000	31	125				
950	31	550	9.8	3.0	01	.6
900	31	1,002	9.1	-.2	28	3.8
850	31	1,474	7.6	-1.3	29	6.3
800	31	1,972	5.3	-3.7	29	7.4
750	31	2,494	2.3	-7.2	29	7.7
700	31	3,052	-1.1	-10.4	28	8.1
650	31	3,633	-4.8	-13.5	28	9.7
600	31	4,265	-8.8	-18.0	28	11.9
550	31	4,927	-12.9	-23.3	28	14.2
500	31	5,655	-17.8	-28.9	28	16.2
450	31	6,428	-23.0	-35.0	28	18.3
400	31	7,289	-29.2	-40.7	28	21.2
350	31	8,230	-36.3	-45.9	27	22.7
300	31	9,282	-44.1	-49.7	28	25.0
250	31	10,484	-52.2		27	27.3
200	31	11,906	-57.7		27	28.5
175	31	12,746	-58.9		27	25.6
150	31	13,714	-58.5		27	22.9
125	31	14,863	-57.7		28	17.9
100	31	16,269	-58.2		28	13.4
80	31	17,675	-58.0		29	8.8
70	31	18,516	-57.5		29	5.7
60	31	19,491	-56.4		31	4.3
50	31	20,653	-54.8		32	2.6
40	31	22,085	-53.5		03	1.2
30	30	23,934	-52.5		06	1.7
25	30	25,114	-51.5		05	1.7
20	29	26,564	[illegible]		05	1.3
15	27	28,456	-47.0		03	1.1
10	26	31,166	-41.9		32	1.7
7	17	[illegible]	-36.5		29	5.4
5	5	35,032	[illegible]			

PAGO PAGO, AMERICAN SAMOA 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	28.3	23.8	10	3.4
1000	31	103	27.1	22.3	10	3.6
950	31	553	22.8	18.5	09	3.9
900	31	1,025	19.7	15.2	08	3.9
850	31	1,516	17.0	11.7	07	2.9
800	31	2,032	15.0	6.9	07	1.9
750	31	2,577	12.7	2.1	03	.7
700	31	3,155	10.2	-3.2	32	.9
650	31	3,767	7.1	-6.5	31	1.0
600	31	4,423	3.4	-9.8	26	1.1
550	31	5,117	-.4	-14.5	25	2.6
500	31	5,881	-5.0	-20.0	25	4.3
450	31	6,700	-9.9	-25.3	24	5.4
400	31	7,603	-15.6	-31.0	24	7.4
350	31	8,596	-22.8	-37.8	25	8.9
300	31	9,707	-31.4	-45.4	25	11.2
250	31	10,971	-41.5		26	13.8
200	31	12,445	-53.7		25	16.7
175	31	13,290	-60.4		25	17.7
150	31	14,235	-66.9		25	17.3
125	31	15,317	-74.0		25	15.6
100	31	16,601	-78.0		25	11.5
80	31	17,682	-74.9		26	6.1
70	31	18,666	-70.0		26	4.2
60	30	19,596	-65.0		26	2.6
50	30	20,721	-60.2		28	1.0
40	30	22,128	-55.7		02	.8
30	30	23,982	-50.7		08	3.9
25	30	25,176	-48.4		09	6.1
20	30	26,653	-45.6		08	10.1
15	30	28,588	-40.9		09	15.1
10	26	31,369	-36.3		09	17.0
7	19	33,856	-32.7		10	13.7
5	6	36,197	-30.5			
4						

* PEORIA, ILL. 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	200	8.9	4.6	03	1.0
1000	31	127				
950	31	555	10.3	2.1	33	1.9
900	31	1,063	8.7	.1	31	3.1
850	31	1,475	6.8	-3.2	29	4.8
800	31	1,971	4.5	-4.6	29	6.9
750	31	2,494	1.8	-8.4	29	9.6
700	31	3,049	-1.3	-12.9	29	11.6
650	31	3,633	-4.9	-16.3	29	13.7
600	31	4,261	-8.8	-20.7	28	14.8
550	31	4,927	-13.2	-25.6	29	16.5
500	31	5,649	-17.9	-30.1	29	18.7
450	31	6,426	-23.0	-35.1	28	20.6
400	31	7,282	-29.1	-40.5	28	23.5
350	31	8,224	-36.0	-45.4	28	25.7
300	31	9,277	-43.6	-50.6	26	27.5
250	31	10,481	-51.6		28	30.6
200	31	11,909	-57.6		28	30.7
175	31	12,748	-59.3		28	28.3
150	31	13,714	-58.8		28	25.1
125	31	14,860	-58.7		28	20.9
100	31	16,264	-58.5		28	13.8
80	31	17,667	-57.9		28	9.6
70	31	18,509	-57.2		28	6.5
60	31	19,486	-56.2		29	3.2
50	31	20,649	-54.4		33	1.6
40	31	22,081	-53.3		04	1.1
30	30	23,940	-52.1		09	1.8
25	30	25,123	-51.0		08	2.8
20	27	26,577	-48.9		08	3.2
15	27	28,481	-45.5		08	3.0
10	25	31,221	-39.0		07	2.5
7	17	33,739	-32.5		07	2.5
5						
4						

* PITTSBURGH, PA. 973 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	7.6	4.3	10	.7
1000	31	132				
950	31	557	8.3	2.3	15	.5
900	31	[illegible]	7.2	.6	26	2.2
850	31	1,472	5.2	-2.8	27	5.2
800	31	1,965	2.7	-5.4	27	7.7
750	31	2,484	.6	-9.0	27	9.9
700	31	3,037	-2.4	-13.0	28	11.4
650	31	3,620	-5.2	-16.0	28	13.5
600	31	4,247	-8.7	-19.4	28	16.0
550	31	4,913	-12.8	-23.8	28	18.0
500	31	5,637	-17.4	-28.1	28	18.7
450	31	6,417	-22.6	-32.8	28	20.3
400	31	7,273	-28.6	-38.5	28	22.7
350	31	8,215	-35.8	-44.7	28	25.8
300	31	9,269	-43.5	-48.7	28	29.2
250	31	10,474	-51.4		28	31.6
200	30	11,901	-57.3		28	33.4
175	30	12,743	-58.0		28	30.0
150	30	13,714	-57.6		28	23.0
125	30	14,866	-57.4		28	18.6
100	30	16,275	-57.4		28	13.0
80	30	17,685	-57.2		27	8.8
70	30	[illegible]	-56.5		28	4.8
60	30	19,509	-55.6		30	1.9
50	30	20,674	-54.3		36	.4
40	30	22,107	-53.4		07	.5
30	30	23,963	-52.2		08	.9
25	30	25,146	-51.1		09	.8
20	30	26,603	-49.3		08	1.0
15	28	28,511	-45.4		09	1.1
10	25	31,267	-39.4		09	.7
7	24	33,729	-33.9		28	.6
5	14	36,101	-27.4		10	.6
4	8	37,703	-23.4			

* PONAPE, CAROLINE IS. 1005 MB

NO DATA AVAILABLE

PORTLAND, MAINE 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	20	[illegible]	1.7	35	1.5
1000	31	121	8.5	-.7	36	2.3
950	31	[illegible]	[illegible]	-2.5	35	3.2
900	31	981	2.7	-4.0	36	3.0
850	31	1,442	.6	-6.5	32	3.1
800	31	1,927	-1.2	-9.4	30	5.3
750	31	2,435	-3.4	-12.9	30	7.1
700	31	2,984	-5.9	-15.5	29	9.6
650	31	3,555	-8.6	-19.5	28	11.3
600	31	4,176	[illegible]	-23.6	28	13.5
550	31	4,833	-15.9	-27.5	27	14.4
500	31	5,552	-20.4	-32.4	27	17.8
450	31	6,315	-25.5	-37.1	27	21.7
400	31	7,170	-31.3	-42.3	27	24.0
350	31	8,103	-38.1	-46.3	27	26.8
300	31	9,149	[illegible]		27	29.1
250	31	10,349	-51.3		28	29.5
200	31	11,786	[illegible]		26	23.7
175	31	12,641	[illegible]		27	19.8
150	31	13,629	-53.9		27	17.6
125	31	14,799	-54.3		26	13.5
100	30	16,225	-55.0		26	8.8
80	30	17,651	-54.6		25	5.4
70	30	18,505	-54.0		25	3.6
60	30	19,493	-54.0		22	2.1
50	29	20,662	-53.4		18	.6
40	26	22,103	-53.2		11	1.6
30	26	23,958	-51.9		10	2.4
25	26	25,141	[illegible]		11	2.3
20	27	26,595	-49.6		09	2.7
15	26	28,492	-46.3		09	3.2
10	24	31,218	-40.4		09	6.1
7	13	33,675	-35.1		11	4.6
5	11	36,012	-30.1			

* QUILLAYUTE, WASH. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	58	7.6	7.0	09	1.1
1000	31	172	7.5	6.2	08	.7
950	31	593	6.1	3.6	24	1.4
900	31	1,036	4.7	-.5	25	2.5
850	31	1,500	2.5	-3.3	26	2.8
800	31	1,989	.4	-8.6	27	3.7
750	31	2,504	-2.1	-12.8	27	4.3
700	31	3,050	-5.0	-15.8	27	5.5
650	31	3,624	-8.1	-19.7	27	6.4
600	31	4,247	-11.7	-23.5	27	7.1
550	31	4,904	-15.9	-26.7	27	8.8
500	31	5,620	-20.9	-30.9	27	9.5
450	31	6,383	-26.3	-35.2	27	10.6
400	31	7,231	-32.3	-41.3	27	11.6
350	31	8,159	-39.2	-43.5	26	13.6
300	31	9,199	-46.6		26	15.4
250	31	10,388	-53.9		26	17.3
200	31	11,804	-58.4		27	15.2
175	31	12,644	-57.7		26	12.7
150	31	13,619	-57.0		26	10.3
125	31	14,775	-56.2		26	9.3
100	30	16,196	-55.3		26	6.3
80	29	17,617	-55.5		26	3.6
70	29	18,467	-55.6		28	2.5
60	28	19,450	-55.0		28	2.0
50	28	20,616	-54.6		32	.7
40	28	22,047	-53.9		08	1.2
30	28	23,898	-52.9		08	3.5
25	28	25,077	-52.1		08	4.7
20	27	26,521	-50.7		08	6.2
15	26	28,412	-47.4		08	8.1
10	24	31,129	-40.9		08	9.7
7	16	33,603	-33.8		08	11.7
5						

RAPID CITY, S. DAK. 965 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	5.9	1.9	33	1.8
1000	30	140				
950	30	564				
900	30	1,012			32	2.2
850	30	1,482	6.9	-.5	31	3.4
800	30	1,977	3.7	-3.3	31	3.5
750	30	2,494	1.0	-5.8	30	4.3
700	30	3,052	-1.9	-9.3	30	6.7
650	30	3,629	-5.5	-13.9	29	8.3
600	30	4,262	-9.5	-17.5	29	9.5
550	30	4,920	-13.7	-22.5	29	11.0
500	30	5,647	-18.7	-27.9	29	13.2
450	30	6,416	-24.2	-33.6	29	14.7
400	30	7,273	-30.4	-39.2	29	16.9
350	30	8,208	-37.7	-44.3	29	17.6
300	30	9,254	-45.9		29	20.7
250	30	10,447	-53.4		28	23.2
200	30	11,865	-58.2		28	21.0
175	30	12,704	-58.9		28	19.5
150	30	13,675	-57.1		28	16.8
125	30	14,831	-56.5		28	13.8
100	30	16,246	-56.9		28	11.2
80	30	17,659	-57.0		29	6.7
70	30	18,504	-56.5		30	4.4
60	30	19,485	-55.7		31	2.6
50	30	20,649	-54.2		33	1.9
40	30	22,084	-53.1		03	1.7
30	30	23,942	-51.9		06	2.8
25	29	25,124	-51.2		07	3.4
20	28	26,586	-49.1		08	3.7
15	27	28,485	-46.5		07	3.4
10	25	31,206	-40.5		06	3.0
7	18	33,637	-36.7			
5	5	35,664	-35.3			

* ST CLOUD, MINN. 977 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	316	4.8	.5	14	.4
1000	31	127				
950	31	550	6.6	-1.1	11	.7
900	31	991	5.4	-3.6	29	1.0
850	31	1,456	2.8	-6.9	31	3.0
800	31	1,945	.1	-10.4	31	4.7
750	31	2,457	-2.5	-14.2	31	5.9
700	31	3,004	-5.6	-17.9	30	7.0
650	31	3,578	-9.0	-20.2	30	9.2
600	31	4,197	-12.5	-23.3	29	11.3
550	31	4,849	-16.7	-28.3	29	13.2
500	31	5,566	-21.5	-32.3	29	15.4
450	31	6,324	-26.7	-37.1	29	17.6
400	31	7,175	-32.5	-41.3	29	20.9
350	31	8,103	-39.2	-43.6	29	23.4
300	31	9,143	-46.2		29	25.0
250	31	10,338	-52.1		29	27.9
200	31	11,771	-55.2		29	27.6
175	31	12,623	-55.5		29	23.1
150	31	13,606	-54.6		28	19.9
125	30	14,778	-54.6		29	15.7
100	30	16,205	-54.9		29	10.8
80	30	17,629	-55.5		30	6.5
70	30	18,479	-54.8		30	4.6
60	30	19,468	-53.6		33	2.6
50	30	20,640	-53.0		35	1.2
40	29	22,077	-52.6		07	2.6
30	28	23,943	-51.6		07	3.7
25	27	25,133	-50.7		08	4.5
20	27	26,591	-49.3		08	5.8
15	27	28,488	-46.0		09	5.9
10	26	31,213	-40.7		08	7.1
7	14	33,674	-36.1			

ST PAUL IS., ALASKA 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	2.3	1.0	03	1.9
1000	31	161	1.6	.8	03	2.2
950	31	574	1.0	-1.3	06	2.4
900	31	1,010	.6	-3.7	06	2.4
850	31	1,469	-.5	-7.9	06	2.5
800	31	1,952	-2.3	-10.3	06	2.7
750	31	2,460	-4.5	-12.7	06	2.1
700	31	3,004	-7.2	-17.0	06	2.0
650	31	3,574	-10.3	-19.1	05	2.6
600	31	4,192	-13.9	-23.3	04	3.4
550	31	4,842	-18.1	-28.7	03	3.4
500	31	5,554	-22.7	-33.3	02	3.8
450	31	6,311	-28.0	-38.8	01	3.1
400	30	7,153	-34.3	-44.6	01	3.9
350	30	8,074	-41.3	-45.1	02	3.8
300	30	9,105	-48.5		36	3.5
250	30	10,267	-54.2		34	3.2
200	30	11,715	-54.3		33	4.2
175	30	12,572	-53.2		34	4.1
150	30	13,567	-52.8		34	3.7
125	30	14,742	-53.5		34	2.8
100	30	16,174	-54.1		36	2.2
80	30	17,607	-53.3		03	1.3
70	30	18,468	-52.6		06	1.0
60	30	19,465	-51.7		07	1.4
50	30	20,650	-50.6		08	2.3
40	30	22,107	-49.8		09	4.1
30	29	23,933	-49.1		09	5.4
25	29	25,190	-48.7		09	7.1
20	28	26,664	-47.6		09	8.1
15	24	28,588	-45.0		09	11.4
10	20	31,324	-42.5		09	12.2
7	12	33,815	-36.3			

SALEM, OREG. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	6.6	4.3	22	.2
1000	31	172	9.2	5.2	02	.9
950	31	596	8.6	3.1	03	1.8
900	31	1,043	6.8	-.8	32	1.7
850	31	1,511	4.8	-5.4	28	2.4
800	31	2,004	2.4	-7.9	29	2.9
750	31	2,522	-.1	-11.4	28	3.8
700	31	3,072	-3.4	-14.6	28	4.7
650	31	3,649	-6.6	-19.4	28	6.0
600	31	4,275	-10.3	-22.5	28	7.2
550	31	4,935	-14.6	-25.8	28	8.0
500	31	5,655	-17.5	-29.4	28	9.1
450	31	6,423	-24.8	-34.2	28	9.5
400	31	7,275	-31.0	-39.1	28	9.8
350	31	8,208	-38.0	-44.0	28	9.9
300	31	9,251	-46.0		28	11.0
250	31	10,442	-53.7		28	12.3
200	31	11,854	-59.2		29	13.6
175	31	12,689	-59.6		29	12.6
150	30	13,658	-58.1		27	11.2
125	29	14,807	-57.2		27	9.5
100	29	16,218	-57.0		27	6.7
80	29	17,632	-56.7		28	4.2
70	29	18,478	-56.6		28	3.0
60	29	19,455	-56.1		30	1.7
50	29	20,614	-55.9		02	.8
40	29	22,038	-54.8		06	1.8
30	29	23,882	-53.5		07	3.5
25	26	25,058	-52.6		07	4.5
20	25	26,562	-50.9		8	4.6
15	23	28,399	-47.3		08	5.5
10	21	31,111	-41.2		08	6.9
7	15	33,531	-36.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SALT LAKE CITY, UTAH — 872 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	7.8	2.4	15	2.1
1000	31	136				
950	31	568				
900	31	1,022				
850	31	1,496	10.8	1.0	16	2.9
800	31	2,000	8.2	-1.9	20	1.5
750	31	2,529	4.3	-4.7	27	2.3
700	31	3,088	.1	-7.6	29	3.9
650	31	3,675	-4.3	-11.2	29	4.9
600	31	4,304	-8.6	-15.3	29	5.9
550	31	4,971	-13.2	-20.4	29	6.6
500	31	5,693	-18.1	-25.2	28	7.6
450	31	6,467	-23.6	-31.7	28	8.3
400	31	7,324	-29.9	-38.2	26	9.5
350	31	8,261	-37.2	-43.8	27	10.6
300	31	9,307	-45.5		26	11.4
250	31	10,500	-53.9		27	10.7
200	31	11,912	-59.1		26	13.0
175	31	12,748	-59.6		27	13.9
150	31	13,713	-59.0		27	13.0
125	31	14,858	-58.5		27	11.5
100	31	16,258	-59.2		27	9.6
80	31	17,656	-59.3		27	7.2
70	31	18,492	-58.6		28	4.7
60	31	19,463	-58.2		30	2.2
50	30	20,615	-57.0		32	1.2
40	29	22,034	-55.5		05	1.4
30	29	23,876	-53.4		06	2.6
25	29	25,052	-52.2		06	2.8
20	28	26,496	-50.4		06	3.3
15	27	28,383	-46.9		07	3.3
10	25	31,110	-41.3		08	3.3
7	6	33,522	-36.3			
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SAN DIEGO, CALIF. — 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	12.8	10.4	18	.4
1000	31	126			26	.2
950	31	561	13.6	5.2	22	.1
900	31	1,017	14.1	-.3	32	1.3
850	31	1,498	13.3	-3.6	33	3.1
800	31	2,005	10.6	-6.9	31	3.7
750	31	2,537	7.9	-10.9	29	3.6
700	31	3,106	4.6	-14.1	26	4.5
650	31	3,701	.6	-17.4	28	5.2
600	31	4,343	-3.6	-20.5	28	6.3
550	31	5,017	-8.4	-25.2	27	8.0
500	31	5,759	-13.8	-29.4	27	8.8
450	31	6,543	-19.4	-34.9	26	10.5
400	31	7,417	-25.7	-39.3	26	13.2
350	31	8,372	-32.9	-45.6	26	15.8
300	31	9,439	-41.0	-51.1	26	18.4
250	31	10,655	-50.0		26	21.9
200	31	12,085	-58.4		25	26.5
175	31	12,920	-60.2		25	26.5
150	31	13,881	-60.5		25	24.3
125	31	15,014	-61.7		25	21.3
100	31	16,389	-63.5		25	16.5
80	31	17,758	-63.7		26	9.4
70	31	18,577	-63.1		25	5.8
60	31	19,528	-61.4		27	2.4
50	31	20,666	-58.8		26	.5
40	30	22,075	-55.8		04	1.0
30	28	23,923	-52.6		04	1.8
25	28	25,104	-50.9		35	.3
20	28	26,563	-48.7		31	1.0
15	26	28,469	-45.4		29	2.5
10	25	31,198	-40.8		28	4.1
7	24	33,654	-34.5		28	5.1
5	17	36,018	-31.0			

* SAN JUAN, P. R. — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	24.8	21.3	10	3.5
1000	31	152	23.7	20.2	10	6.6
950	31	594	22.4	17.1	09	8.9
900	31	1,065	17.4	13.7	10	8.8
850	31	1,552	14.6	10.3	10	7.9
800	31	2,063	12.0	6.2	10	6.6
750	31	2,596	9.9	-1.2	10	6.2
700	31	3,173	7.6	-7.7	09	5.1
650	31	3,773	4.1	-11.4	09	3.8
600	31	4,427	.7	-16.0	08	1.3
550	31	5,114	-3.4	-20.8	30	.5
500	31	5,869	-7.7	-25.5	26	2.1
450	31	6,675	-13.0	-30.3	26	3.2
400	31	7,569	-19.1	-35.4	26	5.4
350	31	8,549	-26.3	-41.1	26	8.3
300	31	9,645	-34.5	-48.5	26	11.2
250	31	10,894	-44.0		26	15.0
200	31	12,355	-55.1		26	19.1
175	31	13,195	-61.4		27	20.3
150	31	14,137	-67.4		27	18.9
125	31	15,220	-72.5		28	15.2
100	31	16,523	-74.5		28	9.9
80	30	17,827	-72.6		30	3.1
70	30	18,617	-68.9		03	1.4
60	30	19,547	-64.4		07	3.9
50	30	20,674	-60.2		08	6.9
40	29	22,076	-56.9		09	9.7
30	28	23,922	-51.8		10	11.9
25	28	25,111	-49.0		09	12.6
20	26	26,587	-45.7		09	14.3
15	26	28,520	-41.7		09	16.2
10	24	31,306	-37.4		09	18.3
7	20	33,795	-32.8		09	18.7
5	8	36,172	-29.6			

* SAULT STE MARIE, MICH. — 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	221	3.4	-2.2	03	.5
1000	31	132				
950	31	545	4.2	-4.1	22	.1
900	31	988	2.5	-6.4	30	2.4
850	31	1,448	.0	-9.4	30	4.4
800	31	1,932	-2.8	-11.9	30	6.5
750	31	2,436	-5.6	-14.7	29	7.9
700	31	2,980	-8.2	-17.8	28	9.0
650	31	3,546	-10.9	-20.9	28	10.8
600	31	4,164	-14.0	-24.5	26	12.0
550	31	4,815	-17.9	-27.9	29	13.5
500	31	5,526	-22.4	-32.5	28	14.7
450	31	6,285	-27.7	-37.9	29	16.3
400	31	7,126	-33.8	-43.0	28	17.9
350	31	8,051	-40.2	-44.7	28	20.2
300	31	9,087	-46.9		28	22.2
250	31	10,28[illegible]	-51.6		28	25.4
200	31	11,722	-53.1		28	23.7
175	31	12,584	-52.6		28	19.9
150	31	13,581	-52.3		28	17.0
125	31	14,759	-52.4		28	13.5
100	31	16,202	-52.4		28	9.2
80	31	17,641	-53.1		26	5.4
70	31	18,561	-52.9		29	2.7
60	31	19,496	-52.5		30	1.8
50	31	20,677	-51.6		35	1.0
40	31	22,126	-50.9		07	2.3
30	30	24,002	-51.3		08	3.6
25	30	25,143	-49.7		06	4.5
20	30	26,658	-46.1		08	5.9
15	29	28,564	-44.7		09	7.2
10	29	31,315	-36.0		09	8.6
7	24	33,634	-31.3		09	11.1
5	7	36,211	-26.1			

SHEMYA, ALASKA — 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	38	3.3	2.9	19	1.8
1000	31	163	2.6	2.4	20	2.2
950	31	581	2.1	.2	20	2.7
900	31	1,015	2.5	-3.3	21	3.2
850	31	1,477	1.1	-5.4	22	3.0
800	31	1,963	-1.2	-8.6	22	3.1
750	31	2,474	-3.8	-11.4	22	3.3
700	31	3,018	-6.7	-14.5	21	2.5
650	31	3,589	-9.9	-19.6	21	2.7
600	31	4,208	-13.4	-23.1	21	2.8
550	31	4,862	-17.6	-29.0	22	2.7
500	31	5,573	-22.2	-34.2	22	2.4
450	31	6,333	-27.5	-38.1	21	2.7
400	31	7,177	-34.0	-43.1	23	2.6
350	31	8,100	-40.5	-47.2	25	3.3
300	31	9,135	-47.3		25	5.4
250	31	10,325	-52.8		27	7.4
200	31	11,756	-54.8		28	8.1
175	31	12,61[illegible]	-54.1		28	7.1
150	31	13,60[illegible]	-54.2		28	6.3
125	31	14,767	-55.0		30	5.5
100	31	[illegible]	-55.5		29	2.2
80	31	17,615	-54.7		33	1.1
70	31	18,46[illegible]	-54.2		04	.3
60	31	19,460	-53.3		10	.9
50	31	20,636	-52.5		10	1.9
40	31	22,08[illegible]	-51.6		10	3.5
30	30	23,950	-50.6		09	5.5
25	29	25,14[illegible]	-49.9		09	6.3
20	28	26,6[illegible]	-48.9		09	8.2
15	27	28,496	-46.4		09	9.4
10	23	31,205	-42.0		09	10.4
7	16	33,646	-37.8		09	11.9
5	9	35,944	-36.1			

* SHREVEPORT, LA. — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	16.5	14.7	16	1.0
1000	31	129			16	1.0
950	31	570	17.0	11.0	20	3.5
900	31	1,029	16.1	5.2	22	4.8
850	31	1,514	14.3	.2	24	5.7
800	31	2,024	11.7	-3.2	25	6.4
750	31	2,558	8.6	-7.3	25	6.3
700	31	3,129	5.2	-11.0	27	7.2
650	31	3,727	1.6	-14.1	27	9.2
600	31	4,370	-2.5	-17.7	27	10.5
550	31	5,050	-6.9	-22.7	27	11.7
500	31	5,793	-12.0	-27.1	27	14.2
450	31	6,584	-17.8	-32.0	27	16.1
400	31	7,462	-24.3	-37.6	27	17.3
350	31	8,421	-31.5	-43.6	27	21.2
300	31	9,493	-39.8	-48.1	27	23.7
250	31	10,714	-48.9		27	27.8
200	31	12,146	-56.7		27	32.0
175	31	12,976	-62.8		28	32.3
150	31	13,920	-64.5		28	30.8
125	30	15,036	-65.4		28	23.8
100	30	16,387	-67.3		28	17.8
80	30	17,734	-65.6		28	10.1
70	30	18,547	-64.2		28	6.1
60	30	19,497	-60.6		28	3.7
50	30	20,638	-58.2		32	1.4
40	30	22,053	-54.9		10	1.6
30	29	23,899	-52.5		07	1.5
25	29	25,081	-50.8		06	2.4
20	27	26,543	-48.3		05	1.1
15	25	28,451	-44.0		28	3.3
10	23	31,201	-39.5		28	8.2
7	12	33,672	-33.1		27	8.0
5	5	36,084	-28.6			

SPOKANE, WASH. — 933 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	717	6.6	2.4	18	2.3
1000	31	143				
950	31	569				
900	31	1,016	8.9	-.3	22	3.2
850	31	1,487	6.6	-3.0	25	3.5
800	31	1,982	3.3	-5.3	26	4.4
750	31	2,500	-.3	-8.9	26	5.1
700	31	3,052	-4.0	-12.4	26	5.0
650	31	3,626	-7.7	-15.9	27	6.2
600	31	4,252	-11.2	-20.0	28	8.5
550	31	4,909	-15.5	-24.5	28	9.1
500	31	5,628	-20.2	-29.6	27	10.0
450	31	6,395	-25.4	-34.5	27	11.3
400	31	7,248	-31.5	-39.9	27	12.2
350	31	8,179	-38.7	-44.6	27	13.4
300	31	9,219	-46.7		28	13.0
250	31	10,406	-54.6		27	13.9
200	31	11,818	-58.1		28	15.3
175	31	12,659	-57.6		28	14.6
150	31	13,636	-56.0		26	10.7
125	31	14,796	-55.6		28	8.1
100	31	16,219	-55.5		27	6.2
80	30	17,645	-55.7		28	5.1
70	29	18,494	-55.5		30	3.2
60	29	19,477	-54.9		31	2.1
50	28	20,641	-54.1		04	1.2
40	28	22,076	-53.[illegible]		06	3.3
30	28	23,936	-51.7		07	4.2
25	28	25,120	-51.1		07	5.0
20	27	26,581	-49.3		08	6.1
15	24	28,489	-46.0		06	8.0
10	22	31,204	-39.9		08	9.5
7	11	33,612	-33.7			
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SWAN ISLAND, W. I. — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	26.1	22.5	10	4.4
1000	31	122	25.2	22.0	10	5.2
950	31	576	21.5	19.5	10	6.9
900	31	1,041	19.0	15.0	11	7.3
850	31	1,531	16.4	10.1	11	7.3
800	31	2,045	13.5	5.6	11	6.8
750	31	2,567	11.0	-1.0	11	5.9
700	31	3,160	8.3	-6.5	11	4.7
650	31	3,767	5.7	-12.9	11	3.4
600	31	4,42[illegible]	2.4	-16.7	09	2.9
550	31	5,113	-1.5	-20.1	06	2.8
500	31	5,871	-6.1	-24.2	02	3.9
450	31	6,683	-11.3	-28.5	01	4.4
400	31	7,583	-17.6	-33.8	36	4.6
350	31	8,567	-24.6	-39.7	34	6.0
300	31	9,677	-33.1	-47.2	32	6.9
250	31	10,928	-43.1		30	8.2
200	31	12,394	-54.8		30	10.0
175	31	13,235	-61.3		29	10.2
150	31	14,176	-68.3		28	10.9
125	30	15,251	-73.6		29	10.5
100	30	16,548	-75.1		31	5.2
80	30	17,641	-74.3		01	2.6
70	30	18,623	-71.0		06	1.4
60	30	19,547	-66.0		06	2.5
50	30	20,666	-60.9		08	5.1
40	30	22,070	-55.7		09	8.1
30	30	23,917	-51.4		09	12.4
25	30	25,108	-48.7		09	14.2
20	29	26,584	-45.9		09	15.6
15	23	28,505	-42.3		09	17.7
10	15	31,269	-37.7		09	21.0
7	9	33,739	-34.5			
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TAMPA, FLA. — 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	21.2	18.7	15	1.3
1000	31	148	21.2	17.7	15	1.7
950	31	590	19.9	13.1	19	2.7
900	31	1,057	17.4	8.5	21	2.7
850	31	1,544	14.6	5.1	22	2.3
800	31	2,055	12.3	.2	24	1.9
750	31	2,590	9.7	-4.8	26	2.5
700	31	3,164	7.0	-9.3	27	3.1
650	31	3,769	3.4	-13.1	28	4.3
600	31	4,415	-.8	-17.2	29	5.7
550	31	5,098	-5.2	-20.5	28	6.8
500	31	5,847	-10.3	-24.9	28	8.5
450	31	6,649	-15.8	-30.3	29	10.2
400	31	7,530	-21.7	-35.7	28	12.4
350	31	8,499	-29.0	-41.8	29	14.0
300	31	9,583	-37.3	-48.3	28	16.4
250	31	10,819	-46.5		29	18.5
200	31	12,265	-56.9		29	22.6
175	31	13,100	-61.7		29	24.3
150	31	14,046	-65.1		29	22.6
125	31	15,150	-67.2		28	19.9
100	31	16,486	-67.6		28	15.0
80	31	17,818	-68.4		28	8.6
70	31	18,622	-65.9		28	5.1
60	31	19,566	-62.1		31	2.4
50	31	20,703	-58.5		05	3.1
40	31	22,118	-54.9		07	4.3
30	31	23,972	-51.3		10	3.3
25	31	25,162	-49.3		09	2.0
20	31	26,634	-46.5		08	1.3
15	30	28,555	-42.4		31	1.9
10	27	31,326	-37.4		27	5.2
7	6	33,759	-33.2			
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TOPEKA, KANS. — 983 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	269	11.4	5.4	01	.5
1000	31	127				
950	31	556	12.0	4.5	31	1.8
900	31	1,010	11.4	2.3	26	4.2
850	31	1,487	9.9	-.1	28	4.9
800	31	1,984	7.3	-2.9	28	6.7
750	31	2,514	4.4	-6.6	27	7.7
700	31	3,077	1.3	-10.4	28	9.1
650	31	3,663	-2.1	-13.7	28	11.0
600	31	4,302	-6.0	-19.2	28	12.6
550	31	4,972	-10.6	-23.6	28	14.3
500	31	5,705	-15.6	-28.3	28	15.8
450	31	6,484	-21.1	-33.9	28	17.0
400	31	7,351	-27.6	-40.5	28	19.8
350	31	8,298	-34.8	-45.5	28	22.6
300	31	9,356	-42.8	-50.1	27	23.9
250	31	10,563	-51.4		28	25.9
200	31	11,988	-58.5		27	28.1
175	31	12,822	-60.0		28	28.5
150	31	13,766	-59.5		28	24.7
125	31	14,926	-59.4		28	19.4
100	31	16,322	-59.8		28	14.7
80	31	17,717	-59.4		28	9.3
70	31	18,553	-58.6		29	5.9
60	31	19,528	-56.8		30	4.0
50	31	20,667	-55.2		35	1.5
40	31	22,116	-53.4		02	1.1
30	30	23,979	-51.7		06	1.6
25	29	25,164	-50.7		07	1.3
20	29	26,624	-48.8		07	1.1
15	27	28,544	-44.9		08	1.5
10	22	31,274	-39.3		03	.9
7	8	33,766	-35.9			
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* TRUK, CAROLINE IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	28.4	24.9	08	2.0
1000	31	90	27.6	23.6	08	2.3
950	31	539	24.3	19.9	09	3.6
900	31	1,017	21.3	16.8	09	3.9
850	31	1,512	18.6	13.3	09	4.2
800	31	2,031	15.9	9.8	10	4.4
750	31	2,574	13.3	5.8	09	4.6
700	31	3,156	10.3	2.1	10	4.6
650	31	3,767	6.7	-1.3	10	4.7
600	31	4,424	3.0	-5.6	09	4.5
550	31	5,118	-.7	-10.8	10	4.3
500	31	5,881	-4.8	-15.6	10	3.4
450	31	6,697	-9.4	-22.0	09	3.6
400	31	7,606	-14.7	-28.8	07	2.8
350	31	8,604	-21.3	-36.2	05	1.7
300	31	9,723	-29.6	-43.6	31	1.6
250	31	10,996	[illegible]	-52.4	31	3.5
200	31	12,480	-52.4		28	5.5
175	31	13,329	-59.5		28	7.1
150	30	14,276	-66.9		30	6.0
125	30	15,358	-74.6		30	4.9
100	30	16,636	-79.2		34	1.9
80	30	17,912	-75.6		31	1.8
70	30	18,693	-70.4		28	3.5
60	30	19,621	-65.1		28	5.6
50	30	20,743	-60.8		27	3.9
40	30	22,143	-56.6		26	.7
30	30	23,985	-52.6		09	6.9
25	30	25,168	-50.4		09	13.6
20	27	26,628	-47.5		09	21.6
15	24	28,539	-43.3		09	28.4
10	20	31,292	-37.5		09	32.7
7	7	33,793	-33.9			
5						

* TUCSON, ARIZ. — 924 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	789	15.0	-3.1	15	2.9
1000	31	105				
950	31	543				
900	31	1,010	19.5	-1.3	17	1.5
850	31	1,499	16.8	-3.6	21	.2
800	31	2,012	13.0	-6.5	23	.8
750	31	2,547	9.2	-9.8	22	3.5
700	31	3,118	5.4	-12.7	23	5.2
650	31	3,715	1.6	-15.8	24	6.9
600	30	4,360	-2.7	-18.6	24	8.9
550	30	5,036	-7.5	-22.6	24	10.9
500	30	5,779	-12.7	-27.3	25	12.6
450	30	6,566	-18.5	-31.9	25	15.2
400	30	7,443	-24.8	-37.3	25	16.6
350	30	8,399	-32.1	-43.0	25	18.7
300	30	9,468	-40.3	-47.9	25	22.2
250	30	10,666	-49.5		25	28.0
200	30	12,118	-57.9		25	33.3
175	29	12,947	-60.5		25	34.3
150	29	13,904	-61.6		25	30.2
125	29	15,028	-63.5		25	25.1
100	29	16,391	-64.9		25	18.3
80	29	17,747	-66.0		26	11.4
70	29	18,558	-64.5		26	7.7
60	29	19,506	-61.8		28	2.9
50	29	20,642	-58.9		36	1.2
40	28	22,052	-55.8		05	1.6
30	28	23,899	-52.3		06	1.2
25	28	25,082	-50.9		04	.5
20	28	26,543	-48.2		28	.7
15	26	28,456	-44.5		28	3.0
10	25	31,200	-39.4		27	7.2
7	22	33,672	-33.2		27	8.7
5	7	36,015	-29.2			

* VANDENBERG AFB, CALIF. — [illegible] MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	[illegible]	8.6	34	1.4
1000	30	141	[illegible]	8.4	01	1.7
950	30	576	13.2	4.6	01	4.8
900	30	1,027	14.0	-.3	01	4.5
850	30	1,508	12.3	-2.8	35	4.2
800	30	2,014	9.5	-7.6	34	3.3
750	30	2,542	6.0	-10.8	32	3.3
700	30	3,108	3.1	-14.7	31	4.1
650	30	3,700	-.6	-18.4	31	4.2
600	30	4,340	-4.6	-22.4	29	5.9
550	30	5,012	-9.2	-26.4	29	6.4
500	30	5,749	-14.6	-30.1	29	8.0
450	30	6,521	-20.6	-35.6	29	8.5
400	30	7,398	-27.4	-41.5	29	10.2
350	30	8,344	-34.9	-46.7	28	11.6
300	30	9,460	-43.2	-52.7	27	14.2
250	30	10,605	-51.8		27	16.4
200	30	12,024	-59.5		27	18.8
175	30	12,856	-61.0		26	18.3
150	30	13,815	-60.4		27	16.6
125	30	[illegible]	-61.2		26	15.2
100	30	16,331	-62.4		26	12.2
80	29	17,705	-62.1		26	8.2
70	29	18,531	-61.3		26	5.0
60	28	19,487	-60.2		27	2.2
50	28	20,626	-58.5		27	.8
40	28	22,036	-57.5		01	.4
30	28	23,871	-54.0		[illegible]	.6
25	26	25,043	-52.6		01	.9
20	28	26,491	-50.2		33	.4
15	28	28,379	-47.7		27	2.6
10	24	31,094	-40.9		26	5.5
7	15	33,565	-34.6		26	4.0
5	5	[illegible]	-28.6			

VICTORIA, TEXAS — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	33	20.7	18.3	13	1.9
1000	31	117	21.3	17.8	12	3.0
950	31	558	19.6	15.1	16	6.9
900	31	1,027	17.9	9.7	18	7.6
850	31	1,515	16.0	3.4	19	6.4
800	31	2,029	14.5	-1.5	21	4.4
750	31	2,568	12.0	[illegible]	23	4.1
700	31	3,146	8.5	-9.9	27	4.2
650	31	3,749	4.7	-14.1	28	5.2
600	31	4,402	.4	-18.3	28	6.7
550	31	5,066	-4.3	-22.4	27	8.8
500	31	5,838	-9.8	-25.7	27	10.6
450	31	6,634	-15.6	-30.3	27	13.1
400	31	[illegible]	-21.1	-37.0	27	15.6
350	31	8,489	-29.2	-42.2	28	19.2
300	31	9,572	-37.4	-46.4	27	23.2
250	31	[illegible]	-46.8		27	26.8
200	31	12,251	-57.3		28	31.6
175	31	13,085	-62.2		28	32.3
150	31	14,027	-66.2		27	29.3
125	31	15,127	-67.6		26	23.7
100	31	16,464	-69.8		28	17.4
80	31	17,790	[illegible]		28	10.5
70	31	[illegible]	[illegible]		29	[illegible]
60	31	19,522	[illegible]		31	1.6
50	31	20,653	-58.9		[illegible]	[illegible]
40	31	[illegible]	-55.1		09	3.6
30	30	23,912	-51.9		[illegible]	2.7
25	29	[illegible]	-49.6		[illegible]	2.1
20	27	26,570	-46.2		28	.8
15	27	28,486	-43.6		27	3.4
10	27	31,237	-39.3		27	[illegible]
7	20	[illegible]	[illegible]		27	[illegible]
5	8	[illegible]	-32.3			

* WAKE IS., PACIFIC AREA — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	26.2	22.9	08	5.4
1000	31	124	25.1	22.2	08	6.4
950	31	[illegible]	21.3	19.4	08	6.8
900	31	[illegible]	[illegible]	15.9	09	[illegible]
850	31	[illegible]	16.0	11.4	09	4.7
800	31	2,046	[illegible]	4.4	09	3.0
750	31	[illegible]	12.0	-2.4	08	2.4
700	31	3,164	9.1	-7.3	09	1.6
650	31	3,767	5.4	[illegible]	08	.8
600	31	4,424	1.6	-15.9	03	.4
550	31	5,114	-2.5	-19.3	35	.9
500	31	[illegible]	-6.9	-22.2	34	1.4
450	31	6,641	-11.9	-28.5	32	2.2
400	31	7,577	-16.1	-34.1	31	3.5
350	31	[illegible]	[illegible]	-40.2	29	5.6
300	31	9,663	-33.7	-47.5	28	7.8
250	31	[illegible]	-43.6		28	[illegible]
200	31	12,374	-54.9		28	12.8
175	31	13,221	[illegible]		28	13.5
150	31	[illegible]	-67.1		29	13.8
125	30	[illegible]	-72.3		29	11.1
100	29	16,553	[illegible]		29	[illegible]
80	27	17,845	-75.2		36	2.0
70	27	[illegible]	-71.6		[illegible]	2.7
60	26	19,547	-65.1		[illegible]	4.3
50	26	[illegible]	[illegible]		09	5.2
40	26	22,073	-57.4		09	7.4
30	26	[illegible]	[illegible]		[illegible]	11.3
25	26	25,091	[illegible]		[illegible]	13.4
20	26	[illegible]	-47.3		09	15.1
15	25	28,473	-44.6		09	16.2
10	25	[illegible]	-39.1		09	16.8
7	21	33,691	-35.0		[illegible]	[illegible]
5	9	36,035	-33.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1967

Standard pressure surface (mb.)	* WALLOPS IS., VA. NASA 1017 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.	WASHINGTON DULLES INT. AP 1007 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	3	10.5	6.5	01	1.4	31	85	9.5	6.8	05	.3
1000	30	146	11.9	6.4	35	2.0	31	139			03	.5
950	30	574	10.8	3.1	34	4.3	31	571	10.1	2.0	32	2.3
900	30	1,025	9.0	1.2	32	4.6	31	1,014	8.0	.0	30	4.2
850	30	1,497	6.9	-1.3	30	6.5	31	1,484	6.0	-1.5	29	6.7
800	30	1,994	4.8	-4.1	28	8.3	31	1,979	3.5	-5.3	29	8.7
750	30	2,517	2.5	-6.6	28	10.4	31	2,505	1.9	-9.3	28	10.2
700	30	3,074	-.3	-9.9	28	12.7	31	3,055	-1.1	-12.3	28	11.7
650	30	3,661	-3.2	-14.7	28	15.0	31	3,642	-4.2	-16.3	28	14.3
600	30	4,294	-7.0	-18.8	27	17.0	31	4,269	-7.8	-19.9	28	16.7
550	30	4,962	-11.3	-23.4	27	17.8	31	4,938	-11.9	-24.5	27	17.8
500	30	5,693	-16.1	-28.5	27	19.0	31	5,664	-16.6	-28.7	27	18.7
450	30	6,472	-21.2	-33.4	27	19.9	31	6,445	-22.0	-33.5	27	20.5
400	30	7,339	-27.5	-39.7	28	21.0	31	7,304	-27.9	-38.2	27	23.0
350	30	8,287	-34.3	-44.4	28	24.1	31	8,249	-34.9	-44.3	27	26.9
300	30	9,348	-42.0	-51.2	28	26.1	31	9,307	-42.7	-49.3	27	29.7
250	30	10,560	-50.4		28	28.1	31	10,515	-51.2		27	32.6
200	30	11,987	-58.3		28	30.1	31	11,941	-58.2		28	34.8
175	30	12,821	-60.6		28	27.4	31	12,777	-59.7		28	31.6
150	30	13,780	-60.6		28	23.2	31	13,743	-58.9		28	24.1
125	30	14,919	-59.3		28	18.7	31	14,687	-59.0		28	20.0
100	30	16,315	-59.9		27	14.2	31	16,287	-59.0		27	14.2
80	30	17,711	-59.1		28	9.2	30	17,689	-58.3		27	8.0
70	30	18,548	-58.4		28	6.5	30	18,529	-57.7		27	5.6
60	30	19,519	-57.2		27	3.2	30	19,505	-56.7		29	2.5
50	29	20,680	-55.6		28	2.2	30	20,664	-55.2		35	.9
40	29	22,107	-53.9		30	.8	29	22,093	-54.0		07	.7
30	28	23,959	-51.9		08	1.5	29	23,945	-52.6		19	1.0
25	27	25,146	-50.6		08	2.8	26	25,130	-51.3		09	1.0
20	25	26,611	-48.7		07	2.3	24	26,581	-49.5		10	.8
15	23	28,519	-45.1		06	.9	24	28,480	-45.9		27	1.1
10	21	31,263	-39.4		10	.6	22	31,219	-40.5		28	3.5
7	14	33,740	-34.1				12	33,616	-37.4			
5												

Standard pressure surface (mb.)	WINNEMUCCA, NEV. 870 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.	WINSLOW, ARIZ. 851 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	31	1,310	5.0	-3.5	20	.4	31	1,492	8.1	-9.3	23	1.5
1000	31	150					31	134				
950	31	578					31	567				
900	31	1,031					31	1,026				
850	31	1,502	10.2	-1.1	01	.2	31	1,504			25	1.6
800	31	2,005	8.1	-3.2	32	1.2	31	2,010	11.6	-5.0	28	2.7
750	31	2,528	4.4	-5.6	31	2.3	31	2,543	7.6	-7.4	27	3.9
700	31	3,092	.1	-8.5	29	3.8	31	3,110	3.3	-10.5	25	5.2
650	31	3,675	-4.3	-12.2	27	4.5	31	3,700	-1.1	-14.6	25	5.7
600	31	4,307	-8.5	-17.0	26	5.1	31	4,340	-5.5	-19.0	24	7.4
550	31	4,971	-13.2	-22.1	26	7.0	31	5,009	-10.0	-23.6	25	9.1
500	31	5,695	-17.9	-28.7	27	7.5	31	5,746	-14.9	-27.8	25	12.1
450	31	6,466	-23.5	-34.2	27	6.8	31	6,527	-20.4	-32.6	26	15.1
400	31	7,325	-29.9	-39.6	28	7.8	31	7,396	-26.7	-38.2	25	18.5
350	31	8,262	-37.3	-44.3	27	7.7	31	8,346	-34.0	-43.8	25	20.1
300	31	9,308	-45.3		27	9.1	31	9,408	-42.0	-47.7	25	23.7
250	31	10,503	-52.9		27	9.9	31	10,616	-51.1		25	26.6
200	31	11,920	-58.4		27	12.4	31	12,042	-58.9		25	30.0
175	31	12,757	-59.4		28	12.5	31	12,876	-59.9		26	28.1
150	29	13,728	-58.8		27	11.8	31	13,838	-60.5		26	26.3
125	29	14,873	-58.2		27	11.5	31	14,969	-62.1		25	21.8
100	29	16,277	-58.1		27	9.2	30	16,339	-63.6		26	17.1
80	28	17,684	-58.6		27	4.6	30	17,707	-63.2		26	10.3
70	28	18,528	-58.1		27	3.8	30	18,528	-62.8		27	6.6
60	27	19,497	-57.8		26	1.7	30	19,481	-61.3		30	2.7
50	27	20,649	-57.1		34	1.0	29	20,618	-59.2		33	.6
40	27	22,067	-55.3		06	1.5	28	22,025	-56.5		01	.9
30	26	23,91[illegible]	-53.4		08	2.5	27	23,857	-54.4		03	1.1
25	26	25,088	-52.2		06	2.1	27	25,029	-53.0		05	.5
20	24	26,541	-51.4		06	3.1	27	26,474	-5[illegible].8		29	1.1
15	23	28,427	-46.9		07	3.7	25	28,362	-47.0		29	2.5
10	18	31,14[illegible]	-41.2		11	2.9	16	31,078	-41.5			
7	6	33,62[illegible]	-35.3									
5												

Standard pressure surface (mb.)	YAKUTAT, ALASKA 1016 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	31	12	3.2	1.5	09	.7
1000	31	139	6.3	1.4	11	1.0
950	31	558	4.1	-1.4	16	1.4
900	31	996	1.4	-3.8	15	1.9
850	31	1,455	-1.0	-6.3	14	2.2
800	31	1,937	-3.6	-9.4	13	2.2
750	31	2,445	-6.6	-12.2	15	1.6
700	31	2,980	-9.7	-17.3	17	2.6
650	31	3,549	-12.9	-21.6	16	2.3
600	31	4,155	-16.4	-25.0	19	2.3
550	31	4,804	-20.6	-29.2	21	2.9
500	31	5,503	-25.3	-33.4	22	3.1
450	31	6,256	-30.8	-39.2	23	3.5
400	31	7,086	-36.6	-45.2	25	4.5
350	31	7,998	-43.3		26	5.7
300	31	9,019	-50.5		27	6.4
250	31	10,193	-54.9		27	8.1
200	31	11,625	-52.7		27	6.6
175	31	12,489	-51.9		27	6.6
150	31	13,487	-52.1		28	5.9
125	31	14,667	-52.3		28	4.6
100	31	16,111	-52.0		27	3.1
80	31	17,559	-50.8		26	2.2
70	31	18,429	-50.2		25	1.6
60	31	19,437	-49.5		14	.2
50	31	20,632	-48.9		11	1.7
40	30	22,098	-48.4		09	2.8
30	30	23,993	-47.6		08	5.5
25	30	25,198	-47.0		08	7.1
20	28	26,686	-45.5		09	10.4
15	25	28,602	-43.3		08	12.3
10	23	31,362	-38.4		09	15.1
7	18	33,822	-33.9		08	16.8
5	13	36,122	-32.4			

Standard pressure surface (mb.)	+ YAP, CAROLINE IS. 1009 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.	YUCCA FLAT, NEV. 881 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	31	17	28.7	24.9	08	2.5	31	1,196	7.3	-3.1	29	.9
1000	31	84	27.8	23.6	08	2.9	31	124				
950	31	532	23.6	19.1	09	4.4	31	55[illegible]				
900	31	1,008	20.8	15.5	10	4.7	31	1,017				
850	31	1,502	18.2	12.0	11	4.6	31	1,494	14.1	-1.1	34	1.3
800	31	2,020	15.6	8.6	11	4.3	31	2,003	10.9	-3.8	01	.6
750	31	2,559	12.9	4.7	12	4.5	31	2,534	6.7	-6.5	22	.4
700	31	3,144	10.0	.6	11	4.6	31	3,1[illegible]	2.0	-9.9	22	1.1
650	31	3,75[illegible]	6.7	-3.6	11	4.9	31	3,692	-2.2	-13.4	22	1.9
600	30	4,411	3.2	-7.4	10	4.4	31	4,326	-7.1	-18.1	24	2.4
550	30	5,104	-.6	-12.3	09	3.6	31	[illegible]	-11.5	-23.4	26	4.4
500	30	5,868	-5.0	-17.3	09	3.0	31	5,723	-16.6	-28.6	27	6.7
450	30	6,685	-9.5	-23.1	11	2.5	31	6,5[illegible]	-22.3	-34.4	26	7.6
400	30	7,592	-15.1	-29.1	14	1.3	31	7,383	-28.7	-39.6	27	1[illegible].3
350	30	8,588	-21.9	-36.0	21	1.8	31	8,3[illegible]	-35.6	-45.1	27	12.7
300	30	9,704	-3[illegible].2	-43.8	23	3.0	31	9,35[illegible]	-43.6		27	15.9
250	30	10,975	-40.4	-53.0	23	5.1	31	1[illegible],562	-51.5		26	1[illegible]
200	30	12,455	-52.9		23	3.9	31	11,989	-57.6		26	17.9
175	30	13,303	-6[illegible]		24	4.1	31	12,820	-59.1		27	18.6
150	30	14,248	-67.4		26	4.6	31	13,794	-59.1		26	17.8
125	30	15,328	-74.9		30	4.2	30	14,933	-59.1		26	16.3
100	30	16,601	-74.9		03	3.3	30	16,327	-60.3		26	12.5
80	30	17,672	-76.5		06	3.8	30	17,716	-60.5		26	7.6
70	30	18,647	-72.0		03	1.3	30	18,549	-59.5		27	4.8
60	30	19,569	-65.3		31	1.1	30	19,516	-58.7		29	2.0
50	30	20,689	-61.8		29	.2	30	20,663	-57.7		32	1.3
40	30	22,085	-57.1		09	2.5	30	22,075	-56.0		05	1.4
30	29	23,92[illegible]	-53.1		09	4.1	30	23,912	-54.0		01	.8
25	29	25,100	-50.7		09	14.7	29	25,087	-52.4		35	.6
20	27	26,565	-47.5		09	22.2	27	26,534	-50.5		34	1.2
15	23	28,474	-43.8		09	27.6	26	28,417	-47.6		31	1.0
10	22	31,230	-37.7		10	32.1	18	31,113	-43.3		27	6.5
7	12	33,703	-34.0				7	33,535	-39.6			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. MAY 1967

Date	Sun's zenith distance A. M. 78.7°	75.7°	70.7°	60.0°	*	P. M. 60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N. MEX.									
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
May									
1-----	0.99	1.07	1.19	1.32	1.45	1.20	1.05	----	0.73
2-----	.96	1.04	----	----	1.51	----	----	----	----
3-----	----	----	----	----	----	1.30	1.11	0.99	.91
4-----	.94	1.05	1.18	1.33	1.53	----	----	----	----
6-----	.89	.99	1.08	1.27	1.50	1.26	1.07	.93	----
7-----	.92	1.03	1.17	1.32	1.41	1.26	1.11	1.00	.91
8-----	.99	1.08	----	----	----	----	----	----	----
9-----	† .78	† .81	† .98	1.30	----	1.26	1.09	----	----
10----	.83	----	----	----	----	----	----	----	----
12----	.96	1.06	----	----	----	----	----	----	----
13----	.97	1.08	1.19	1.34	----	----	----	----	----
14----	.89	.99	1.10	----	----	----	----	.86	.70
15----	.91	1.01	1.13	1.27	1.48	1.26	1.13	1.02	.92
16----	.92	1.03	1.14	1.31	1.46	1.28	1.11	.97	.86
20----	----	----	----	----	1.40	----	----	----	----
21----	.75	.88	1.04	1.21	1.42	----	----	.89	.78
22----	.83	.92	1.06	1.22	1.43	1.25	1.05	.90	.79
23----	.76	.86	1.00	1.17	1.40	1.28	1.09	.98	.85
24----	----	----	1.00	1.16	----	----	----	----	----
26----	.69	.77	----	----	----	----	----	----	----
27----	.72	.81	.92	1.12	----	----	----	----	----
29----	.75	.85	1.00	1.18	----	----	----	----	----
31----	----	----	----	1.16	----	----	----	.83	.73
Averages	0.87	0.97	1.09	1.25	1.45	1.26	1.09	0.94	0.82
BLUE HILL OBS., MASS.									
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
May									
1-----	0.72	0.82	0.93	1.13	1.30	1.01	0.84	0.69	0.57
2-----	.64	.74	----	----	----	----	----	----	----
13----	----	----	----	1.15	1.37	1.06	.84	.67	.57
14----	.70	.79	.94	1.11	----	----	----	----	----
17----	.52	.62	.79	1.00	----	----	----	----	----
28----	----	----	.84	1.01	1.28	.96	.82	.70	.64
30----	----	----	----	1.13	1.37	----	----	----	----
31----	.84	.95	1.06	1.18	----	----	----	----	----
Averages	0.68	0.78	0.91	1.12	1.33	1.01	0.83	0.69	0.59
MAUNA LOA OBS., HAWAII									
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
May									
2-----	----	----	----	----	----	1.31	1.15	1.05	0.95
3-----	1.08	1.17	1.28	1.40	----	----	----	----	----
6-----	1.09	1.17	1.27	1.40	----	----	----	----	----
14----	1.09	1.16	1.25	1.36	----	----	----	----	----
16----	1.14	1.20	1.27	----	----	----	----	----	----
18----	1.12	1.20	1.29	1.40	----	----	----	----	----
19----	1.08	1.15	1.24	1.34	----	----	----	----	----
20----	1.03	1.13	1.23	1.36	----	----	----	----	----
21----	1.00	1.09	1.19	1.33	1.53	----	----	----	----
22----	1.04	1.13	1.23	1.37	1.53	----	----	----	----
23----	1.10	1.19	1.30	1.41	----	----	----	----	----
27----	1.04	1.16	1.25	1.37	----	----	----	----	----
30----	1.07	1.15	1.27	1.40	----	----	----	----	----
31----	1.10	1.18	1.30	1.46	----	----	----	----	----
Averages	1.08	1.16	1.26	1.38	1.53	1.31	1.15	1.05	0.95

Date	Sun's zenith distance A. M. 78.7°	75.7°	70.7°	60.0°	*	P. M. 60.0°	70.7°	75.7°	78.7°
MADISON, WIS.									
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
May									
1-----	----	----	----	M 0.97	----	----	----	----	----
7-----	I 0.60	I 0.73	----	----	----	----	----	----	----
9-----	S .68	S .81	S 0.98	†S1.06	S 1.43	S 1.20	S 1.03	S 0.90	----
16----	----	----	----	----	S 1.26	----	----	----	----
19----	S .56	S .65	S .75	----	----	----	----	----	----
Averages	0.61	0.73	0.87	0.97	1.35	1.20	1.03	0.90	----
TUCSON, ARIZ.									
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
May									
1-----	0.81	0.91	1.08	1.21	1.48	1.22	1.09	0.93	0.90
2-----	----	----	----	----	1.40	1.20	1.07	.97	.89
3-----	.75	.88	1.01	1.20	1.40	1.18	1.07	.99	.91
4-----	----	----	----	----	1.33	1.02	.97	.88	----
10----	.72	.74	.98	----	----	----	----	----	----
11----	----	----	----	1.20	1.39	----	1.03	.90	----
12----	----	----	----	1.19	1.37	----	----	----	----
13----	.78	.88	1.00	1.14	1.30	1.01	.87	.76	.69
14----	.80	.91	1.02	1.20	1.34	1.07	1.00	.88	.79
15----	.83	.92	1.03	1.12	1.18	1.17	.99	.83	.76
16----	.86	.93	1.04	----	----	----	----	----	----
18----	----	----	----	----	----	.99	.79	.64	.56
19----	----	----	----	1.02	1.20	----	----	----	----
20----	.54	.64	.78	.97	1.20	1.01	.83	.70	.61
21----	.63	.72	.86	1.00	1.18	.84	.69	.56	.47
23----	.47	----	.70	----	----	----	----	----	----
25----	Integrater inoperable								
26----	.67	.78	.91	1.09	1.30	1.08	.83	----	----
28----	----	.90	1.00	1.19	1.36	1.13	.97	.84	.76
29----	.74	.83	1.13	----	----	----	----	----	----
31----	.80	.89	1.00	1.15	1.31	1.10	.93	.82	.71
Averages	0.72	0.84	0.96	1.12	1.31	1.07	0.93	0.82	0.73
OMAHA, NEBR.									
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
May									
1-----	HS0.74	HM0.83	HM0.92	HM1.11	----	----	----	----	----
2-----	HS .70	HM .76	HM .92	HM1.10	----	----	----	----	----
8-----	HS .76	HS .87	HS1.01	HS1.15	----	----	----	----	----
9-----	HS .66	HM .70	HM .90	HM .98	----	----	----	----	----
18----	HS .72	HS .84	HS .96	HS1.16	----	----	----	----	----
19----	HM .60	HM .74	HM .90	HM1.11	----	----	----	----	----
24----	HM .51	HM .72	----	----	----	----	----	----	----
25----	----	----	----	----	----	----	HM0.80	HM0.71	HM0.61
26----	----	----	----	HM .88	----	----	----	----	----
Averages	0.67	0.78	0.94	1.09	----	----	0.80	0.71	0.61
GUAM, M. I.									
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
May									
1-----	----	M 0.76	----	----	----	----	----	----	----
18----	----	M .69	----	----	----	----	----	----	----
23----	----	S .80	----	----	----	----	----	----	----
Averages	----	0.75	----	----	----	----	----	----	----

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon
HS Slight haze
HM Moderate haze
† Readings during solar eclipse

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. MAY 1967

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	848	765	853	860	689	860	844	859	830	859	839	725	845	824	856	852	736	681	769	---	862	---	---	755	---	568	---	705	715	682	---	787
AMES IOWA	539	639	310	546	178	385	445	625	672	244	141	458	550	354	719	480	679	543	691	711	716	703	695	623	457	658	410	98	86	---	---	495
ANNETTE ALASKA	628	615	632	524	65	---	191	312	615	668	657	503	81	178	122	355	539	685	360	94	649	130	434	646	663	390	85	444	407	728	726	437
APALACHICOLA FLORIDA	580	344	590	416	605	614	398	698	699	720	491	689	657	618	561	736	717	714	710	671	587	586	163	479	755	714	689	698	747	832	775	621
ASTORIA OREGON	472	103	158	395	449	400	563	210	532	---	644	325	448	643	727	710	563	563	698	734	565	691	507	601	676	569	383	279	450	446	612	504
ATLANTA GEORGIA	355	252	657	63	236	148	654	479	723	626	370	339	593	696	374	683	660	703	667	637	368	83	113	711	696	705	702	673	550	577	332	498
BARROW ALASKA	329	394	337	262*	444	504	361	412	343	327	329	381	403	484	430	613	459	352	587	491	550	617	498	367	563	715	555	593	553	470	386	455*
BETHEL ALASKA	485	523	583	577	559	606	468	206	192	310	464	458	386	255	261	663	605	496	617	573	507	427	498	513	408	646	668	690	685	560	483	496
BISMARCK N.DAK.	556	686	774	725	751*	645	569	744	656	81	756	347	651	614	600	656	669	693	756	679	625	708	632	731	230	728	716	734	598	435	496	621*
BLUE HILL MASS.	661	302	347	507	403	109	228	387	270	222	363	508	724	650	67	584	625	573	554	572	552	549	712	547	61	117	376	703	362	624	578	446
BOISE IDAHO	617	646	625	670	664	627	622	652	278	357	409	510	668	658	694	701	619	655	717	702	708	690	705	689	741	650	622	306	486	520	324	598
BOSTON MASSACHUSETTS	643	319	347	491	375	120	213	336	188	230	356	520	709	669	42	574	623	539	484	530	558	557	688	586	57	113	434	659	345	567	622	435
BROWNSVILLE TEXAS	574	179	475	439	---	642	678	703	709	682	667	703	553	613	646	566	559	526	603	596	358	764	748	756	710	708	700	562	605	415	683	604
CANTON ISLAND P.I.	---	---	---	622	620	586	620	435	602	411	562	602	156	608	621	540	365	574	517	566	572	471	---	600	524	589	517	589	595	577	602	542
CAPE HATTERAS N.C.	593	593	522	412	525	408	285	621	655	666	332	385	197	444	587	571	676	677	688	595	441	99	74	86	472	698	706	627	606	428	184	479
CARIBOU MAINE	---	439	81	570	417	497	636	106	227	396	398	131	626	736	252	228	400	476	174	266	528	582	733	733	273	141*	---	353*	775	408	538	418*
CHARLESTON S.C.	592	592	733	90	267	487	427	731	750	771	450	511	618	737	715	809	739	825	774	741	723	60	91	391	784	699	754	784	762	571	514	596
CLEVELAND OHIO	246	141	672	523	442	420	48	206	229	594	94	384	582	77	381	705	458	600	532	589	647	640	676	602	654	716	617	700	438	681	752	485
COLUMBIA MISSOURI	690	686	323	641	112	86	476	761	722	306	441	151	161	120	595	483	728	719	693	197	728	733	704	673	732	739	629	687	287	207	112	494
DAVIS CALIFORNIA	654	678	673	670	405	682	652	684	301	648	614	723	727	714	698	693	704	693	696	694	694	710	703	678	702	682	700	612	672	722	633	662
DODGE CITY KANSAS	645	585	660	169	141	209	703	722	669	675	742	563	501	235	741	714	778	751	578	238	800	814	773	745	782	568	504	378	587	514	393	577
E. LANSING MICHIGAN	408	386	509	120	408	618	662	275	188	---	---	752	606	591	577	740	563	452	648	600	396	721	219	630	620	574	630	636	674	646	762	538
EL CENTRO CALIF. NPF	593	581	586	464	593	584	581	539	442	600	600	600	612	619	601	582	587	590	580	580	589	512	336	509	578	555	591	556	573	594	599	565
EL PASO TEXAS	839	805	822	772	597	700	794	766	793	803	781*	833	818*	841	821	829	726	609	675	669	810	788	826	602*	419	812	748	817	842	743	834	759*
ELY NEVADA	---	693	649	299	318	806	793	634	---	570	---	413	656	813	784	802	639	757	736	810	804	717	721	492	408	652	589	521	357	---	332	621
EPPLEY NEWPORT R.I.	642	290	534	569.	577	88	115	487	411	301	297	567	680	521	151	663	639	605	566	598	453	381	582	549	66	121	466	673	330	634	697	460
FAIRBANKS ALASKA	650	631	562	588	434	700	683	407	471	310	556	267	741	436	426	771	738	284	594	401	403	272	459	733	306	463	556	618	643	659	563	527
FORT WORTH TEXAS	674	765	347	267	296	538	758	627	725	683	696	505	463	158	784	785	770	785	597*	---	199	792	780	787	770	755	693	653	327	361	728	602*
FRESNO CALIFORNIA	684	707	620	375	463	694	697	698	354	512	694	711	723	711	714	723	710	722	736	710	699	704	714	729	720	689	629	684	699	728	499	660
GAINESVILLE FLORIDA	600	604	528	488	460	492	483	795	703	764	680	632	644	668	663	705	765	696	565	612	684	156	400	292	731	728	703	706	515	640	698	606
GLASGOW MONTANA	287	536	533	560	694	388	624	413	410	158	362	629	411	600	403	662	617	613	659	596	569	---	677	514	610	763	745	739	425	114	120	469
GRAND JUNCTION COLO.	636	627	741	481	279	640	741	702	596	735	574	605	507	695	783	782	775	617	610	792	781	778	775	609	289	304	686	371	569	476	547	616
GREAT FALLS MONTANA	338	311	549	726	721	554	493	649	215	167	595	314	638	531	523	659	---	654	610	660	678	648	732	627	770	795	714	553	152	495	208	542
GREENSBORO N.C.	371	379	617	251	438	231	483	489	477	674	451	425	259	301	472	619	534	675	552	455	245	89	321	700	631	518	651	646	540	229	105	446
INDIANAPOLIS INDIANA	---	---	---	---	---	---	---	549	718	---	---	---	---	---	---	---	---	---	---	---	---	---	676	729	---	642	735	459	190	121	---	---
LAKE CHARLES LA.	287	707	164	327	224	522	649	594	595	551	588	576	551	533	652	725	683	703	626	251	397	626	714	724	654	549	586	679	480	508	270	538
LAKELAND FLORIDA	608	575	614	429	501	610	552	725	545	739	623	708	654	686	699	366	596	740	682	681	654	351	565	454	753	701	682	624	483	640	710	611
LANDER WYOMING	680	645	184	537	329	686	703	664	609	539	192	390	529	735	634	741	747	652	351	712	733	734	625	496	285	602	517	458	414	563	201	545
LARAMIE WYOMING	472	388	454	500	532	651	560	670	562	680	471	456	409	506	377	711	687	406	319	663	717	741	603	442	404	115	403	423	578	445	339	506
LAS VEGAS NEVADA	770	706	734	438	714	751	757	702	558	776	730	743	779	776	769	776	776	744	734	770	778	773	625	610	642	747	590	751	485	---	---	707
LITTLE ROCK ARKANSAS	---	---	---	---	---	---	---	---	705	435	680	253	528	170	729	754	752	747	600	337	172	751	758	740	---	737	705	717	590	258	324	565
LOS ANGELES, CALIF.	757	741	721	666	720	736	681	701	403	738	717	727	784*	777	791	739	725	639	548	576	668	689	525	580	186	438	387	475	451	461	231	612*
LOS ANGELES CALIF. U	649	726	686	244	476	854	840	740	330	856	722	791	754	754	570	845	871	765	662	819	860	827	578	761	196	287	302	201	168	263	134	598
MADISON WISCONSIN	664	494	580	660	488	592	486	349	731	89	156	682	647	452	600	742	718	623	746	762	667	744	566	619	458	696	531	62	580	398	739	559
MANHATTAN KANSAS	574	590	163	388	53	91	545	656	576	339	324	107	111	236	576	563	641	604	517	384	639	631	632	606	610	574	473	499	135	236	74	424
MATANUSKA ALASKA	588	562	596	426	167	625	628	584	609	223	640	614	549	257	142	607	727	400	553	672	---	289	571	210	325	702	707	664	626	376	172	494
MEDFORD OREGON	697	697	690	703	659	633	712	650	145	276	349	626	748	740	726	720	704	728	729	722	716	726	748	687	766	756	672	527	565	442	289	631
MIAMI FLORIDA	490	560	---	---	438	539	473	521	571	576	---	---	600	612	606	506	312	495	684	544	638	520	528	591	666	748	691	612	683	699	588*	574*
MIDLAND TEXAS	---	696	674	588	449	670	681	668	654	647	674	---	---	---	693	706	673	536	331	463	701	696	684	656	517	---	---	282	552	629	683	608
NASHVILLE TENNESSEE	247	544	740	481	635	135	489	554	738	589	236	162	159	190	345	699	652	748	483	360	181	572	756	733	736	727	725	607	475	403	231	495
NEW YORK N.Y. U	594	41	648	523	507	76	33	455	398	504	100	562	708	260	111	687	685	672	553	549	245	577	648	362	43	172	739	666	79	762	689	440
NORTH OMAHA NEBRASKA	440	632	156	353	119	381	470	756	632	354	236	289	519	392	661	580	746	708	693	743	746	721	607	---	706	637	343	136	68	62	88	466
OAK RIDGE TENNESSEE	215	125	730	206	672	155	379	404	618	576	110	306	211	428	127	616	525	653	485	560	229	226	634	694	610	651	707	660	300	567	299	441
OKLAHOMA CITY OKLA.	729	675	475	298	97	190	725	724	664	582	672	371	72	405	818	797	---	---	571	73	477	743	747	740	730	588	513	387	422	259	641	524
PALMER AAES ALASKA	516	481	500	330	202	555	552	505	491	233	563	507	464	185	172	517	571	321	441	548	210	241	434	262	456	628	619	620	476	338	139	422

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

MAY 1967

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	753	744	735	739	727	695	731	628	651	730	762	745	751	776	767	713	592	709	702	736	739	651	503	412	514	710	498	760	584	624	770	682
PORTLAND MAINE	639	354	163	564	289	418	349	298	47	212	464	485	687	697	54	494	640	478	376	639	620	550	691	632	138	117	476	649	562	531	496	445
PROSSER WASHINGTON	651	680	526	636	704	491	463	660	370	307	306	437	736	592	727	735	546	599	614	716	654	722	739	780	772	700	585	472	699	577	587	606
RAPID CITY S.DAK.	719	588	336	388	719	738	590	569	742	192	222	421	365	419	325	767	793	654	471	734	673	695	781	666	666	722	625	728	101	112	88	536
RENO NEVADA	668	558	639	548	409	651	648	618	488	645	409	483	681	674	667	646	634	652	664	663	668	673	685	587	669	550	414	595	686	662	253	596
RICHLAND 25 NW WASH.	608	623	530	487	632	392	288	655	309	189	205	478	662	443	603	643	449	515	648	623	593	641	692	696	706	626	517	316	629	---	---	531
RIVERSIDE CALIFORNIA	785	752	739	688	368	736	727	693	486	518	550	727	810	793	791	748	750	667	652	682	730	747	426	744	544	610	297	229	211	151	118	596
RUSTON LOUISIANA	88	620	453	546	458	359	599	507	570	464	534	487	546	538	660	630	615	615	614	255	44	643	592	620	621	612	619	587	420	176	192	493
SAINT CLOUD MINN.	184	568	479	463	579	599	380	628	590	63	438	443	595	567	644	563	630	407	688	324	624	539	708	438	460	514	506	433	739	661	709	521
SALT LAKE CITY	623	672	606	511	---	---	749	643	481	237	340	318	643	764	769	780	765	765	646	783	775	775	642	435	309	540	638	365	421	393	615	586
SAN ANTONIO TEXAS	450	698	98	380	326	420	591	544	632	566	571	622	620	348	729	703	717	623	414	460	701	684	720	724	621	550	583	444	288	318	452	535
SANTA MARIA CALIF.	716	699	641	680	614	685	582	670	301	658	733	725	748	731	734	719	715	488	612	662	689	618	628	630	441	495	619	664	683	742	685	645
SAULT STE MARIE MICH	422	317	463	---	702	698	690	622	550	646	306	741	717	461	734	748	605	287	492	353	643	771	209	484	679	669	736	619	690	775	765	586
SEATTLE TACOMA WASH.	365	251	332	439	453	438	534	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	463	417	489	429	431	---
SPOKANE WASHINGTON	467	488	560	323	654	556	365	681	193	129	215	487	553	526	662	713	595	642	725	592	629	704	737	690	750	694	590	221	478	433	499	534
STATE COLLEGE PENN.	439	236	717	465	345	144	40	275	240	421	44	444	494	118	98	711	591	646	347	702	433	451	756	764	754	784	670	694	44	802	789	466
STERLING VIRGINA	455	484	684	411	635	71	76	276	380	653	292	654	164	73	204	605	366	729	520	665	162	210	595	658	754	769	722	663	249	---	428	453
STILLWATER OKLAHOMA	673	638	464	454	84	173	670	633	581	493	633	291	94	326	715	653	682	644	584	112	537	688	698	696	700	563	474	434	379	284	643	506
SWAN ISLAND W.I.	643	589	632	658	653	643	676	---	680	674	675	656	603	666	649	682	664	680	662	658	619	668	678	554	579	643	---	520	694	557	631	641
TAMPA FLORIDA	657	669	570	596	599	618	571	699	640	736	695	700	670	688	711	486	558	718	636	678	687	325	---	548	748	726	715	655	616	701	707	644
TUCSON ARIZONA	---	673	700	696	687	---	---	---	633	662	699	705	699	724	715	679	452	563	643	687	680	531	480	489	650	694	564	728	661	547	726	643
WAKE ISLAND,PACIFIC	712	740	703	539	534	712	574	291	612	546	706	508	587	677	683	712	668	652	677	662	620	665	635	680	672	649*	689	661	665	673	636	637*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

MAY 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	224	209	224	180	105	238	231	215	227	87	258	235	213	94	110	210	261	150	179	254	117	147	255	150	192	271	290	285	238	165	68	196

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

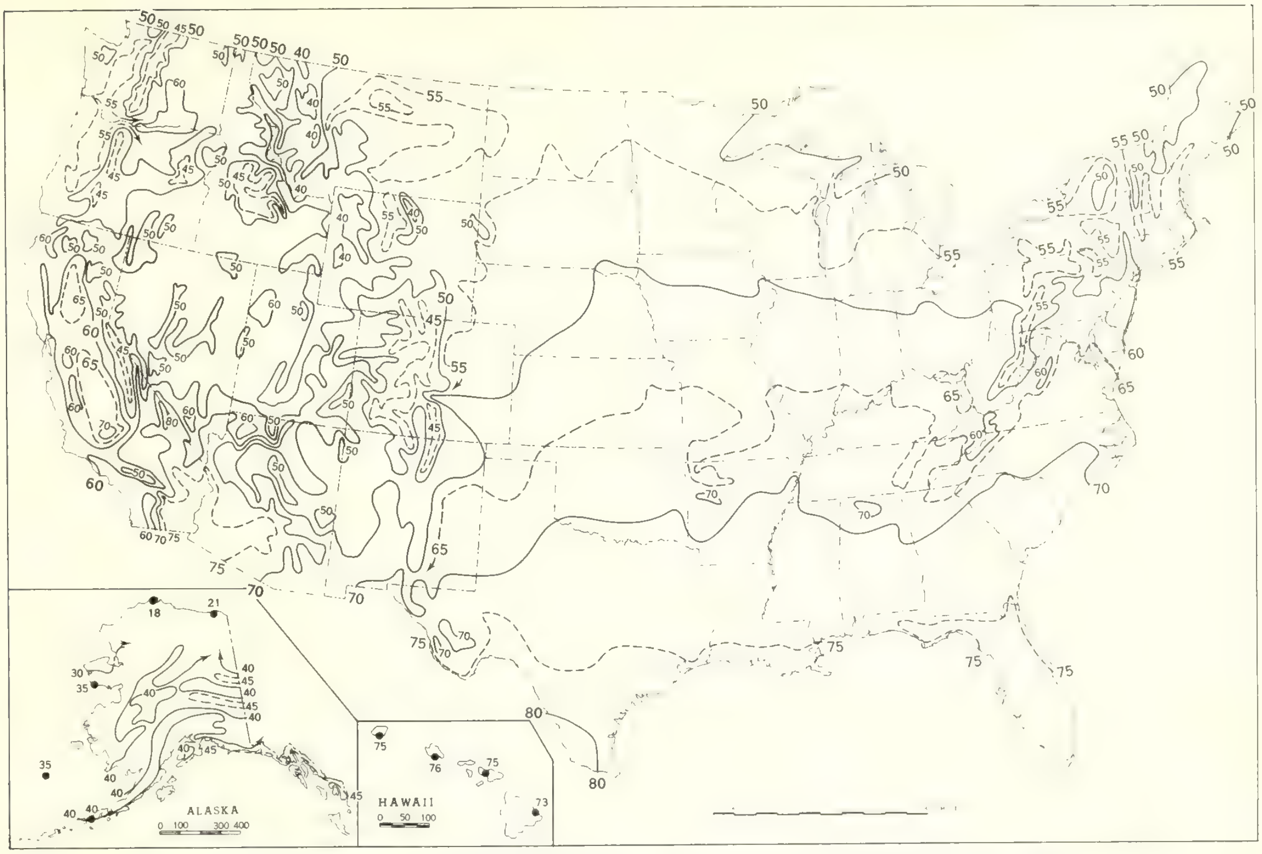
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), May.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), May 1967.

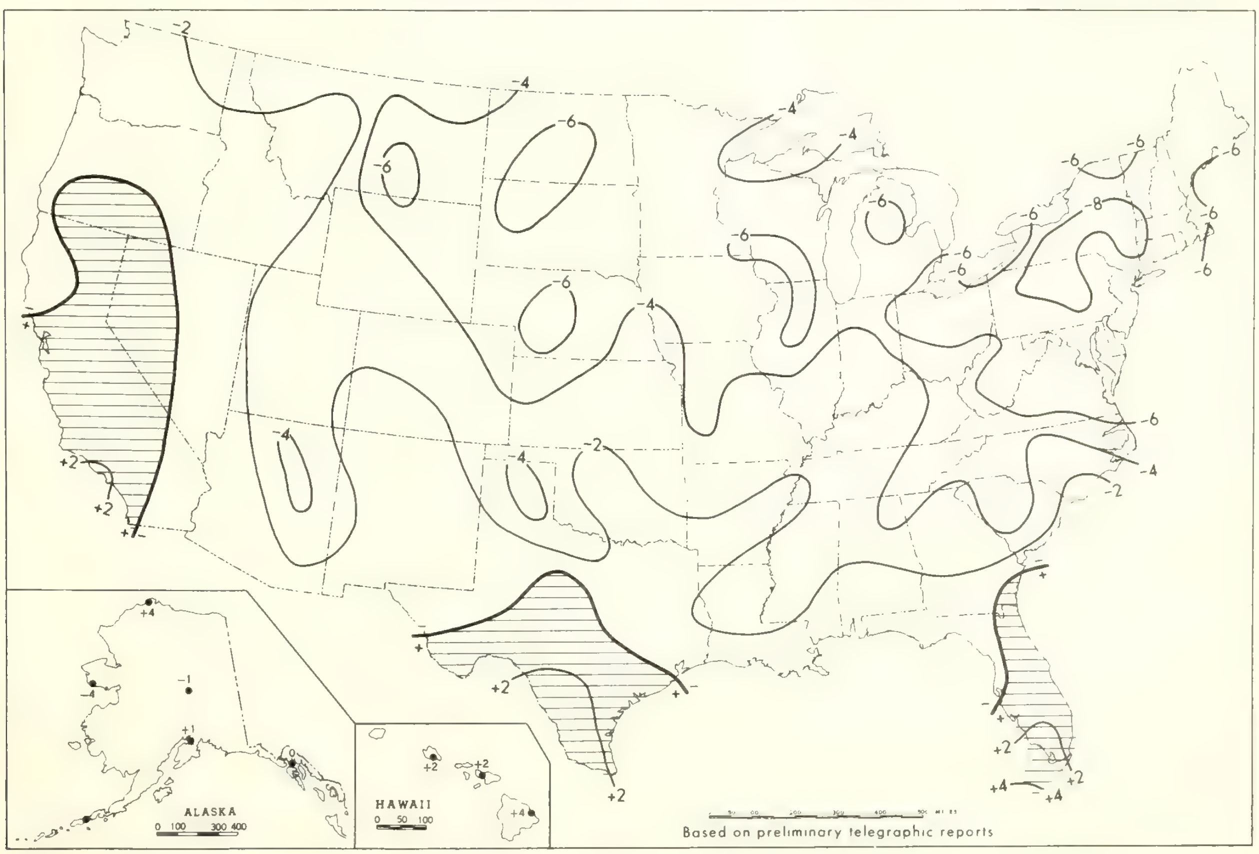


Chart II. Total Precipitation (Inches), May 1967.

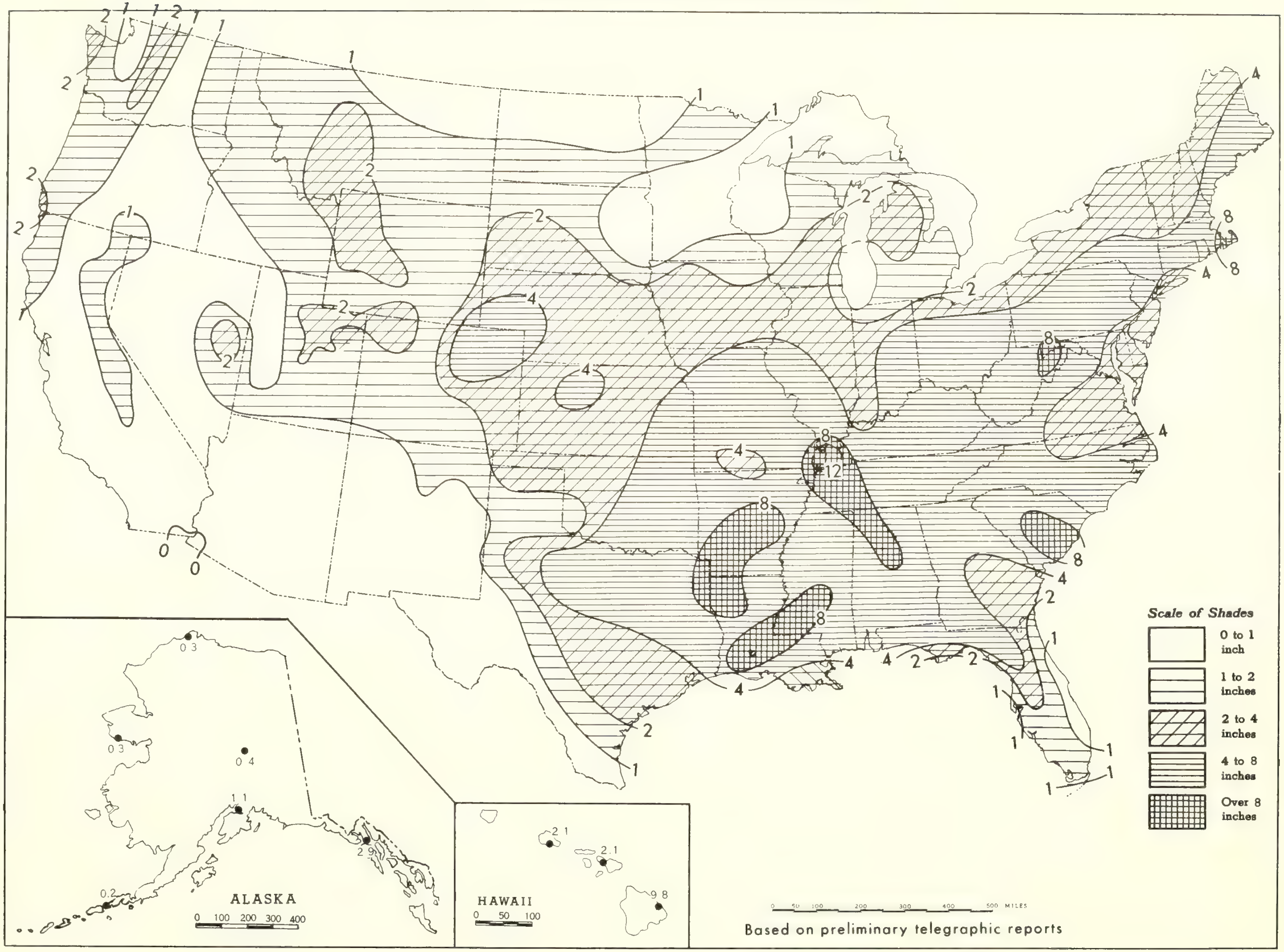


Chart III. Percentage of Normal Precipitation, May 1967.

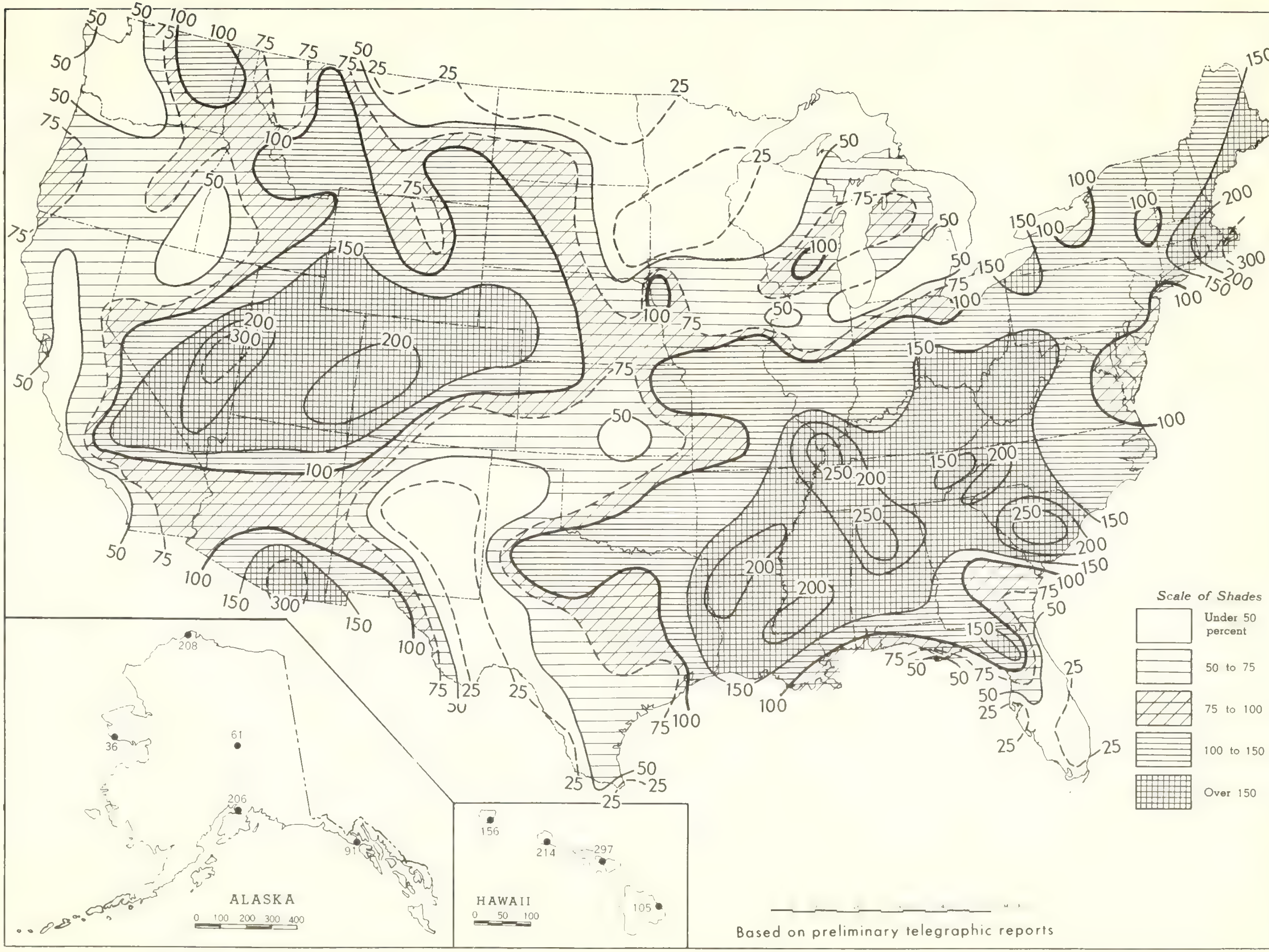
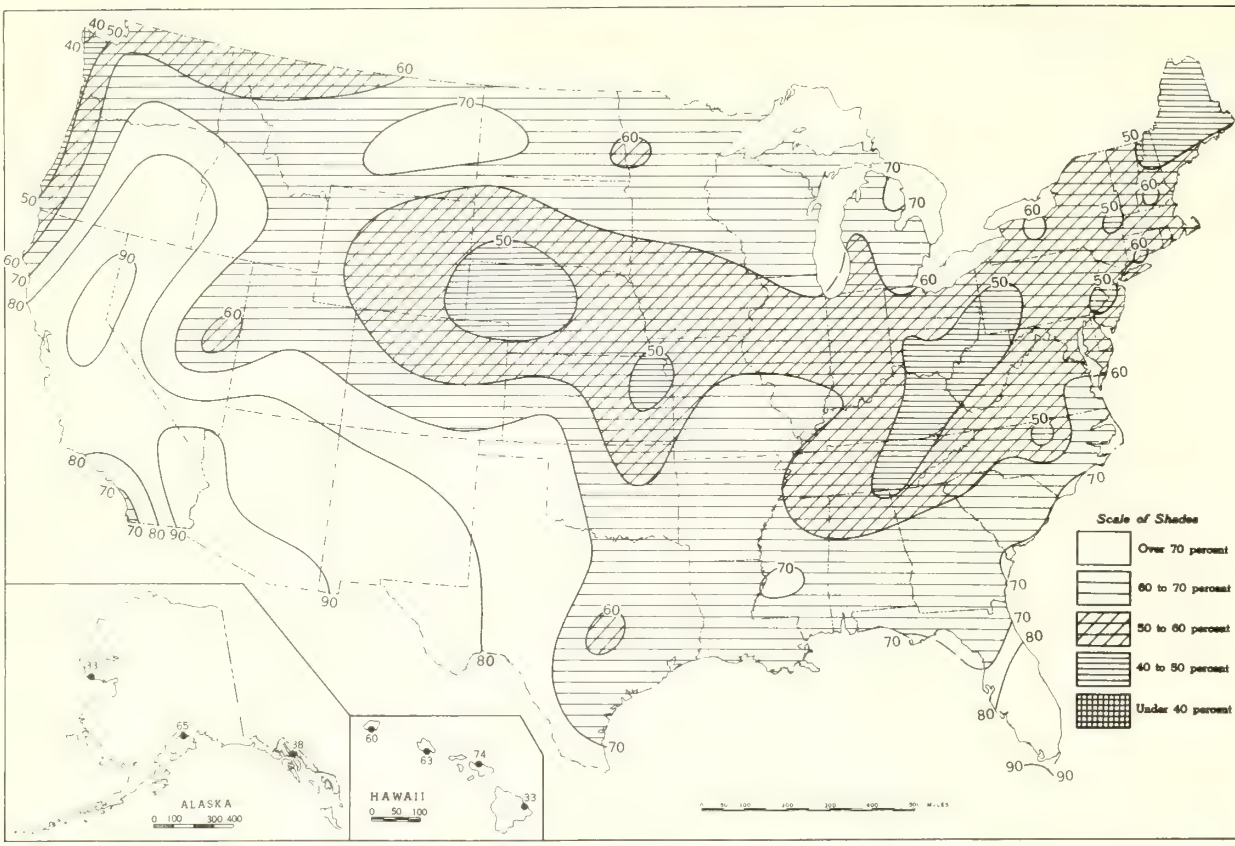
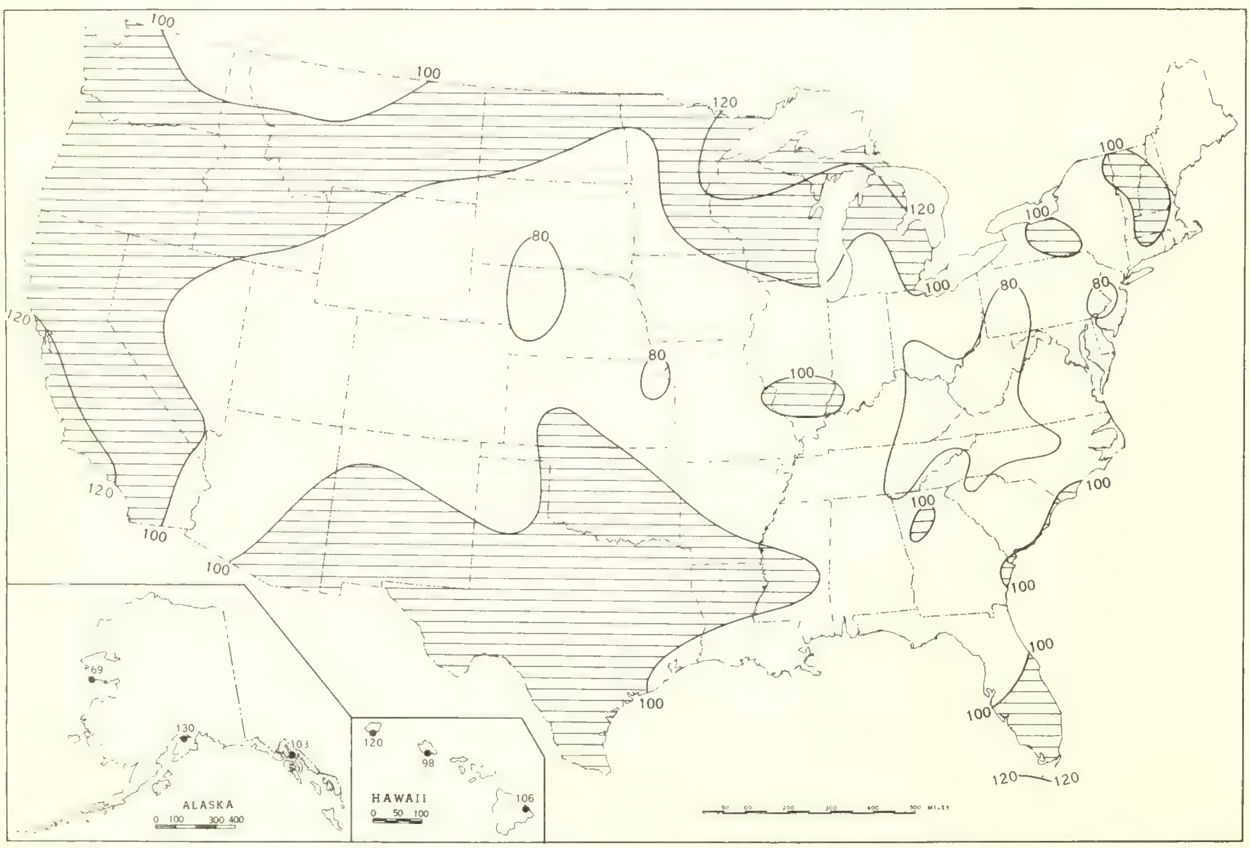


Chart VI. A. Percentage of Possible Sunshine, May 1967.

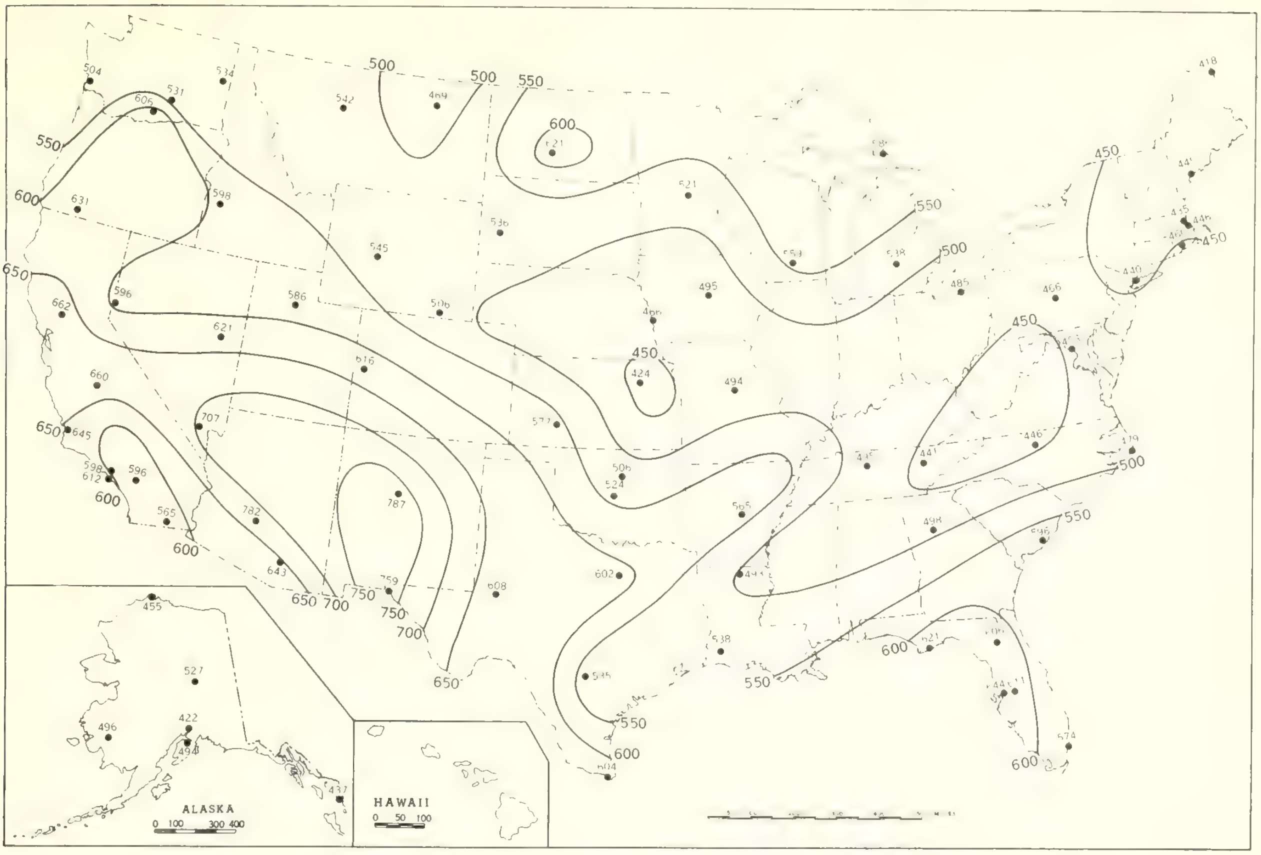


B. Percentage of Mean Monthly Sunshine, May 1967.

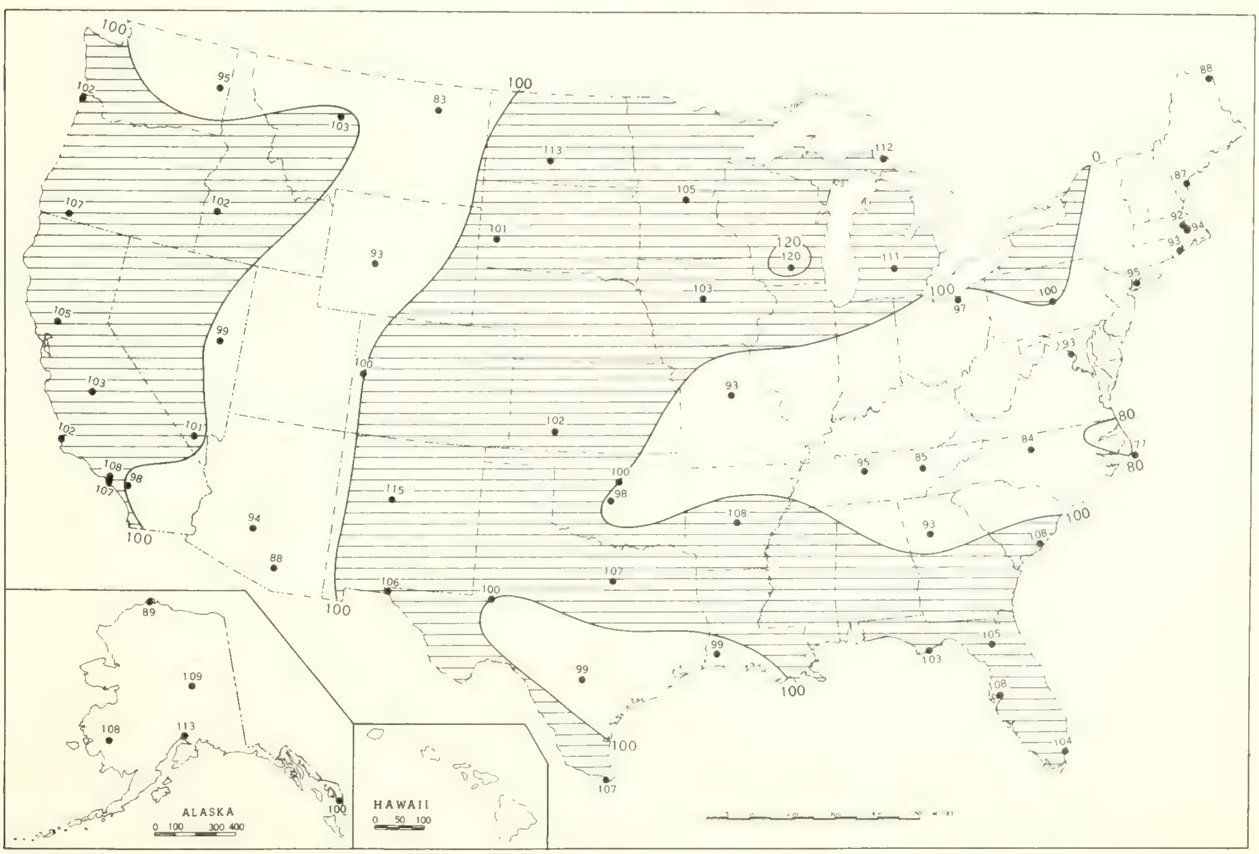


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, May 1967.

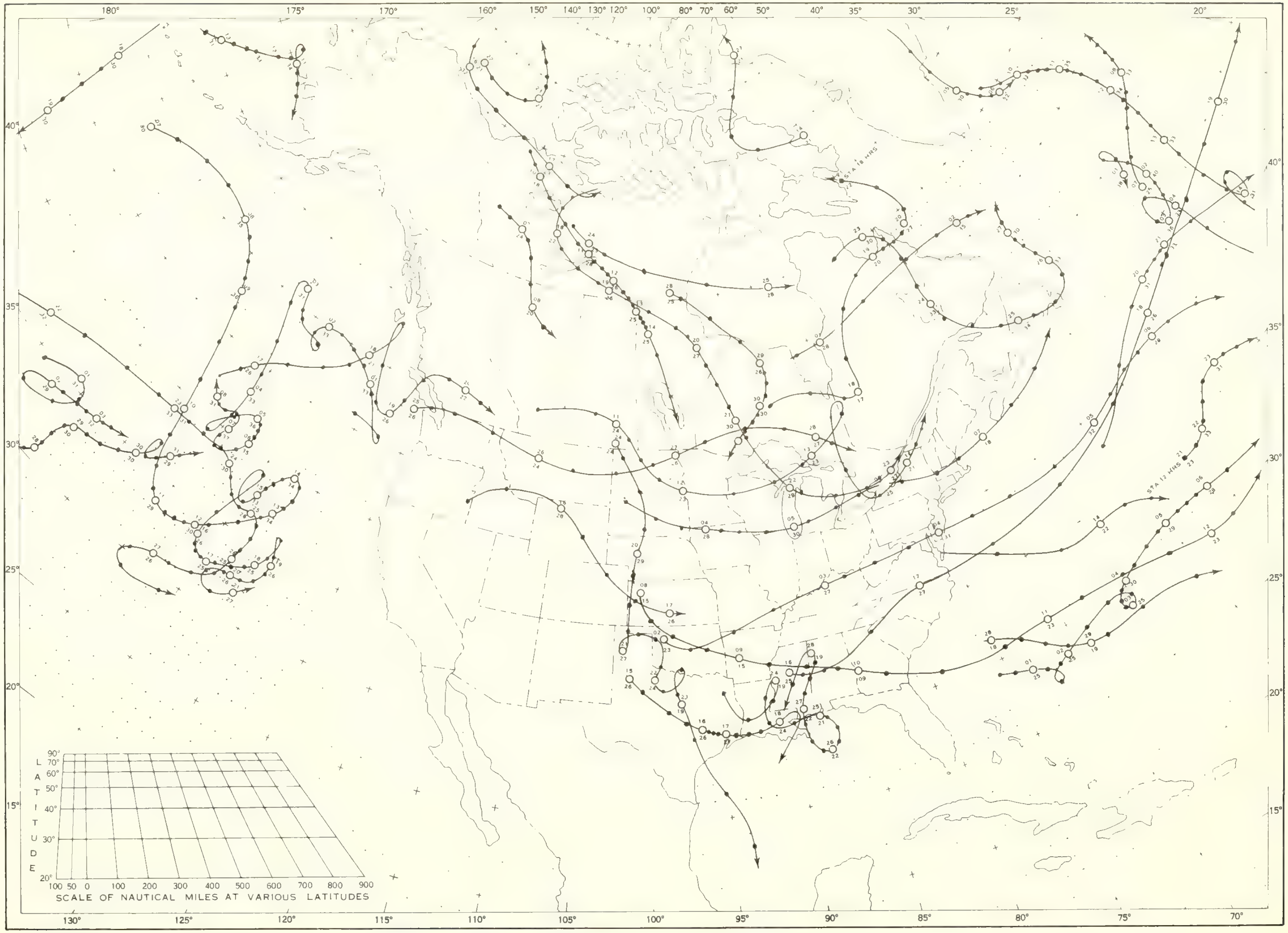


B. Percentage of Mean Daily Solar Radiation, May 1967.



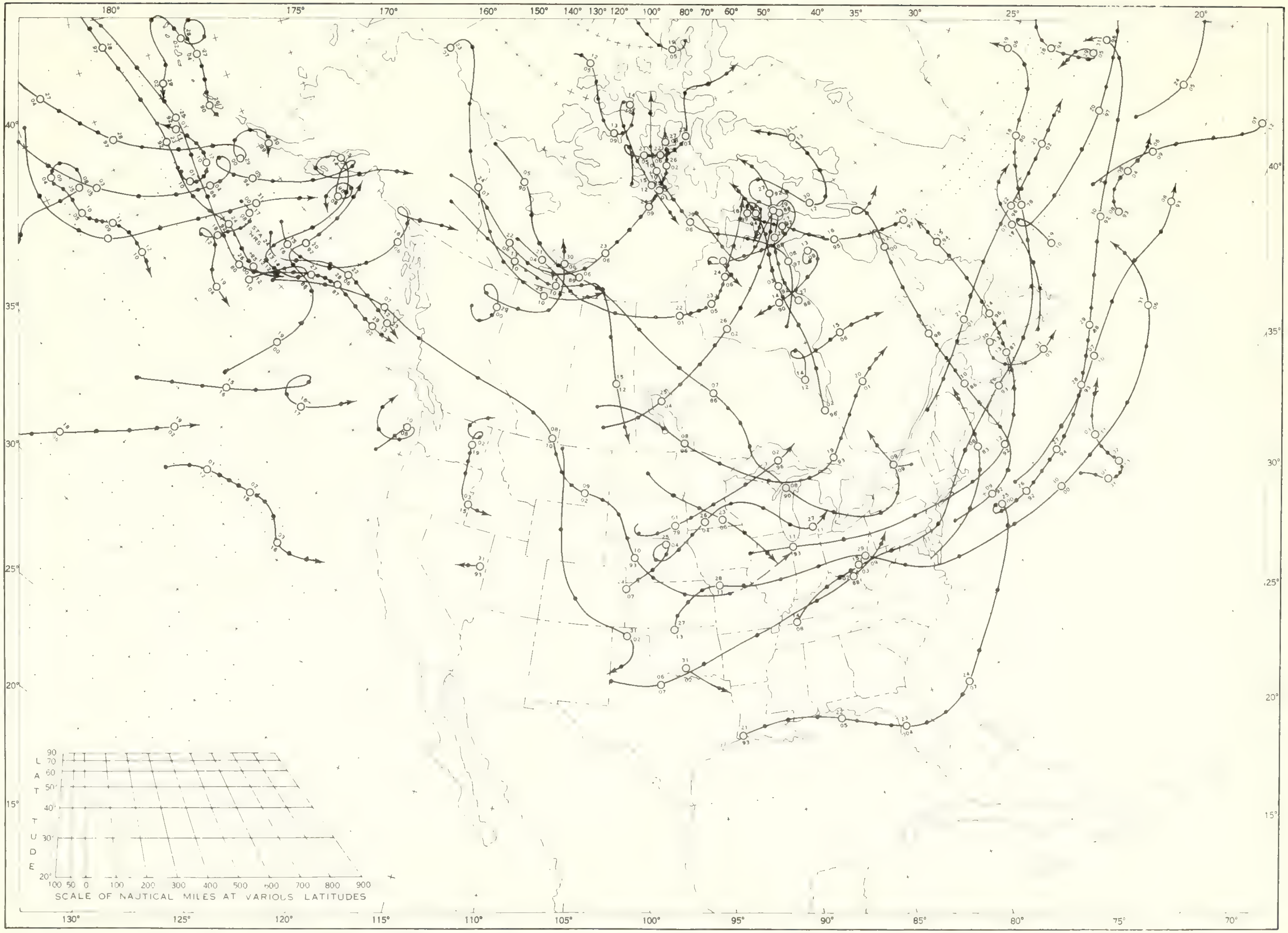
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, May 1967.



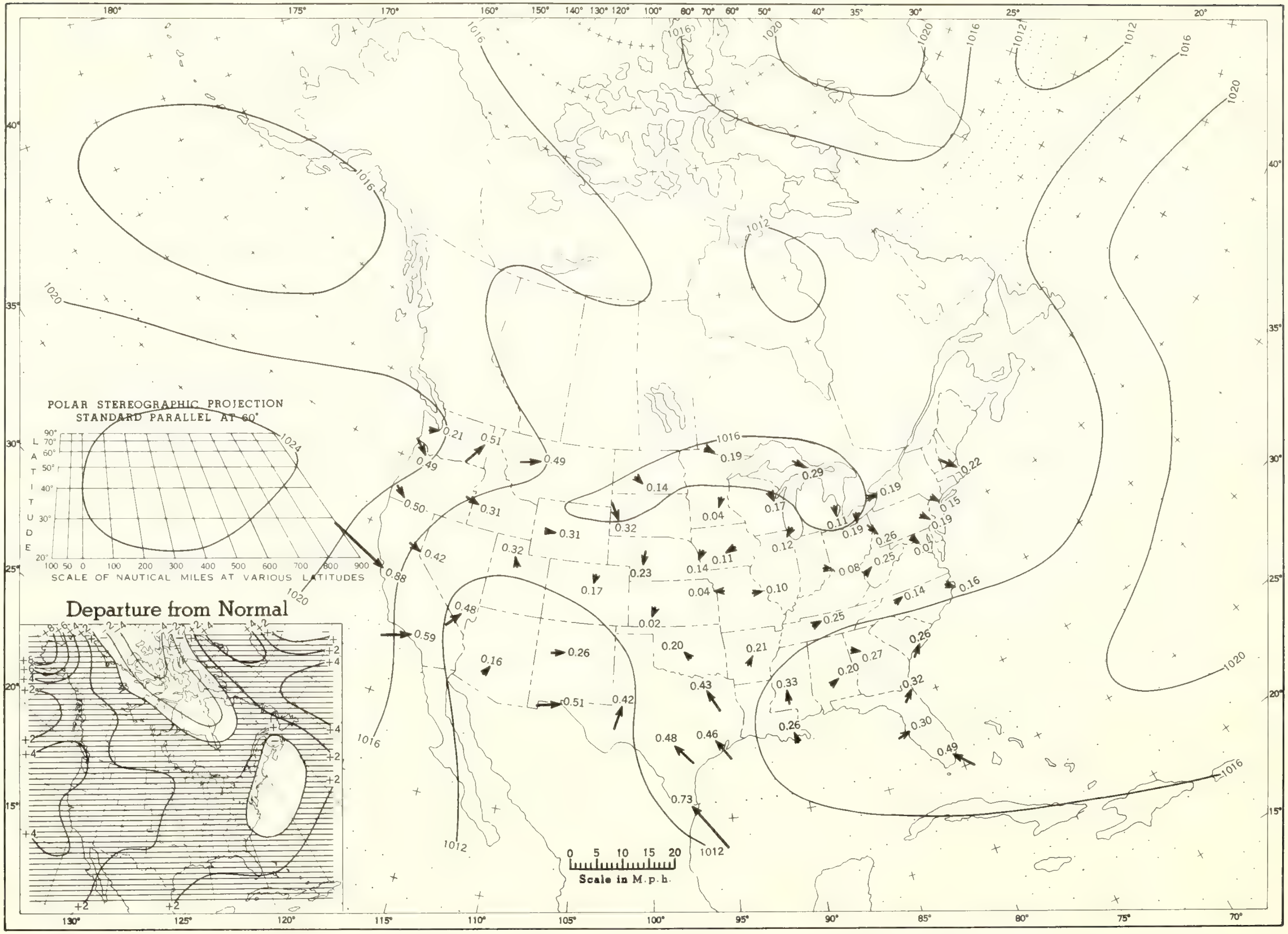
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, May 1967.



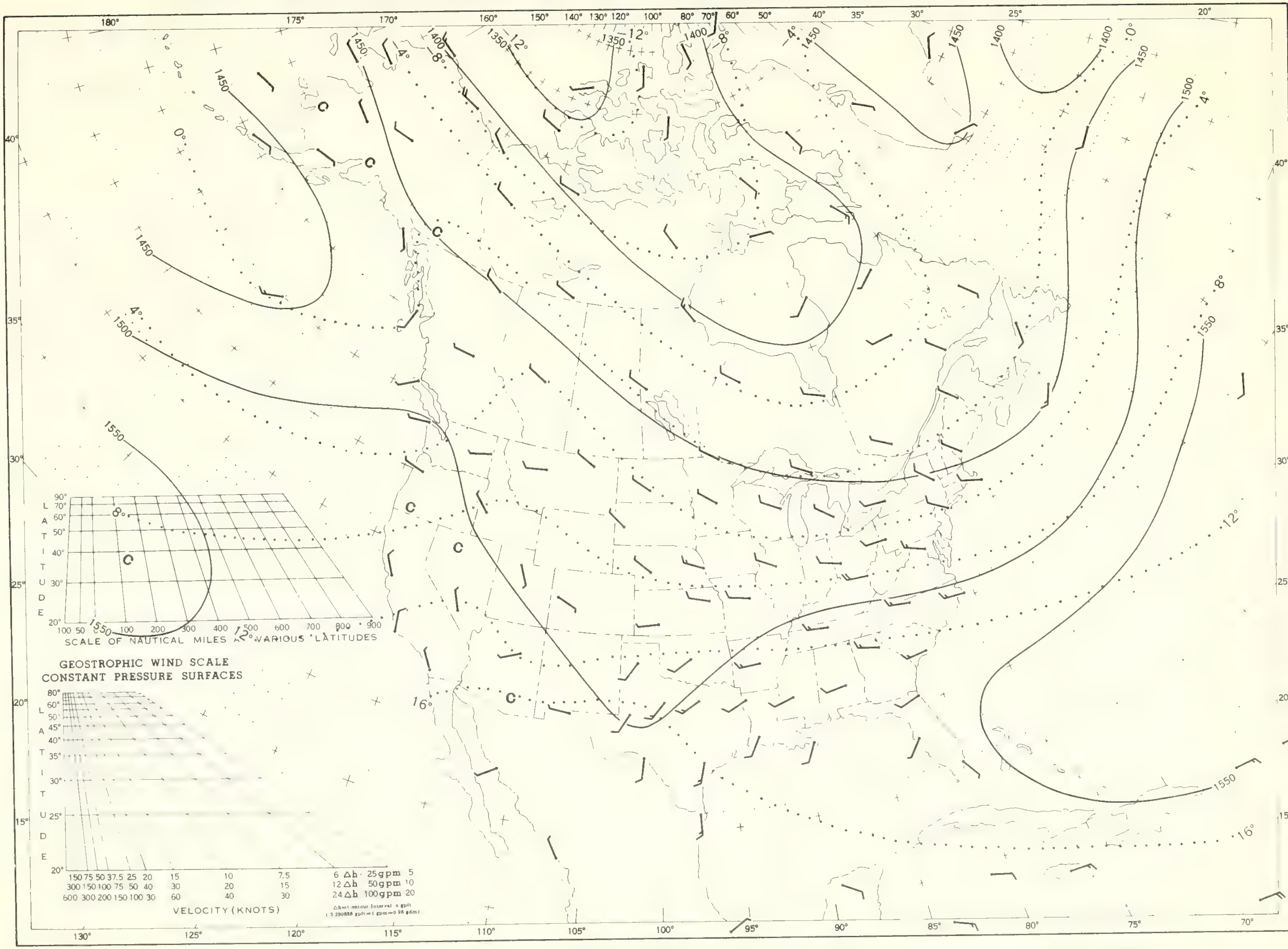
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, May 1967. Inset: Departure of Average Pressure (mb) from Normal, May 1967.



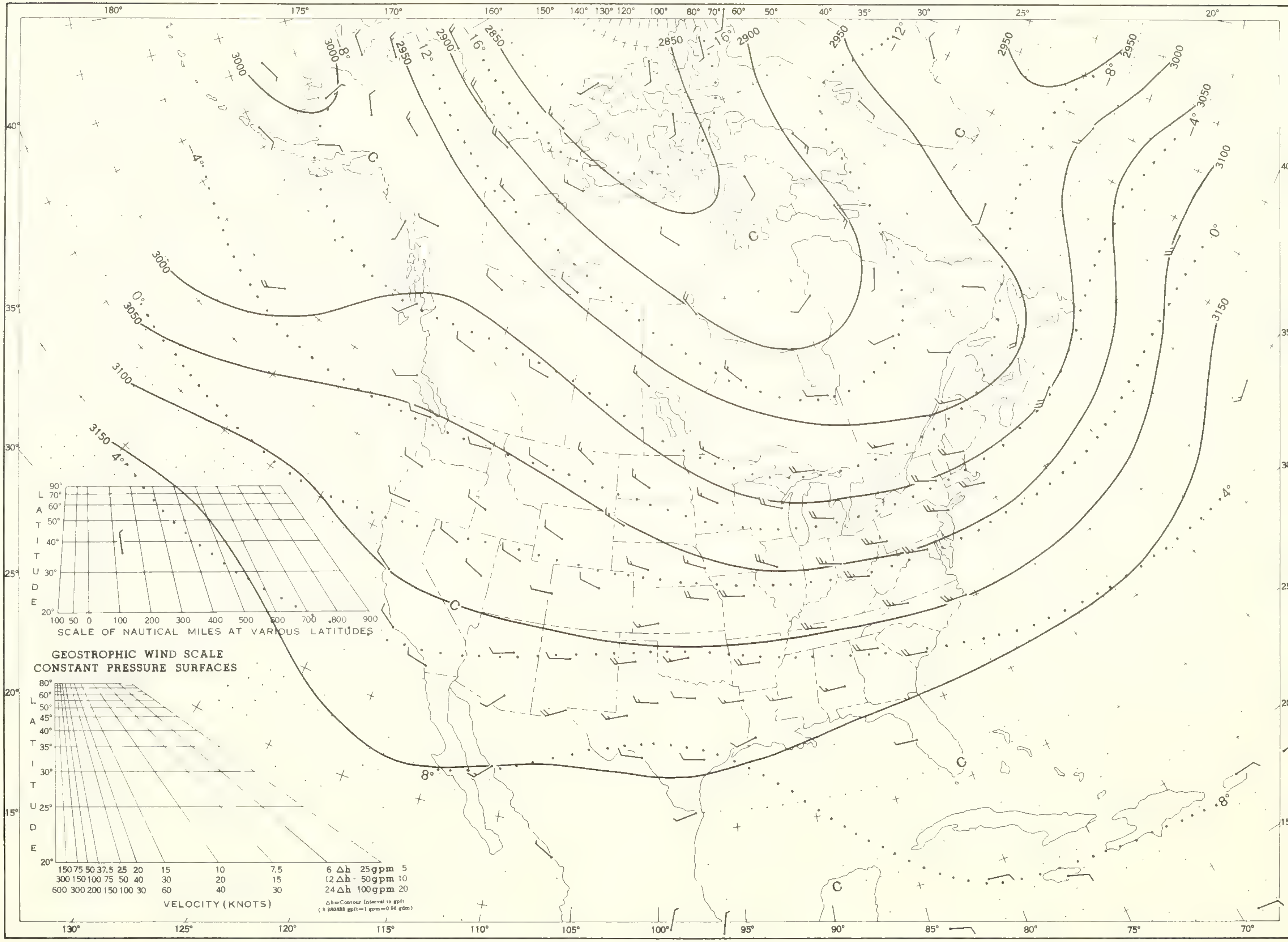
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed ÷ average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.



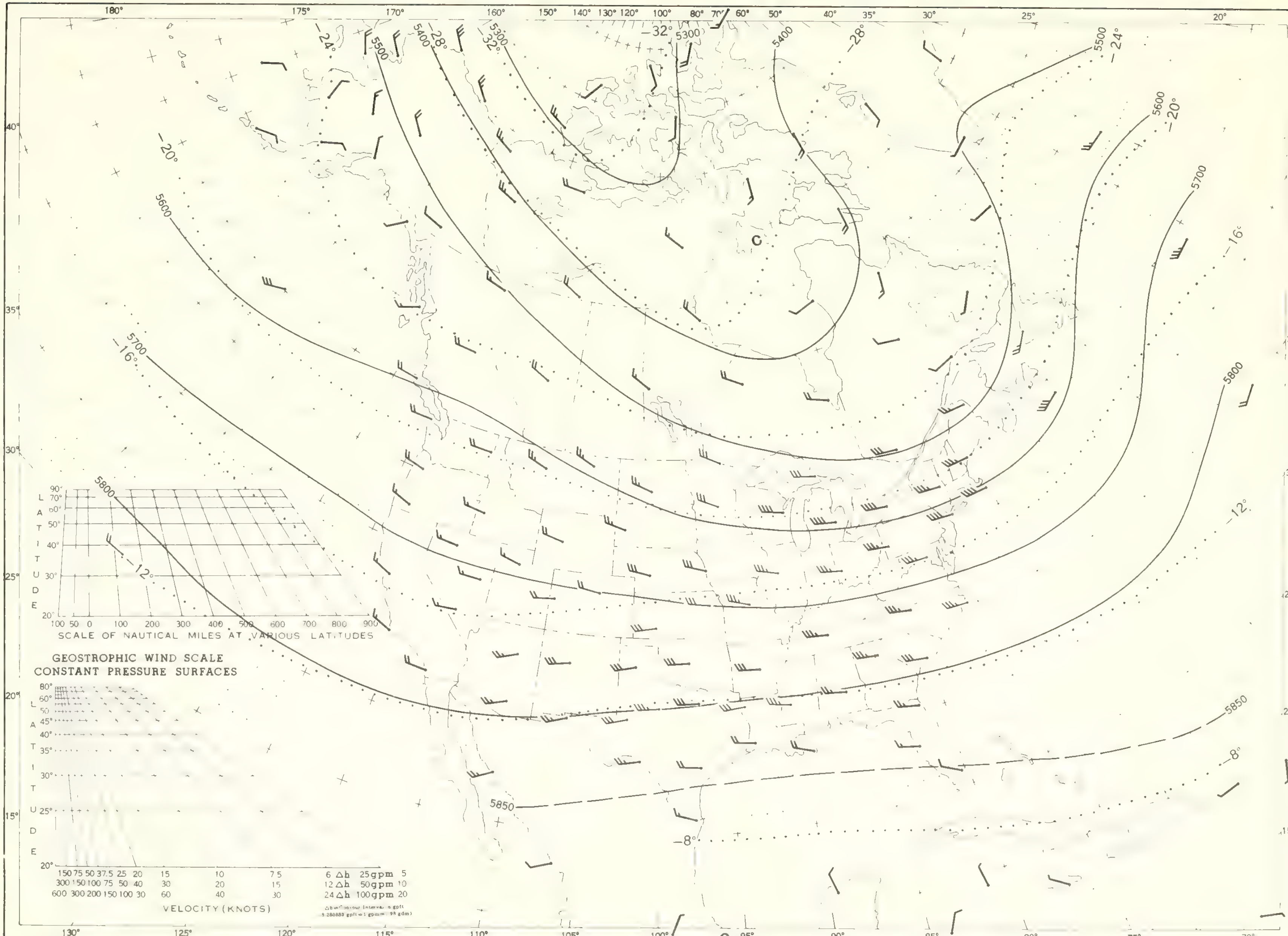
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.



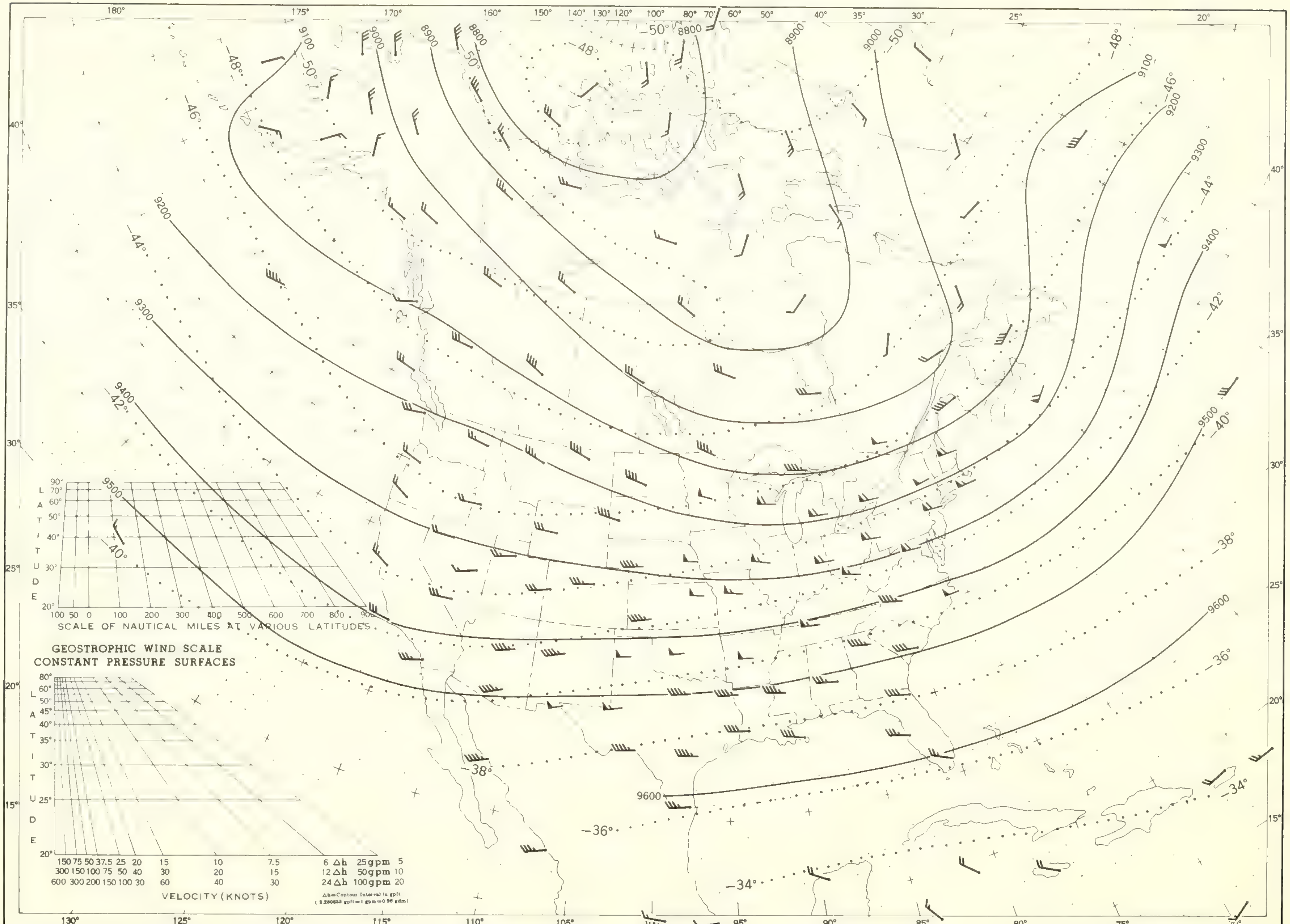
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.



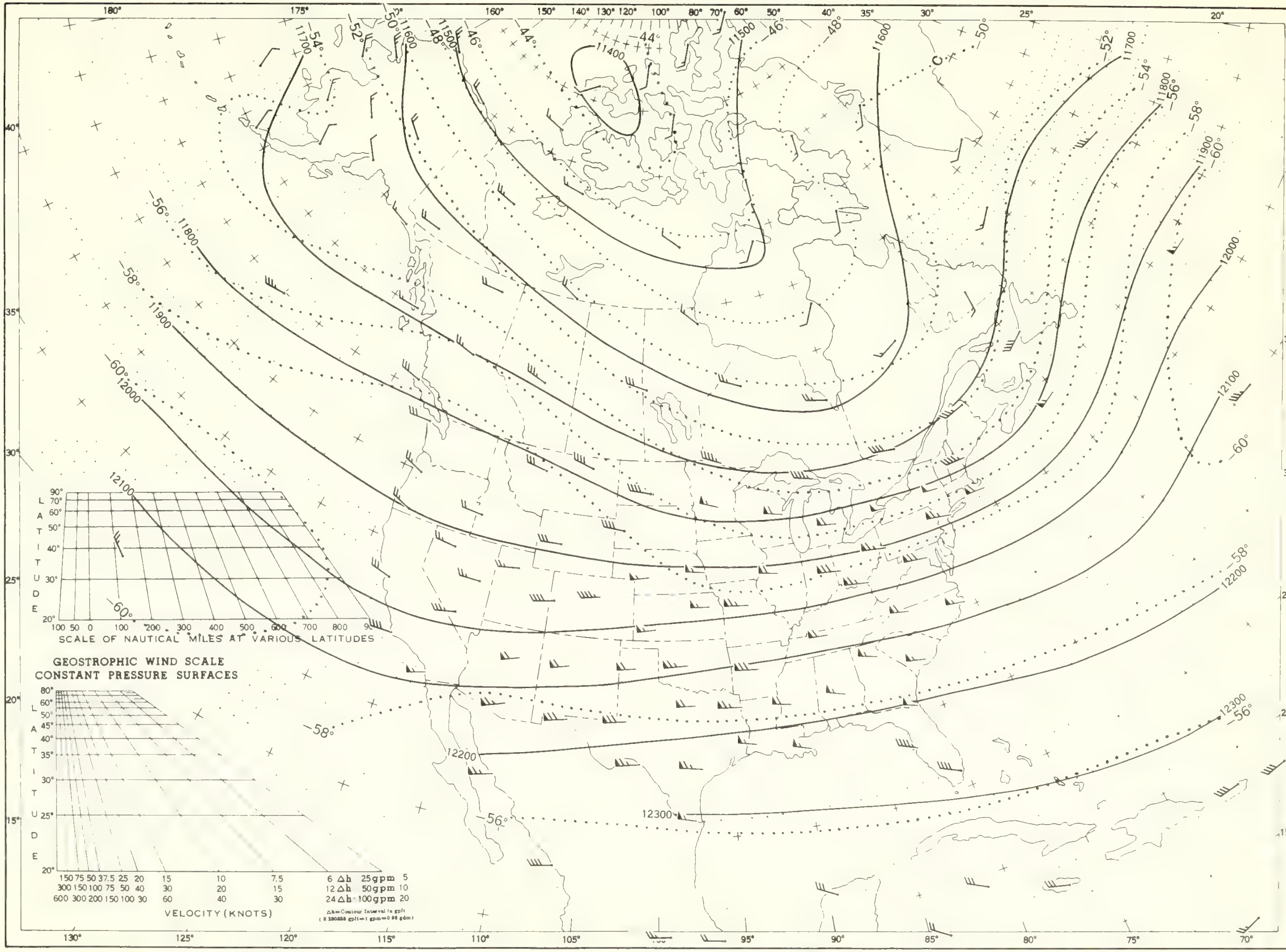
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.



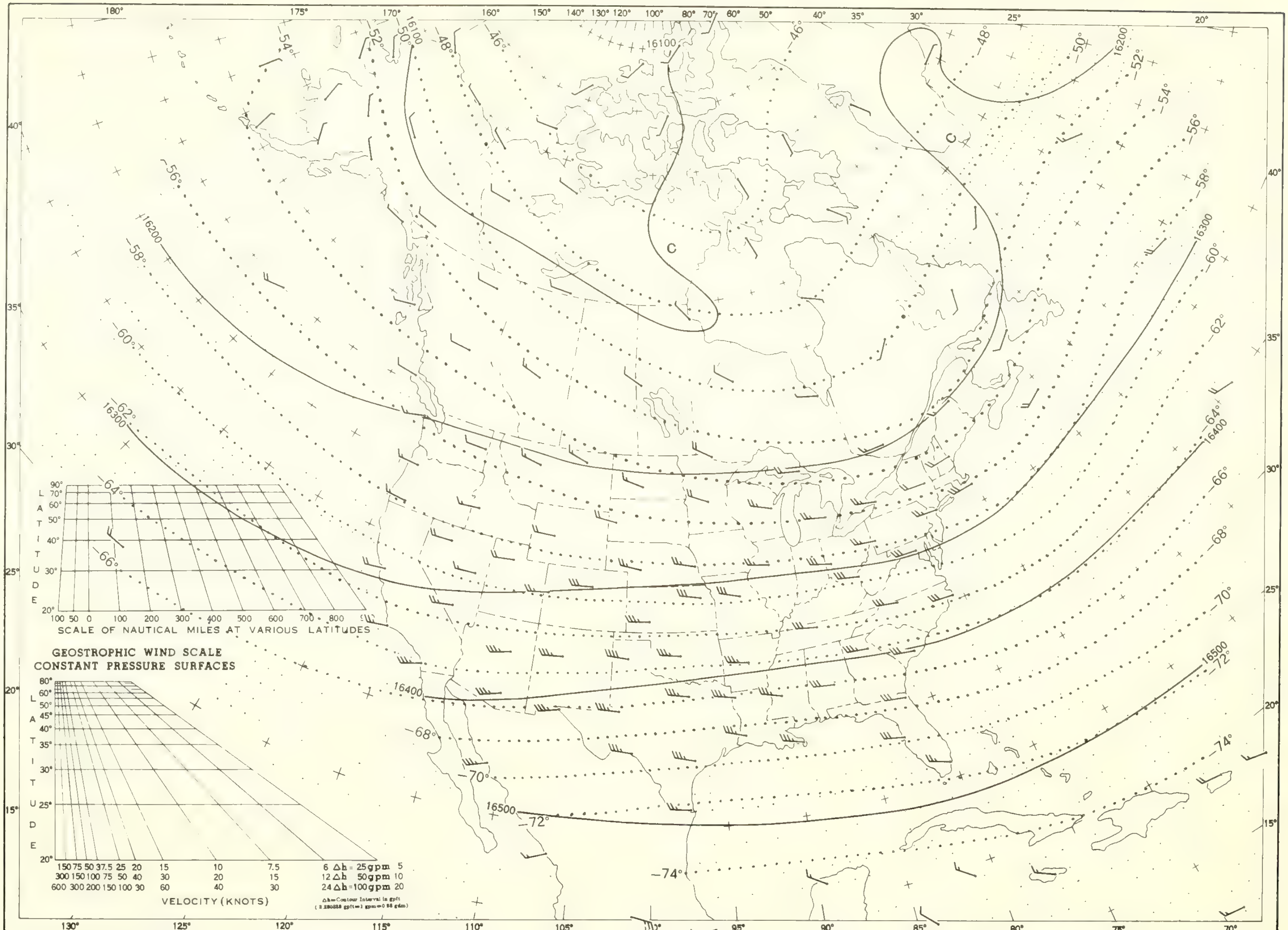
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.



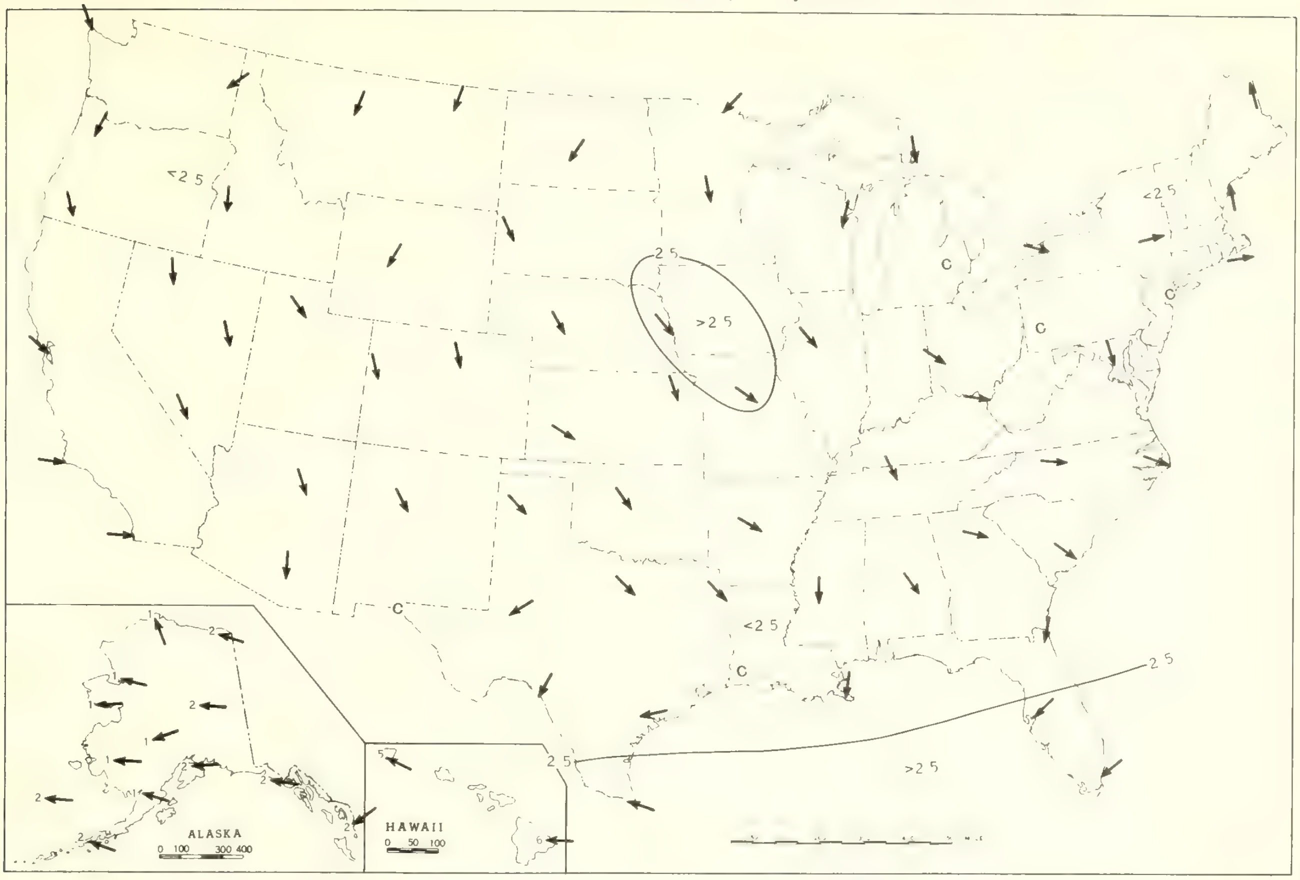
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, May 1967. Average Height and Temperature, and Resultant Winds.

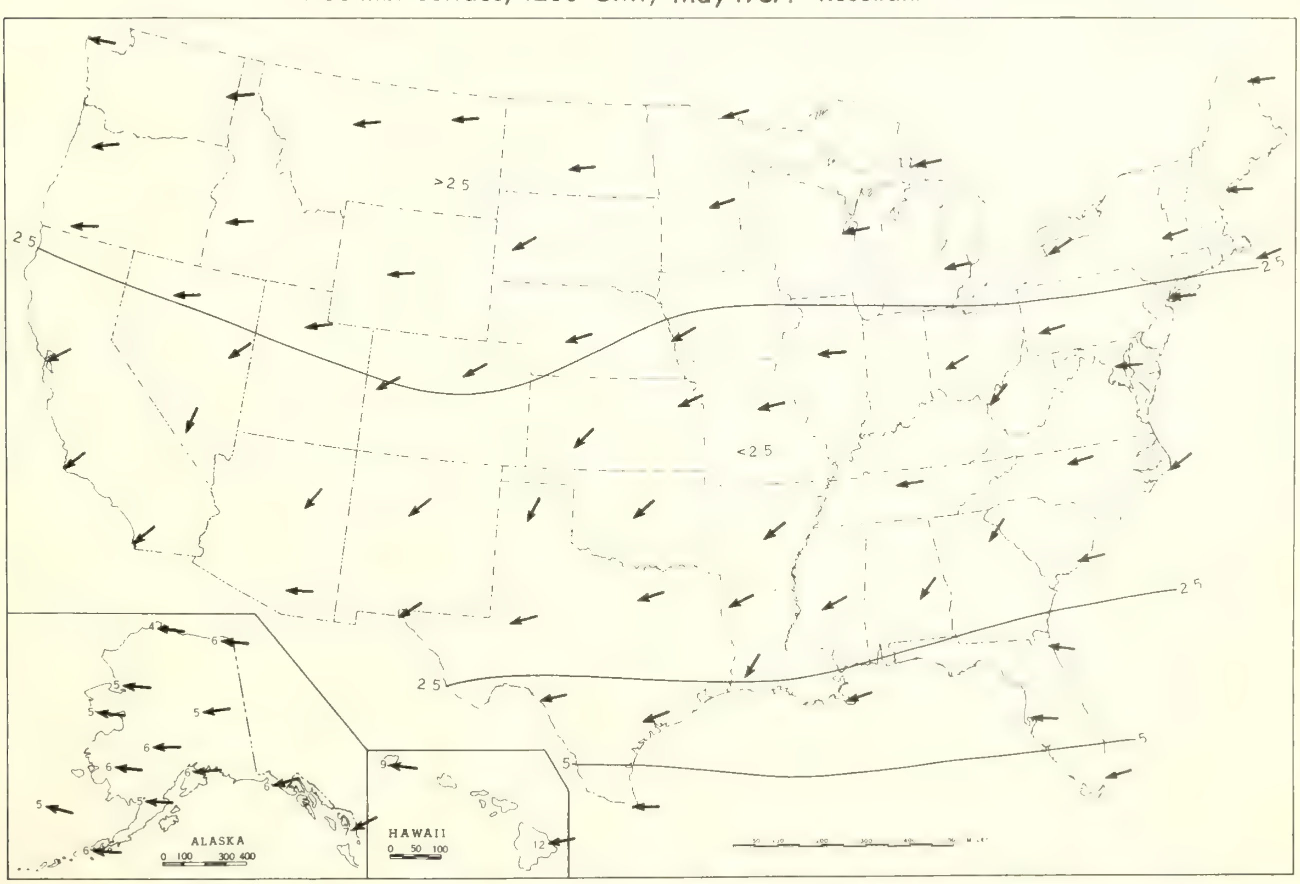


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, May 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, May 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

JUNE 1967

Volume 18 No. 6

ASHEVILLE: 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 6 JUNE 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Record-breaking rainfall North-Central and Far West.
2. Numerous severe local storms.
3. Severe to extreme drought continued in south Texas.
4. Drought-relieving rains in Florida.

TEMPERATURE.--Temperatures for June generally averaged near normal in the 48 States. They were slightly above in extreme southern Florida, the southeastern half of Texas, the Pacific Northwest and from the Great Lakes almost to the Atlantic coast, and below elsewhere.

The month was warmest, relative to normal, in parts of the Northeast and Pacific Northwest where it was 4° or more warmer than usual. In the latter area Pendleton, Oreg., reported its 6th warmest June since 1899, and Medford, Oreg., recorded a date high of 100° there for the 18th.

In the Northeast, June was the first warmer-than-normal month since January. Only a few days were colder than normal and there were no unusual cold spells. This was the warmest June at Buffalo, N. Y., since 1870, and maxima reached 80° or higher on 16 consecutive days (2d-17th). Albany, N. Y., reported a record 96° for the 16th, and all days there were warmer than normal except on the 1st, 18-20th, and last 5 days of the month. On the 1st minima were in the 30's in much of New England, and 31° at Concord, N. H., was the first subfreezing temperature ever recorded there in June. This was the 4th consecutive abnormally warm month in southern Texas where maximum temperatures rose to 90° or above on more than 20 days.

In the coolest areas, relative to normal, of the west-central Great Plains and parts of Georgia and South Carolina, monthly departures were as much as -4°. This was the coldest June at Denver, Colo., during a record dating back to 1872, and the monthly average equaled the lowest of record since 1884 in Charleston, S. C. At Sheridan, Wyo., this was the 4th coolest June on record, and the monthly maximum of 80° was the lowest ever recorded in June.

PRECIPITATION.--Precipitation was above normal in about two-thirds of the 48-State area. From the Great Lakes to California, including nearly all of the Rocky Mountain States, this was one of the wettest Junes on record. Several areas along the Atlantic coast also had above normal amounts. Some sections had less than 50 percent of normal, including western Oregon, northwestern North Dakota, the southwestern half of Texas, and parts of the Ohio Valley. Several other sections in an area reaching from Texas to New York had 50 to 75 percent of normal.

In the Far West where normal June totals generally range from a few hundredths to nearly an inch, amounts for June 1967 were three to five times as much. For Sacramento, Calif., 0.68 inch was the 5th greatest June total since 1850. Milford, Utah, recorded 2.43 inches for its greatest June total during a 60-year record. Rainfall was frequent as shown by 17 days with measurable rainfall at Salt Lake City, Utah, but generally occurred as light to moderate amounts. Rainfall of heavy intensity occurred locally in the Far West and with snowmelt caused some flooding.

Heaviest rainfall occurred in the Great Plains where it ranged up to 300 percent of normal. Rainfall in the Great Plains was frequent and sometimes of great intensity, particularly in the Missouri River Basin where damaging floods occurred. Denver, Colo., recorded 4.69 inches, its greatest June total since 1882. Much greater totals included 15.20 inches at Topeka, Kans., with a 90-year record, and 13.96 inches at Grand Island, Nebr., with a 77-year record, amounts which set new records at both stations not only for June but for any month. On the 20th and 21st, 5.52 inches of rainfall in 24 hours was a June record for Topeka, Kans. In the Great Lakes region, Alpena, Mich., measured 8.14 inches for its greatest June total since 1880.

In the Atlantic Coastal States heaviest rainfall occurred in Florida where totals for the month locally exceeded 12 inches and ranged up to 200 percent of normal. The heavy rainfall in Florida relieved the State's drought that had become severe in southern portions at the end of May. In New England moderate to heavy precipitation furnished adequate moisture which was a welcome contrast to the past 5 years of drought. On the 20th and 21st unusually heavy rainfall occurred in southwestern New England and central Maine and caused considerable flood damage. Heavy rains in Georgia set new monthly record amounts of 13.21 and 10.83 inches for Athens and Columbus, respectively. A record 24-hour amount of 9.93 inches for Athens fell on the 4th.

In the few dry areas, the driest June was reported by Parkersburg, W. Va., with 1.14 inches, Victoria, Tex., with a trace and San Antonio, Tex., with 0.01 inch which equaled the previous record set in 1914. Severe to extreme drought prevailed in much of Texas at the end of the month.

STORMS.--Severe local storms occurred with greater than usual frequency. Hailstorms and tornadoes, in particular, were frequent in the Great Plains. One of the most damaging tornadoes struck the southern portion of Rapid City, S. Dak., on the 18th, causing 3 injuries and about $2 million damage. Local flash floods also caused much damage. One of the worst of these occurred at Grand Island, Nebr., where heavy rains on the 13th and 14th flooded about 30% of the City.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature: Monthly extremes						Precipitation: Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Brewton 3SSE	101	26+	Heflin	47	4	Abbeville 1NNW	14.92	Melvin	0.64
Alaska	Data delayed									
Arizona	Santa Rosa School	118	30	Alpine	21	7	Kitt Peak	2.69	17 Stations	.00
Arkansas	4 Stations	99	23+	Huntsville	46	3	Lurton 2NNE	8.42	Morobay Lock No 8	.21
California	Death Valley	122	30	White Mountain 2	2	1	Bowman Dam	4.58	94 Stations	.00
Colorado	John Martin Dam	97	14	Hermit 7ESE	20	11	Fleming 1S	9.44	Cortez	.32
Connecticut	2 Stations	96	16+	Coventry	31	1	Bakersville	5.56	Dawson Lake	1.82
Delaware	do	94	17+	Selbyville	37	1	Georgetown 5SW	5.16	Milford 2WSW	2.38
Florida	Tallahassee WBAP	100	20	Loxahatchee	57	7	Tavernier	21.83	Saint Leo	2.33
Georgia	Bainbridge	100	21+	Clayton	47	6	Athens	13.83	Blackbeard Island	1.62
Hawaii	Data delayed									
Idaho	2 Stations	100	30+	3 Stations	25	3+	Driggs	5.83	Kellogg Airport	.76
Illinois	Harrisburg	98	14	4 Stations	42	2	Illinois City Dam 16	12.63	Pontiac	1.30
Indiana	Kokomo Sewage Plant	98	16	LaGrange Sewage Plant	39	2	Culver Experiment Farm	6.95	Crawfordsville Pwr Pl	.82
Iowa	6 Stations	92	30+	Sibley	37	2	Red Oak	22.18	Clinton No 2	2.76
Kansas	Ashland	100	9	2 Stations	43	2	Neosho Rapids	17.53	Saint Francis	2.16
Kentucky	2 Stations	97	14+	Vanceburg	44	27	Campbellsville	6.59	Grayson 1SE	.95
Louisiana	5 Stations	99	30+	Ashland 2S	53	4	Houma 1SW	9.76	Farmerville	.14
Maine	Saco	96	16	4 Stations	28	1	Saco	7.47	Caribou WBAP	1.69
Maryland	Cumberland	98	16	Sines Deep Creek 2	35	2	Coleman 3WNW	5.99	Beltsville	.69
Massachusetts	Springfield Armory	97	16	2 Stations	32	1	Shelburne Falls	7.12	Fall River	1.60
Michigan	Saint Charles	98	13	do	30	1	Holland WJBL	10.66	Coldwater State School	2.11
Minnesota	Canby	95	30	Bigfork	22	23	Bricelyn 5NNE	11.65	Karlstad	1.35
Mississippi	Merrill	101	27	2 Stations	50	4	Beaumont	9.64	Moorhead	.44
Missouri	2 Stations	97	15+	Berryman 6NW	40	3	Gallatin	13.71	Annapolis 4WSW	1.57
Montana	Warland RS	95	21	Yellowstone Pk NE Ent	24	24	Volborg	12.67	Simpson 6NW	.36
Nebraska	Beaver City	96	27+	Ellsworth 15NNE	36	1	Minden	16.93	Purdum	2.50
Nevada	Overton	109	30	Montgomery Mntc Sta	17	1	Lund	5.37	Searchlight	.00
New Hampshire	Manchester	97	17	Fabyan	27	1	Mount Washington	6.92	Benton 5SW	1.74
New Jersey	New Brunswick Exp Sta	99	17	2 Stations	35	1	Cape May 3W	7.15	Millville FAA AP	1.05
New Mexico	2 Stations	105	24	do	24	2+	Bitter Lakes WL Ref	5.88	Cureton Ranch	.12
New York	Little Falls Mill St	99	21	Alcove Dam	26	1	Millbrook	8.60	Utica FAA AP	.54
North Carolina	Albemarle	97	25	Grandfather Mountain	32	2	Rosman	15.80	Asheboro 2W	.46
North Dakota	Hannah 2N	96	29	Powers Lake 1N	27	23	Hankinson RR Station	8.55	Sherwood 3N	.20
Ohio	Toledo Blade	100	16+	Dorset	35	1	West Manchester 3SW	4.79	Ton Jenkins Dam	.15
Oklahoma	2 Stations	104	20+	Kenton	44	25	Kingfisher	9.81	Spiro	.47
Oregon	do	105	26+	3 Stations	23	2+	Enterprise	3.90	Reston	.11
Pennsylvania	Farrell Sharon	99	14	Clermont 4NW	24	1	Raymond	7.27	Newell	.28
Puerto Rico	Manati	97	14	Aibonito	55	21+	Coloso	14.07	Ensenada	.02
Rhode Island	2 Stations	93	16	Kingston	35	1	Greenville	4.17	Block Island WBAP	2.48
South Carolina	5 Stations	97	25+	Caesars Head	41	2	Salem	12.00	Effingham	1.19
South Dakota	Parkston 5E	96	6	Custer	30	26	Pine Ridge	12.59	Pollock	2.71
Tennessee	Savannah	99	16	Mountain City No 2	42	7+	Coldwater	7.44	Moscow	.00
Texas	2 Stations	110	23+	Plains	44	1	Brownfield No 2	9.61	61 Stations	.00
Utah	Saint George	107	30	Blowhard Mtn Radar	24	1	Bingham Canyon	5.17	Saint George	.19
Vermont	Vernon	97	17	West Burke	26	1	Newport	8.06	South Newbury	1.20
Virginia	Elkwood 6SE	99	17	Newport News Press Bld	32	2	Rockfish	7.40	Newport 2NW	.20
Washington	Dallesport FAA AP	105	19	Satus Pass	31	1	Ranier Carbon Rvr Ent	4.78	Clallam Bay 1NNE	T
West Virginia	Logan	98	18	Arbovale 2	30	2	Mathias	5.30	Horner	.20
Wisconsin	4 Stations	93	30+	2 Stations	30	1	Richland Center	11.21	Prairie Du Chien	3.38
Wyoming	Worland FAA AP	96	30	Buffalo 15SW	20	24	Buffalo 15SW	8.09	Bitter Creek 4NE	1.28

\+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	994.2	1016.4	87	66	76.2	- 3.2	94	20+	59	2	10	0	66	75	4.37	0.36	1.64	9	8	0.0	0	2.6	9	33	E	21	9	7	14	6.0	59
HUNTSVILLE	600	993.6	1016.4	88	68	77.8	- 0.8	97	18	61	2	13	0	63	62	4.20	0.83	1.40	9	10	0.0	0	3.3	14	23	36	29+	10	12	8	5.5	
MOBILE	211	1007.5	1015.2	92	73	82.5	1.0	100	26	68	5+	24	0	71	75	2.88	- 3.35	0.90	13	11	0.0	0	0.8	13	22	12	16	2	22	6	6.2	
MONTGOMERY	194	1008.8	1016.1	88	69	78.5	- 0.9	97	20	60	2	18	0	68	74	3.69	- 0.48	1.57	11	13	0.0	0	3.2	7	25	NE	19	5	14	11	6.1	59
ALASKA																																
ANCHORAGE	114	1010.2	1015.1	62	50	56.1	0.4	74	17	43	17	B 2	0	45	67	1.44	0.46	0.65	15	0	0.0	0	4.1	19	29	16	12+	1	5	24	8.9	29
ANNETTE	110	1013.5	1017.4	67	50	58.5	4.2	80	17	46	12+	12	0	49	75	2.98	- 2.69	1.50	11	0	0.0	0	1.6	24	23	16	27	5	8	17	7.2	
BARROW	31	1015.2	1015.9	37	30	33.5	0.4	51	15	25	10	0	27	32	96	0.28	- 0.08	0.10	9	0	1.9	2	2.7	6	24	11	20	2	4	24	8.5	
BARTER ISLAND	39	1013.5	1015.3	40	31	35.4	1.2	55	21	28	11+	0	21	31	87	0.98	0.47	0.37	8	0	0.1	T	1.9	7	30	26	25	1	6	23	8.5	
BETHEL	125	1007.5	1013.1	62	46	54.0	2.4	76	22	37	6+	6	0	45	75	2.63	1.45	0.62	17	0	0.0	0	2.8	22	28	23	5	2	3	25	8.6	
COLD BAY	96	1008.8	1012.6	51	42	46.8	1.5	63	20	35	10+	0	0	41	81	2.48	0.53	0.87	16	0	0.0	0	9.8	16	38	17	6	0	2	28	9.2	
FAIRBANKS	436	994.9	1011.9	73	51	61.8	3.4	91	18	39	7	20	0	43	54	1.13	- 0.26	0.33	10	3	0.0	0	2.4	24	28	7	20	5	11	14	6.6	
JUNEAU	12	1016.3	1017.0	65	45	54.8	2.5	80	17	38	8+	9	0	47	79	2.87	- 0.52	0.99	10	0	0.0	0	0.4	7	24	12	27	6	4	20	7.5	39
KING SALMON	49	1011.2	1013.3	58	43	50.6	- 0.8	70	21+	30	11	2	1	41	71	2.90	1.50	0.55	19	0	0.0	0	3.4	18	29	9	12	0	3	27	9.1	
KOTZEBUE	10	1013.9	1014.3	53	39	46.0	2.2	80	18	26	3	1	5	38	77	0.34	- 0.15	0.15	5	0	T	7	5.8	32	33	31	23	6	8	16	6.3	
MC GRATH	344	1000.7	1013.4	64	45	54.5	- 2.0	81	17	36	3	8	0	44	71	1.93	0.27	0.57	12	2	0.0	0	2.1	22	23	29	28	0	6	24	8.8	
NOME	13	1012.9	1013.7	56	37	46.5	0.6	74	17	26	3	1	5	33	60	0.45	- 0.48	0.20	10	0	T	2	2.2	32	28	26	21	6	12	12	6.3	46
ST. PAUL ISLAND	22	1009.8	1010.8	48	40	44.0	3.2	57	21	36	18+	0	0	41	91	1.21	0.06	0.28	13	0	0.0	0	3.3	9	32	14	13	0	3	27	9.2	
SHEMYA	122	1009.5	1013.3	46	39	42.4	0.6	51	26	35	28	0	0	40	93	0.71	- 0.61	0.45	10	0	0.0	0	5.8	36	30	34	8	0	2	28	9.6	
YAKUTAT	28	1016.3	1017.4	55	46	50.5	0.0	73	17	38	17+	1	0	46	87	4.97	- 0.09	1.54	15	0	0.0	0	1.5	22	23	14	1	2	0	28	9.2	
ARIZONA																																
FLAGSTAFF	6993	787.3	1012.2	72	40	56.2	- 3.3	86	30	29	9	0	5	33	46	1.05	0.36	0.88	3	4	0.0	0	5.5	21	23	21	5	17	11	2	3.0	
PHOENIX	1117	969.2	1007.1	96	66	81.1	- 2.5	106	30+	57	1	26	0	45	30	0.47	0.38	0.44	3	2	0.0	0	0.9	23	35Y	SSW	12	23	6	1	1.8	93
TUCSON	2584	922.1	1007.6	95	66	80.7	- 2.0	105	22	55	11	25	0	43	30	0.42	0.13	0.22	5	4	0.0	0	3.9	24	34	S	25	20	7	3	2.7	89
WINSLOW	4895	849.6	1010.1	86	54	69.7	- 4.6	96	30+	43	6	10	0	32	28	1.06	0.80	0.69	3	5	0.0	0	6.4	21	32	19	5	19	8	3	3.0	
YUMA	194	1000.0	1007.3	98	69	83.1	- 2.9	110	30	57	1	25	0	46	30	T	- 0.01	T	0	0	0.0	0	4.6	21	28	S	25	28	2	0	0.6	100
ARKANSAS																																
FORT SMITH	447	997.6	1013.8	89	68	78.5	- 0.1	95	21+	54	3	14	0	67	70	1.95	- 2.40	1.52	6	7	0.0	0	2.2	13	44	W	21	3	15	12	6.8	61
LITTLE ROCK	257	1005.8	1015.0	90	69	79.5	0.6	94	24+	56	4	19	0	67	68	3.02	- 0.59	1.48	9	10	0.0	0	1.9	17	26	N	23+	6	15	9	5.8	75
TEXARKANA	391	1001.7	1014.5	89	71	79.7	0.3	94	20	58	4	16	0	69	72	3.24	- 0.65	2.95	4	3	0.0	0	4.1	18				12	11	7	4.8	
CALIFORNIA																																
BAKERSFIELD	475	993.6	1010.7	89	62	75.2	- 1.9	105	30+	48	1	16	0	47	41	0.20	0.11	0.20	2	1	0.0	0	4.6	33	20	31	4	20	10	0	1.9	
BISHOP	4108	870.3		87	49	67.9	- 1.9	103	30	29	1	12	1			T	- 0.09	T	0		0.0	0						22	6	2	2.6	
BLUE CANYON	5280			67	51	58.9	- 0.3	85	30+	30	1	0	1			2.56	1.63	0.93	8		3.5	6			22	4	12	20	3	7	3.4	
EUREKA U	43			58	51	54.6	- 0.9	68	30	49	18+	0	0			0.32	- 0.42	0.31	2		0.0	0			22	NW	21+	3	7	20	7.7	40
FRESNO	328	999.3	1010.8	90	58	74.3	- 0.4	107	30+	49	1	16	0	53	53	0.14	0.07	0.14	2	2	0.0	0	5.0	29	24	NW	4	22	5	3	2.2	87
LONG BEACH	34	1012.2	1013.4	74	56	65.3	- 2.2	85	27	47	2	0	0	52	69	T	- 0.03	T	0	0	0.0	0	3.0	24	18	21	10+	12	12	6	4.7	
LOS ANGELES	97	1009.5	1013.1	68	57	62.9	- 1.9	72	22	50	2	0	0	54	77	T	- 0.05	T	0	0	0.0	0	7.3	26	25Y	W	2	9	14	7	5.1	
LOS ANGELES U	270			74	58	66.3	- 1.7	85	27	51	2	0	0			0.00	- 0.06	0.00	0		0.0	0			15	SW	2+	14	9	7	4.4	66
MT SHASTA R	3544			76	47	61.3	1.0	95	30	33	3	3	0			1.86	0.61	0.75	5		T	0										
OAKLAND	6	1013.5	1013.8	65	55	59.9	- 2.9	77	29	52	15	0	0	52	80	1.05	0.93	0.94	3	0	0.0	0	7.5	27	22	31	17+	10	8	12	5.7	
RED BLUFF	342	998.6	1011.0	88	60	73.7	- 2.5	106	30+	47	3	16	0	51	51	0.87	0.42	0.74	3	2	0.0	0	0.7	17	26	SE	18	20	5	5	3.0	84
SACRAMENTO	17	1010.5	1011.3	85	54	69.4	- 1.1	103	29	49	8+	13	0	54	67	0.60	0.50	0.30	4	1	0.0	0	6.2	21	25	SW	18	19	5	6	2.9	86
SANDBERG R	4517	861.2		72	49	60.6	- 4.2	94	29	30	1	2	2	39	53	0.00	- 0.03	0.00	0		0.0	0	3.2	29	36	32	11	22	4	4	2.3	
SAN DIEGO	13	1012.2	1013.2	69	58	63.6	- 2.6	77	27	51	2	0	0	54	73	0.16	0.11	0.14	2	0	0.0	0	4.4	27	20	NW	2	12	7	11	5.4	54
SAN FRANCISCO	8	1013.2	1013.7	67	52	59.3	- 2.0	77	28	49	21	0	0	50	77	0.86	0.75	0.83	2	0	0.0	0	10.4	29	41	W	11	12	7	11	5.2	
SAN FRANCISCO U	52			62	52	57.1	- 2.0	68	3	49	16	0	0			1.42	1.28	1.36	3		0.0	0			30	W	9					66
SANTA CATALINA	1568	957.3		64	51	57.6	- 4.3	85	21	45	1	0	0	51	86	0.06	- 0.05	0.03	2	0	0.0	0	5.3	24				15	7	8	4.6	
SANTA MARIA	236			68	50	58.7	- 0.9	74	28	40	2	0	0			0.23	0.09	0.14	3		0.0	0						9	13	8	5.2	
STOCKTON	22	1010.8	1012.0	86	56	70.7	- 2.1	104	29	48	3	13	0	50	55	0.07	0.00	0.16	3	0	0.0	0	7.5	30	23	31	22+	21	3	6	2.9	
COLORADO																																
ALAMOSA	7536			74	41	57.6	- 2.4	83	30	36	15+	0	0			0.84	0.35	0.38	10		T	0						9	19	2	4.7	
COLORADO SPRINGS	6145	811.7	1012.8	74	50	62.0	- 2.7	83	18	45	12	0	0	46	62	2.74	1.15	0.92	14	17	0.0	0	1.8	11	35	35	4	7	13	10	6.0	
DENVER	5283	836.1	1012.0	73	48	60.6	- 5.9	85	27	42	2	0	0	50	73	4.69	3.25	2.26	18	20	0.0	0	0.6	7	35	SW	20	4	14	12	6.5	54
GRAND JUNCTION	4855	850.0	1009.4	82	55	68.6	- 2.7	93	30+	47	14+	5	0	42	43	1.34	0.92	0.42	8	10	0.0	0	0.6	9	49	SW	5	10	13	7	4.9	68

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90° F. or above	Temperature: No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	854.7	1010.8	83	55	69.1	- 2.0	93	18	47	12	6	0	48	52	2.03	0.81	1.05	11	12	0.0	0	2.9	9	43	N	28	9	12	9	5.4	73
CONNECTICUT																																
BRIDGEPORT	7	1017.6	1018.4	76	58	67.2	- 0.8	90	16	41	1	1	0	58	76	2.67	- 0.73	1.02	7	1	0.0	0	2.6	19	31	30	25+	12	8	10	5.3	
HARTFORD	169	1011.5	1017.9	82	59	70.6	1.9	96	16+	40	1	6	0	56	66	3.82	0.12	1.30	13	5	0.0	0	2.9	18	26	NE	20	8	5	17	6.6	55
NEW HAVEN	6	1018.0		76	57	66.7	0.5	86	16+	40	1	0	0			2.23	- 1.30	1.02	8		0.0	0			29	N	20	12	8	10	5.3	68
DELAWARE																																
WILMINGTON	78	1015.6	1018.6	82	61	71.2	- 0.2	92	16	46	1	1	0	61	73	3.01	- 1.06	1.66	6	2	0.0	0	3.1	19	21	27	25	11	8	11	5.4	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.9	1018.4	86	64	74.7	0.5	95	13	49	1	10	0	61	64	1.51	- 1.70	0.91	5	2	0.0	0	4.8	17	24	NW	25	11	5	14	5.8	73
FLORIDA																																
APALACHICOLA U	13			86	73	79.3	- 0.9	92	19	68	3	5	0			6.15	0.85	2.02	14	13	0.0	0			25	E	15	7	15	8	5.9	51
DAYTONA BEACH	31	1014.6	1016.1	86	70	78.0	- 0.4	93	27	66	15+	3	0	70	81	7.51	1.70	1.99	15	18	0.0	0	3.6	8	25	25	25	0	17	13	7.4	
FORT MYERS	15	1014.9	1015.3	89	73	81.4	0.6	95	1	68	2	17	0	70	72	7.41	- 1.55	2.14	18	21	0.0	0	0.3	9	29	12	13	5	18	7	5.9	
JACKSONVILLE	20	1015.2	1016.2	87	72	79.3	- 1.5	97	19	66	3	7	0	70	78	12.90	6.57	3.12	21	15	0.0	0	3.3	5	76	NE	30	0	16	14	7.5	37
KEY WEST	4	1013.9	1014.7	89	79	84.3	2.5	92	29+	74	13	15	0	74	72	8.57	4.60	2.40	17	18	0.0	0	4.5	16	35	SE	11	3	14	13	6.6	60
LAKELAND U	214			89	71	79.7	- 0.9	96	1	67	4	15	0			5.71	- 1.49	2.45	16		0.0	0						1	19	10	6.7	57
MIAMI	7	1014.6	1015.0	87	72	79.9	- 0.9	94	22	67	7	9	0	72	81	15.98	8.61	4.74	21	19	0.0	0	3.3	16	37	13	12	0	13	17	7.7	
ORLANDO	108	1011.5	1015.8	90	71	80.2	- 1.1	95	1	68	2	17	0	71	80	11.16	4.20	2.02	19	21	0.0	0	1.9	8	40	32	5	1	15	14	7.2	
PENSACOLA	112	1011.9	1015.8	88	72	79.9	- 1.2	93	25+	65	3	14	0	71	79	5.10	- 0.33	1.94	14		0.0	0	1.2	14	34	SE	15	4	17	9	6.2	69
TALLAHASSEE	55	1013.5	1015.8	91	71	80.7	0.5	100	20	66	11	20	0	70	76	5.00	- 1.54	1.15	14	16	0.0	0	2.7	7	29	30	21	4	11	15	6.6	
TAMPA	19	1014.9	1015.2	89	71	79.9	- 0.7	96	1	67	4	12	0	70	76	4.70	- 2.58	1.91	10	15	0.0	0	0.9	3	29	14	15	1	20	9	6.8	48
WEST PALM BEACH	15	1014.6	1015.2	87	70	78.8	- 2.2	92	29+	66	14	5	0	72	83	11.39	3.86	2.45	19	22	0.0	0	2.6	15	35	31	5	1	17	12	6.9	
GEORGIA																																
ATHENS	802	988.8	1017.2	83	64	73.3	- 4.3	94	19	51	2	7	0	64	77	13.21	9.33	9.93	12	9	0.0	0	2.8	8	21	30	26	3	14	13	6.8	
ATLANTA	1010	980.7	1017.1	81	64	72.5	- 4.1	90	19	51	2	1	0	63	75	3.06	- 0.77	1.04	15	11	0.0	0	3.6	8	37	NW	18	4	16	10	6.6	65
AUGUSTA	145	1011.5	1016.7	85	63	74.4	- 4.5	94	25	53	2	8	0	64	76	4.67	1.63	1.30	10	7	0.0	0	2.7	7	25	2	18+	2	17	11	7.0	
COLUMBUS	385			87	68	77.7	- 1.7	98	20+	58	2	8	0	67	75	10.83	7.15	3.29	16		0.0	0	3.7	7	24	32	25	6	12	12	6.0	
MACON	354	1003.7	1016.4	87	64	75.3	- 5.4	97	19	52	2	13	0	63	70	3.92	0.58	2.13	10	7	0.0	0	3.6	5	25	SW	22	3	17	10	6.8	52
ROME	637			85	62	73.3	- 3.1	95	18	54	7+	9	0			4.00	0.24	1.04	15		0.0	0										
SAVANNAH	46	1014.6	1016.4	86	68	77.2	- 2.5	95	25	59	2	8	0	68	78	4.38	- 0.71	1.95	16	10	0.0	0	3.1	7	29	E	6	0	11	19	7.7	39
HAWAII																																
HILO	27	1014.6	1015.9	85	70	77.5	3.2	87	19+	67	11	0	0	67	73	6.26	- 0.53	1.88	25	0	0.0	0	1.7	16	19	E	30	1	14	15	7.2	42
HONOLULU	7	1014.6	1015.1	87	72	79.7	1.8	91	22+	68	13+	3	0	63	58	2.43	2.10	2.28	6	0	0.0	0	7.0	6	28	NE	27	15	11	4	4.3	72
KAHULUI	48	1012.5	1014.9	87	68	77.2	0.0	90	22	62	11	1	0	67	70	2.50	2.32	2.36	6	0	0.0	0	9.0	5	30	NE	25	14	10	6	4.7	78
LIHUE	103	1011.2	1016.3	83	71	77.1	0.5	85	24+	65	3	0	0	67	73	2.09	0.63	0.94	10	0	0.0	0	6.3	6	25	E	25	9	15	6	5.2	78
IDAHO																																
BOISE	2838	913.3	1011.6	80	53	66.1	0.3	95	30	40	2	6	0	49	59	1.07	0.18	0.46	7	7	0.0	0	2.1	27	34	W	21+	13	9	8	4.6	77
IDAHO FALLS 46W R	4934			71	45	57.7	- 2.1	90	30	33	3	1	0			2.58	1.49	0.84	17		0.0	0										
LEWISTON	1413			82	55	68.5	3.7	95	20+	46	13	6	0			1.93	0.20	1.27	10		0.0	0						10	8	12	5.5	
POCATELLO	4454	861.5	1012.4	73	46	59.5	- 3.3	91	30	37	4	1	0	45	65	3.30	2.34	0.84	16	14	0.0	0	3.1	22	38	W	7	7	6	17	6.6	55
ILLINOIS																																
CAIRO U	314			85	69	77.0	- 0.9	95	14	56	3	10	0			3.48	- 0.65	1.57	7		0.0	0			42	NW	21	6	9	15	6.5	59
CHICAGO O HARE	658	991.2	1015.4	80	60	69.8	1.8	91	15	43	3	2	0	60	72	7.94	3.98	3.09	13	8	0.0	0	1.6	17	36	18	12	5	11	14	6.6	
CHICAGO MIDWAY	607	993.2		80	63	71.4	0.9	92	15	49	2	2	0	59	68	8.75	4.68	2.95	15	11	0.0	0	3.4	16	47	W	16	5	11	14	6.4	62
MOLINE	582	993.2	1014.3	81	61	70.9	- 0.5	91	30+	43	2	2	0	63	77	8.15	3.78	5.02	13	12	0.0	0	3.8	18	34	SW	8	5	8	17	6.9	52
PEORIA	652	991.5	1015.1	83	62	72.3	0.6	92	15	48	2	3	0	61	71	2.03	- 2.05	1.29	10	7	0.0	0	3.5	18	30	W	10	4	9	17	7.1	56
ROCKFORD	724	988.2	1014.7	78	59	68.4	- 1.3	88	15	44	3	0	0	57	70	9.98	5.68	3.32	12	11	0.0	0	3.1	19	38	21	12	6	10	14	6.5	
SPRINGFIELD	588	992.9	1014.6	84	64	73.8	- 0.2	94	16	49	2	5	0	63	70	2.54	- 1.91	0.64	12	7	0.0	0	3.6	18	36	W	10	5	7	18	6.9	63
INDIANA																																
EVANSVILLE	381	1002.0	1015.8	84	63	73.6	- 2.2	94	14	54	26+	7	0	63	71	1.60	- 2.14	0.98	9	7	0.0	0	2.1	19	25	NW	18	4	10	16	7.0	58
FORT WAYNE	791	986.8	1016.5	82	60	70.6	0.0	92	16+	48	26+	3	0	56	62	2.40	- 1.77	1.08	8	5	0.0	0	2.7	20	30	W	9	5	11	14	6.5	67

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
INDIANAPOLIS	792	987.5	1016.2	84	64	73.9	2.8	93	15	52	26+	5	0	62	67	1.07	-3.55	0.49	7	2	0.0	0	1.9	19	26	SW	24	4	13	13	6.5	55
SOUTH BEND	773	988.2	1015.7	80	62	70.6	1.6	90	16	47	2	1	0	58	66	5.49	1.91	2.13	12	9	0.0	0	3.3	21	29	29	16	6	10	14	6.6	
IOWA																																
BURLINGTON	692			80	62	71.0	-1.1	89	15	50	2	0	0	62	74	5.02	0.01		10	8	0.0		3.6	18	35	22	10	3	11	16	7.0	
DES MOINES	938	980.0	1014.2	78	60	69.0	-2.0	88	30	47	2	0	0	61	77	7.39	2.68	2.20	18	15	0.0	0	3.3	17	43	SE	9	5	9	16	7.0	56
DUBUQUE	1056	976.0		77	59	68.2	0.3	86	15	47	25	0	0			6.75	2.54	2.04	13		0.0	0						5	9	16	7.0	
SIOUX CITY	1095	973.9	1013.1	78	60	68.7	-2.7	91	30	47	2	1	0	60	75	8.78	4.45	1.40	16	16	0.0	0	2.6	17	56	S	13	4	11	15	6.8	70
WATERLOO	868	982.4	1013.7	78	57	67.3	-2.8	86	30	42	2	0	0	58	73	5.52	0.69	2.12	13	6	0.0	0	3.1	18	25	16	7+	6	6	18	7.1	
KANSAS																																
CONCORDIA	1470	960.0	1012.1	82	60	70.7	-3.5	92	14+	50	25+	3	0	63	80	14.14	9.94	5.46	15	15	0.0	0	4.8	14	67	NE	9	6	8	16	6.5	62
DODGE CITY	2582	922.1	1011.0	84	61	72.8	-1.6	97	8	51	2	10	0	58	65	5.49	2.46	1.40	14	15	0.0	0	5.9	17	54	S	28	4	15	11	6.5	76
GOODLAND	3650	887.2	1011.9	79	53	66.0	-3.7	92	27	45	1	1	0	55	76	3.23	0.57	1.45	12	14	0.0	0	1.3	14	40	19	6	5	12	13	6.5	
TOPEKA	876	981.7	1013.1	81	63	72.1	-2.6	90	19	49	2	1	0	64	78	15.20	10.69	5.52	14	15	0.0	0	3.7	16	42	NW	7	2	12	16	7.3	48
WICHITA	1321	965.1	1012.0	84	65	74.5	-2.0	94	4	55	2	8	0	62	69	5.62	1.41	1.06	16	17	0.0	0	7.3	17	51	NW	29	2	13	15	7.0	52
KENTUCKY																																
COVINGTON	869	985.8	1016.9	83	63	73.0	1.2	93	16+	52	26	5	0	59	63	1.72	-2.17	0.83	8	4	0.0	0	2.6	19	23	30	21	6	10	14	6.4	
LEXINGTON	966	982.1	1017.1	81	63	72.1	-1.5	92	14	52	2	5	0	62	73	2.65	-2.07	1.17	11	6	0.0	0	2.9	15	23	20	22	10	7	13	6.1	
LOUISVILLE	477	998.6	1016.1	83	64	73.4	0.0	92	16+	55	2	5	0	64	73	4.41	0.42	1.22	9	7	0.0	0	2.8	16	26	NW	25	7	9	14	6.4	57
LOUISIANA																																
ALEXANDRIA	92	1010.5	1014.6	90	68	78.9	-0.8	95	28+	55	4	20	0	70	77	2.08	-2.21	1.25	3	4	0.0	0	1.9	15	17	28	21	7	21	2	4.9	
BATON ROUGE	64	1012.5	1015.1	91	70	80.7	-0.2	96	19	62	5+	21	0	69	71	2.76	-1.33	1.06	7	4	0.0	0	1.0	17	21	7	14	9	19	2	4.5	
LAKE CHARLES	9	1013.9	1014.9	91	73	82.0	0.8	95	27+	63	4	21	0	72	77	1.64	-3.08	0.93	5	5	0.0	0	2.6	16	24	3	1	12	16	2	3.9	
NEW ORLEANS	3	1014.2	1015.0	91	72	81.6	1.5	98	27	67	8+	21	0	70	71	2.40	-2.03	1.06	8	3	0.0	0	0.3	11	25	12	12+	15	13	2	4.1	
SHREVEPORT	254	1005.1	1014.1	91	71	80.9	0.3	97	30	62	4	22	0	70	72	0.89	-2.45	3.20	3	1	0.0	0	3.7	17	17	22	29+	8	19	3	4.9	74
MAINE																																
CARIBOU	624	993.9		74	51	62.1	3.1	88	4	34	1	0	0			1.69	-2.38	0.50	10		0.0	0						1	13	16	7.4	
PORTLAND	47	1015.2	1017.7	74	53	63.3	1.2	92	16	36	1	2	0	54	76	6.23	3.05	5.58	8	5	0.0	0	2.3	17	25	E	20	6	7	17	6.5	48
MARYLAND																																
BALTIMORE	148	1012.9	1018.4	85	60	72.7	0.2	96	16	44	1	10	0	59	65	1.89	-1.40	1.23	4	3	0.0	0	2.9	17	43	SW	22	11	10	9	5.1	70
MASSACHUSETTS																																
BLUE HILL OBS R	629			77	56	66.2	1.1	92	16+	43	1	2	0			4.30	0.55	2.24	10		0.0	0			44	NE	20					59
BOSTON	15	1016.9	1017.8	76	58	67.2	-0.6	94	16	47	1	3	0	55	69	3.48	0.00	1.45	13	5	0.0	0	2.9	20	29	W	25+	12	7	11	5.6	62
NANTUCKET	43	1018.3	1018.7	67	51	58.7	-2.6	77	28	40	4	0	0	55	90	3.37	0.45	3.02	4	0	0.0	0	4.2	20	33	NE	20	10	6	14	6.1	64
PITTSFIELD	1170			79	54	66.3	3.2	89	16+	34	1	0	0			5.17	0.89	1.74	10		0.0	0										
WORCESTER	986	982.1	1018.7	77	56	66.1	1.5	90	16	43	1	1	0	53	66	3.72	-0.12	1.09	12	7	0.0	0	2.5	25	35	28	25	10	7	13	5.9	
MICHIGAN																																
ALPENA	689	991.2	1016.1	77	52	64.6	4.0	88	14	39	1	0	0	54	75	8.14	5.47	2.01	19	10	0.0	0	1.3	12	26	NW	13	6	7	17	6.7	61
DETROIT	619			82	63	72.7	3.0	94	16	44	1	4	0	57	60					9			1.9	22	23	28	30+					
DETROIT M WAYNE CO	633	991.9	1015.7	82	59	70.4	2.0	93	16+	46	1	4	0	58	68	4.23	0.92	1.46	10	8	0.0	0	2.4	21	31	W	16	5	16	9	6.3	62
DETROIT WILLOW RUN	711	988.5	1016.3	82	58	70.2	0.6	95	16	41	1	3	0	54	57	2.57	-0.71	0.98	9	5	0.0	0	2.4	23	35	29	16	6	16	8	6.1	
FLINT	770	988.2	1015.8	79	58	68.5	1.9	88	16+	41	1	0	0	58	70	5.36	2.24	1.44	12	7	0.0	0	3.4	21	46	25	10	3	14	13	7.1	
GRAND RAPIDS	784	986.8	1015.6	80	59	69.3	1.8	89	15	44	1	0	0	57	68	8.21	4.90	2.53	13	10	0.0	0	2.4	20	46	NW	11	4	12	14	6.5	59
HOUGHTON LAKE	1149	974.9	1016.5	78	55	66.4		85	15+	40	1	0	0	56	73	5.65		1.30	20	11	0.0	0	1.1	20	21	27	16	6	9	15	6.6	
LANSING	841	984.4	1015.6	82	59	70.5	3.1	92	16+	40	2	4	0	57	64	6.77	3.43	1.49	14	8	0.0	0	3.6	22	29	W	13	4	12	14	6.7	59
MARQUETTE U	677			70	51	60.5	0.4	89	14	42	11	0	0			3.67	0.21	1.00	18		0.0	0			24	SW	3	8	4	18	6.6	54
MUSKEGON	627	992.9	1015.5	80	59	69.4	2.7	88	3	50	3+	0	0	56	65	5.46	2.76	3.19	13	11	0.0	0	3.3	20	23	28	12+	5	11	14	6.6	
SAULT STE MARIE	721	989.5	1016.0	74	48	61.0	2.0	86	3	33	24	0	0	50	73	2.86	-0.44	0.66	11	4	0.0	0	1.0	15	24	NW	30+	4	8	18	7.2	53
MINNESOTA																																
DULUTH	1428	963.8	1015.0	68	48	58.2	-0.6	81	29	41	22+	0	0	48	71	5.21	0.94	1.87	17	6	0.0	0	2.2	11	37	NE	11	6	4	20	7.4	47
INTERNATIONAL FALLS	1179	971.6	1014.4	72	49	60.3	0.4	84	29	35	23	0	0	48	66	4.17	0.30	1.14	11	6	0.0	0	0.5	21	25	26	20	3	13	14	6.7	
MINNEAPOLIS	834	983.7	1013.7	76	58	66.9	0.1	87	30	48	25	0	0	56	70	7.53	3.53	1.39	19	9	0.0	0	1.7	17	56	NW	30	8	7	15	6.5	59

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ROCHESTER	1297	967.2	1014.4	76	57	66.1	- 0.9	88	30	45	2	0	0	56	74	8.34	3.88	2.42	17	11	0.0	0	4.1	19	28	28	15	6	7	17	6.8	
ST CLOUD	1034	976.0	1013.4	75	54	64.2	- 1.0	87	29	43	2	0	0		71	7.00	2.51	1.63	18		0.0	0						7	9	14	6.5	
MISSISSIPPI																																
JACKSON	310	1003.7	1015.6	89	67	78.3	- 1.5	96	19	57	5	18	0	69	77	3.76	- 0.03	1.84	4	4	0.0	0	1.7	14	30	NW	27	9	18	3	5.1	79
MERIDIAN	290	1004.7	1015.7	91	68	79.2	- 0.3	98	20	62	4	19	0	65	67	2.00	- 2.07	1.12	2	1	0.0	0	0.3	12	16	34	26	8	17	5	5.3	
MISSOURI																																
COLUMBIA	778	986.1	1014.1	82	64	73.0	- 1.0	90	15+	51	3+	2	0	63	72	4.97	0.63	1.28	10	12	0.0	0	4.0	17	32	SW	10	4	9	17	7.2	62
KANSAS CITY	742	986.8	1013.4	82	64	72.9	- 3.0	89	19+	50	2	0	0	64	75	9.71	5.14	1.75	14	14	0.0	0	4.3	17	41	NW	7	3	12	15	7.3	48
SAINT JOSEPH	811			83	62	72.4	- 1.6	91	19	45	2	2	0	64	81	10.85	4.92		15	12	0.0		3.9	15	35	31	11	4	12	14	6.7	
ST LOUIS	535	994.9	1015.1	83	65	74.0	- 0.1	93	14	50	3	3	0	66	77	4.46	0.17	1.32	11	7	0.0	0	3.5	19	33	SW	12	3	11	16	7.1	67
SPRINGFIELD	1268	970.2	1014.7	84	63	73.4	- 0.8	91	15+	45	3	2	0	63	73	7.12	2.10	1.57	13	11	0.0	0	4.3	17	34	NW	20	4	10	16	6.8	56
MONTANA																																
BILLINGS	3567	890.6	1013.5	70	51	60.8	- 4.3	87	29	42	24	0	0	48	66	5.18	2.63	1.71	16	7	0.0	0	1.7	36	27	NE	18+	9	7	14	6.2	55
GLASGOW	2284	932.6		73	49	60.6	- 1.7	89	27	37	23	0	0			2.23	- 0.75	1.34	10		0.0	0						5	10	15	7.0	
GREAT FALLS	3662	888.6	1014.2	70	51	60.2	0.3	88	29	39	23	0	0	44	58	3.65	0.75	0.86	13	4	0.0	0	1.6	29	34	SW	17	7	5	18	6.9	57
HAVRE	2582	922.8	1013.9	72	47	59.7	- 1.3	88	26	36	23	0	0	44	60	0.69	- 2.04	0.22	7	1	0.0	0	1.3	27	50	NW	3	9	7	14	6.5	60
HELENA	3828	880.8	1014.6	71	48	59.9	0.4	88	29	39	24	0	0	45	63	2.36	0.13	0.45	14	6	0.0	0	4.0	31	25	N	6	9	7	14	6.3	58
KALISPELL	2965	910.6	1014.3	72	45	58.7	0.1	84	21+	36	23	0	0	47	67	2.38	0.17	1.00	11	7	0.0	0	2.1	36	23	22	29+	10	6	14	5.4	
MILES CITY	2629	921.1	1012.9	74	52	63.3	- 2.3	91	27	46	23	1	0	49	66	5.23	2.52		17	7	0.0		0.9	36								
MISSOULA	3190	903.5	1014.5	73	48	60.3	1.8	88	29	39	23	0	0	46	65	2.67	0.76	0.54	14	7	0.0	0	1.9	30	26	N	24+	9	5	16	6.1	59
NEBRASKA																																
GRAND ISLAND	1841	947.5	1012.8	78	58	68.2	- 2.8	92	30	42	2	2	0	60	78	13.96	10.17	4.54	17	16	0.0	0	2.5	14	38	33	13	5	10	15	6.7	
LINCOLN U	1150			80	61	70.1	- 3.0	91	30	44	2	1	0			12.93	8.43	3.31	17		0.0	0			42	S	10	4	7	19	7.0	58
NORFOLK	1544			78	57	67.5	- 3.4	93	30	43	2	1	0			12.22	7.96	2.71	15		0.0	0						4	9	17	6.9	
NORTH PLATTE	2775	916.0	1012.5	75	54	64.6	- 4.5	87	4	43	25	0	0	56	77	6.05	2.80	1.40	14	17	0.0	0	2.3	9	51	NW	14	4	10	16	6.7	59
OMAHA	977	978.3	1013.2	81	61	70.8	- 2.3	89	30	44	2	0	0	62	75	9.86	5.33	2.20	16	14	0.0	0	3.5	15	56	N	4	4	7	19	7.1	56
SCOTTSBLUFF	3957	878.8	1012.6	75	52	63.1	- 3.8	91	30	42	24	1	0	52	73	4.22	1.12	0.81	20	15	0.0	0	2.1	10	49	32	20	2	13	15	6.6	
VALENTINE	2587			76	53	64.5	- 3.0	94	30	41	25	1	0			4.74	1.63	1.66	14		0.0	0			44	NW	14	4	9	17	6.9	49
NEVADA																																
ELKO	5050	843.2	1011.6	78	48	62.7	2.7	98	30	32	2	5	1	44	58	1.19	0.48	0.30	14	6	0.0	0	1.0	23	25	18	19+	9	7	14	5.7	
ELY	6253	808.0	1011.5	70	39	54.6	- 4.0	90	30	28	1	1	2	38	60	2.83	2.33	1.45	13	8	0.8	T	3.2	20	34	S	1	13	10	7	4.8	65
LAS VEGAS	2162	932.6	1007.4	94	65	79.6	- 3.3	108	30	51	1	21	0	36	22	0.82	0.78	0.75	3	1	0.0	0	4.0	21	44	NW	19	24	5	1	1.5	95
RENO	4404	864.2	1012.1	78	42	59.9	- 0.2	98	30	35	3+	5	0	42	55	0.59	0.22	0.55	4	3	0.0	0	2.6	31	34	NW	21	13	10	7	4.3	86
WINNEMUCCA	4299	865.9	1011.7	77	45	60.6	- 0.9	97	30	30	3	4	2	40	51	1.55	0.79	0.67	11	5	0.0	0	0.9	34	30	SE	18+	7	12	11	5.5	52
NEW HAMPSHIRE																																
CONCORD	342	1005.8	1018.2	79	53	66.1	1.6	92	16	31	1	1	1	55	74	3.82	0.22	1.04	13	5	0.0	0	1.2	19	35	NE	12	10	7	13	6.1	58
MT WASHINGTON OBS	6262			54	43	48.2	3.3	59	24+	30	1	0	1			6.92	0.42	1.58	16	2	0.0	1			87Y	W	25	0	6	24	9.0	30
NEW JERSEY																																
ATLANTIC CITY	64	1016.6	1019.2	82	56	69.0	- 1.0	92	25+	37	1	3	0	57	71	1.37	- 1.46	1.15	3	0	0.0	0	3.9	19	20	19	22	12	13	5	4.8	71
ATLANTIC CITY U	11			75	62	68.6	- 0.4	84	25	50	1	0	0			1.33	- 1.71	1.17	3						38	NNE	19					
NEWARK	7	1017.3	1018.3	82	62	72.0	0.7	95	16	49	1	5	0	57	63	3.31	- 0.13	1.75	7	5	0.0	0	3.8	19	24	33	20	9	11	10	5.5	
TRENTON U	56			83	63	73.3	2.3	93	16+	51	1	7	0			2.18	- 1.42	1.07	5		0.0	0			26	S	22	10	12	8	5.4	64
NEW MEXICO																																
ALBUQUERQUE	5311	837.1	1009.6	86	57	71.5	- 3.4	96	27	49	7	7	0	36	32	1.71	1.14	0.49	11	11	0.0	0	2.8	16	46	E	29	14	12	4	3.8	75
CLAYTON	4969			80	54	67.0	- 3.2	90	23	48	13	1	0			3.02	1.54	0.59	13		0.0	0						8	14	8	5.2	
RATON	6379			79	50	64.6	- 0.8	87	26+	41	12	0	0			2.27	0.57	0.67	11		0.0	0						4	18	8	6.1	
ROSWELL	3617	889.3		91	60	75.3	- 1.8	99	9	47	1	18	0	51	52	3.55	2.50	0.90	10	10	0.0	0	3.7	16	42	NW	4	12	11	7	4.7	74
SILVER CITY	5373			86	55	70.6	- 4.0	94	28+	44	12+	5	0			1.02	0.44	0.48	5		0.0	0						15	11	4	3.7	
NEW YORK																																
ALBANY	275	1007.1	1017.8	82	57	69.9	2.6	96	16	36	1	3	0	56	64	2.85	- 0.40	1.35	12	5	0.0	0	3.0	20	38	NW	25	8	4	18	6.8	61
BINGHAMTON	1590	960.4	1018.5	78	58	68.2	4.7	87	16+	42	1	0	0	57	71	2.90	- 0.95	0.55	15	8	0.0	0	2.9	22	45	NW	15	6	10	14	6.3	66

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	991.5	1016.9	83	62	72.5	7.7	91	21	44	1	2	0	56	58	2.50	- 0.04	0.77	10	3	0.0	0	5.8	21	29	SW	25+	9	13	8	5.4	72
NEW YORK U	132	1014.6	1017.9	82	63	72.8	1.4	96	16	48	1	5	0	56	60	4.64	1.33	3.18	8	3	0.0	0	1.6	21	25	N	20					68
J.F. KENNEDY	13	1017.6	1018.5	74	59	66.7	- 3.4	87	25	45	1	0	0	57	76	3.39	0.04	1.22	8	2	0.0	0	5.7	19	32	30	25	10	11	9	5.6	
NEW YORK LA GUARDIA	11	1016.3	1018.1	81	63	71.8	0.3	95	16	47	1	5	0	56	61	3.13	- 0.25	1.39	8	4	0.0	0	3.0	18	33	W	25	9	12	9	5.7	
ROCHESTER	547	998.0	1018.0	82	58	70.4	3.5	91	16	40	1	1	0	56	64	1.57	- 0.99	0.69	8	2	0.0	0	2.5	22	30	SW	25	11	11	8	5.1	77
SYRACUSE	410	1002.4	1017.2	82	57	69.5	2.2	88	16+	40	1	0	0	57	68	1.56	- 1.40	0.50	7	4	0.0	0	1.3	19	33	W	17	9	15	6	5.1	63
NORTH CAROLINA																																
ASHEVILLE	2140	943.1	1018.3	77	56	66.8	- 3.3	87	18	46	6	0	0	59	81	4.45	0.93	2.43	10	3	0.0	0	0.7	14	17	19	21	1	15	14	6.7	68
CAPE HATTERAS P	7	1017.6	1018.0	77	64	70.5	- 4.7	86	25	54	1	0	0	65	81	1.04	- 3.10	0.42	8	2	0.0	0	3.5	6	26	SW	19	6	8	16	6.8	49
CHARLOTTE	736	990.5	1017.6	82	64	73.1	- 4.0	91	25	51	2	1	0	63	72	3.08	- 0.53	0.93	8	5	0.0	0	1.8	9	18	NE	4	3	18	9	6.6	77
GREENSBORO	897	987.1	1018.3	84	63	73.7	- 1.1	96	24	52	1	7	0	65	77	2.11	- 1.36	0.72	8	2	0.0	0	1.9	9	17	N	25	7	12	11	6.1	57
RALEIGH	434	1002.4	1018.0	83	61	72.0	- 3.1	92	25+	53	2+	3	0	62	75	4.57	0.87	3.44	9	3	0.0	0	3.0	10	23	28	25	8	14	8	5.8	64
WILMINGTON	28	1016.6	1017.8	84	68	76.3	- 1.4	94	25+	57	2+	5	0	66	73	6.03	1.77	2.29	12	4	0.0	0	4.2	8	32	N	30	3	12	15	7.0	66
NORTH DAKOTA																																
BISMARCK	1647	954.6	1013.9	73	50	61.1	- 3.4	91	29	40	23	1	0	47	63	0.85	- 2.55	0.45	11	0	0.0	0	1.2	7	29	W	29	6	6	18	7.0	55
FARGO	896	981.0	1013.5	74	51	62.6	- 2.2	89	29	36	23	0	0	50	66	2.54	- 0.50	0.90	9	4	0.0	0	0.9	9	34	S	3	3	10	17	7.1	45
WILLISTON	1899	945.5	1013.1	76	49	62.5	- 0.6	91	27	35	23	2	0	47	61	0.91	- 2.40	0.29	11	4	0.0	0	0.8	29	45	W	3	8	7	15	6.3	70
OHIO																																
AKRON	1208	973.2	1017.2	84	61	72.4	3.0	93	16+	47	2	6	0	59	68	1.01	- 3.25	0.60	7	6	0.0	0	2.5	20	23	15	28+	8	11	11	5.6	
CINCINNATI OBS	761			84	63	73.2	- 0.2	94	15	51	2+	7	0			1.84	- 2.34	0.61	8		0.0	0			17	W	21					73
CLEVELAND	777	988.2	1017.0	83	61	71.7	3.9	93	16+	45	2	4	0	58	65	1.17	- 2.26	0.47	8	3	0.0	0	2.4	20	32	S	29	8	11	11	5.8	61
COLUMBUS	812	987.8	1017.2	83	61	71.8	1.0	92	15+	47	2	5	0	59	65	2.92	- 1.24	1.17	7	5	0.0	0	2.4	18	36	W	21	8	11	11	6.1	63
DAYTON	1002	981.4	1016.8	84	64	74.3	2.8	95	15	52	2	6	0	60	63	3.98	- 0.12	2.51	9	2	0.0	0	3.0	19	36	E	28	9	8	13	6.1	68
MANSFIELD	1295			82	60	70.9	3.1	92	14	47	2	4	0	59	69	1.63	- 2.60	0.96	7	5	0.0	0	3.1	20				9	9	12	5.8	
TOLEDO	676	991.9	1016.6	83	59	71.1	2.8	95	15	45	2	5	0	57	65	1.92	- 1.87	1.26	7	6	0.0	0	2.6	23	26	SW	21	5	11	14	6.4	65
YOUNGSTOWN	1178	975.3	1017.5	82	58	70.2	3.1	92	15+	40	1	4	0	57	68	2.14	- 1.44	1.01	8	5	0.0	0	2.2	18	27	25	16	4	15	11	6.2	
OKLAHOMA																																
OKLAHOMA CITY	1285	967.2	1012.4	87	68	77.4	- 0.6	95	19	57	3	12	0	65	67	2.27	- 2.20	1.34	5	6	0.0	0	5.9	15	37	S	9	6	14	10	6.0	63
TULSA	650	989.5	1013.3	86	67	76.5	- 0.8	94	24+	54	3	8	0	67	74	4.60	- 0.09	2.07	9	8	0.0	0	5.7	16	34	W	11	6	10	14	6.6	54
OREGON																																
ASTORIA	8	1015.9	1016.8	65	51	58.3	1.0	75	1	43	30	0	0	54	88	1.14	- 1.88	0.80	9	0	0.0	0	5.1	28	23	33	29	5	7	18	7.1	
BURNS U	4151	872.0	1013.1	75	47	61.1	1.3	92	30	33	2	1	0	42	53	0.84	- 0.04	0.20	9		0.0	0	3.5	34				9	19	2	4.9	
EUGENE	359	1001.7	1015.2	79	51	64.8	3.9	92	18	44	10	1	0	52	67	1.70	0.28	0.88	3	1	0.0	0	2.6	32	24	2	29+	12	5	13	5.0	
MEACHAM	4050	876.4	1013.5	68	47	57.7	4.0	83	18	40	11+	0	0	41	57	1.22	- 1.23	0.81	3		0.0	0	2.4	30				11	3	16	5.7	
MEDFORD	1298	966.8	1013.8	86	51	68.4	4.2	103	29	37	2	11	0	47	52	0.27	- 0.75	0.27	4	3	0.0	0	3.1	31	25	36	12	15	12	3	3.2	
PENDLETON	1482	960.4	1013.1	84	55	69.7	3.9	98	19	43	4	11	0	44	44	0.41	- 0.76	0.32	2	0	0.0	0	3.5	27	26	27	6	13	8	9	4.4	
PORTLAND	21	1013.9	1015.1	78	54	65.9	3.9	91	19	46	1	2	0	52	66	1.01	- 0.66	0.74	4	1	0.0	0	5.0	31	29	SE	1	9	8	13	5.8	59
SALEM	196	1008.1	1015.4	79	50	64.2	3.6	92	18	41	3	3	0	50	65	0.69	- 0.76	0.51	5	1	0.0	0	2.9	32	25	14	1	13	5	12	5.1	
SEXTON SUMMIT R	3836	883.5	1013.6	71	48	59.5	3.8	87	19+	38	9	0	0	44	65	0.28	- 1.25	0.39	1		0.0	0			27	36	1	16	10	4	3.2	
PACIFIC AREA																																
CANTON ISLAND	8			87	77	82.2	- 1.6	89	24+	73	30+	0	0			4.71	2.06	1.55	13		0.0	0						10	11	9	5.5	
ENIWETOK	13	1009.1	1009.7	88	78	82.9	0.1	91	8+	75	25+	6	0	76	81	7.68	4.31	1.88	19		0.0	0	11.3	8								
TAGUAC GUAM R	361			86	73	79.5	- 0.7	89	14	68	14	0	0			8.37	2.50	1.56	24		0.0	0			22	SE	24+					58
JOHNSTON	7	1012.5	1013.3	85	77	80.8	0.5	87	27+	74	30+	0	0	72	76	1.85	1.01	0.84	14	0	0.0	0	13.8	10	34	E	28	14	6	10	5.2	56
KOROR R	94	1005.4	1009.1	88	76	82.0	0.9	90	30+	73	28+	5	0	75	85	17.19	4.21	4.15	23	3	0.0	0	1.9	23	40	SW	2	0	2	28	9.2	67
KWAJALEIN	8	1008.8	1009.6	86	76	81.4	0.0	89	7+	73	18	0	0	76	82	14.14	5.46	2.61	22	3	0.0	0	9.1	8	30	11	2	1	12	17	7.9	
MAJURO	10	1009.5	1009.8	86	77	81.3	1.0	87	29+	74	28+	0	0	75	81	10.98	- 1.86	2.20	26	2	0.0	0	7.0	9	27	E	22	1	9	20	8.0	48
MARCUS ISLAND	20	1010.2	1012.2	87	77	82.0	- 0.7	89	30+	70	15	0	0	75	80	3.97	1.35	1.16	13	3	0.0	0	4.4	19	32	S	14	6	8	16	7.0	79
PAGO PAGO	12	1012.5	1012.6	83	73	77.9		86	5+	66	22	0	0	73	85	11.74		1.91	20	2	0.0	0	8.3	12	27	E	18	5	11	14	6.9	46
PONAPE R	123	1003.7	1009.1	88	73	80.4	0.3	90	24+	70	12	4	0	75	86	11.48	- 5.22	1.93	27	5	0.0	0	3.5	11	18	E	15	1	8	21	8.2	44
TRUK MOEN ISLAND	5	1008.8	1009.2	87	75	80.8	0.1	91	14	72	22	1	0	75	85	14.13	2.26	3.26	21	4	0.0	0	2.6	9	23	W	30	1	3	26	9.0	58
WAKE	11	1012.5	1012.7	87	78	82.2	0.8	89	14	72	30+	0	0	74	76	4.18	2.28	1.20	20	2	0.0	0	8.0	9	27	S	26	0	13	17	7.6	69
YAP R	62	1006.8	1008.5	87	75	80.9	- 1.0	90	24	70	7	1	0	76	86	16.71	5.99	4.56	24	0	0.0	0	0.7	16	25	S	16	0	7	23	9.1	61

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CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90°F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1004.7	1018.4	83	58	70.6	1.2	95	16	45	1	5	0	56	62	4.10	0.03	3.55	4	3	0.0	0	2.8	21	25	29	25	11	9	10	5.2	
ERIE	731	990.9	1017.1	81	61	71.1	4.4	89	16+	40	1	0	0	57	63	2.49	-0.56	1.89	7	4	0.0	0	3.5	20	24	6	18	11	9	10	5.0	
HARRISBURG	338	1005.4	1018.1	86	62	73.9	2.6	94	16	47	1	10	0	58	59	1.90	-1.52	0.69	7	6	0.0	0	1.9	19	23	W	22+	9	10	11	5.6	74
PHILADELPHIA	5	1017.3	1018.4	83	61	72.1	1.1	93	24+	44	1	6	0	60	69	4.12	0.07	2.53	6	3	0.0	0	3.3	21	23	W	22	12	5	13	5.6	65
PITTSBURGH	1137	974.3	1017.6	85	61	73.0	4.6	93	17	50	26+	7	0	56	57	0.90	-2.88	0.47	6	2	0.0	0	1.8	19	24	31	17	2	18	10	6.7	61
READING U	266			85	63	73.9	1.7	94	16	50	1	8	0			1.15	-2.57	0.64	5		0.0	0			35	SW	22	12	10	8	5.3	69
SCRANTON	930	984.8	1018.6	82	60	71.1	2.9	92	16+	43	1	3	0	59	69	4.48	0.57	2.29	10	6	0.0	0	2.0	20	25	E	16	7	14	9	5.7	65
WILLIAMSPORT	524	999.0	1017.9	84	59	71.2	2.0	92	13+	42	1	6	0	61	74	3.24	0.01	1.60	11	8	0.0	0	1.3	17	36	30	15	10	12	8	5.4	
RHODE ISLAND																																
BLOCK ISLAND	110			68	56	61.6	-1.3	78	27	41	1	0	0			2.48	-0.08	1.10	8		0.0	0						12	7	11	5.5	
PROVIDENCE	51	1015.9	1018.3	78	56	66.8	0.6	93	16	41	1	1	0	56	72	2.72	-0.04	0.94	9	5	0.0	0	2.5	17	29	1	20	11	7	12	5.5	54
SOUTH CAROLINA																																
CHARLESTON	40	1014.9	1016.6	85	67	75.6	-3.6	93	25	54	2	6	0	66	78	4.06	-0.92	2.07	13	6	0.0	0	3.8	6	31Y	E	15+	1	10	19	7.6	38
CHARLESTON U	9			81	70	75.7	-3.9	91	30+	57	2	2	0			4.18	-0.07	3.15	7		0.0	0			34	NE	6					
COLUMBIA	213	1009.5	1017.5	84	63	73.5	-6.2	95	24	54	8+	7	0	64	78	4.18	0.33	1.25	9	4	0.0	0	3.2	7	29	27	25	5	15	10	6.4	66
GNVLE-SPARTANBURG	957	983.7	1017.9	83	63	72.6	-4.4	97	25	52	2	4	0	63	76	4.87	1.98	2.11	11	4	0.0	0	2.4	7	23	N	25	5	13	12	6.4	52
SOUTH DAKOTA																																
ABERDEEN	1296	966.5	1012.9	75	53	64.2	-2.4	88	30	41	2	0	0	54	71	5.13	1.37	0.95	17	8	0.0	0	2.1	5	43	19	13	8	5	17	6.6	
HURON	1282	966.8	1012.7	77	55	66.2	-1.4	92	30	43	2	1	0	58	77	8.30	5.16	5.48	18	10	0.0	0	1.3	11	40	NE	18	5	9	16	6.8	54
RAPID CITY	3162	903.8	1013.8	70	50	60.0	-4.9	85	30	41	24	0	0	52	78	6.78	3.70	1.66	18	14	0.0	0	2.9	1	40	W	18	6	8	16	6.7	50
SIOUX FALLS	1418	962.4	1013.2	77	56	66.3	-1.8	91	30	40	2	1	0	57	74	4.26	-0.09	1.38	17	14	0.0	0	1.7	16	23	32	19+	5	9	16	6.6	
TENNESSEE																																
BRISTOL	1507	964.4	1018.0	80	57	68.9	-4.3	88	17	48	2+	0	0	60	77	2.14	-1.24	0.88	10	5	0.0	0	1.3	7	18	31	18	7	13	10	5.7	
CHATTANOOGA	665	992.2	1016.7	83	63	73.0	-5.1	93	18	56	7+	4	0	64	79	1.63	-2.07	0.62	12	9	0.0	0	1.9	17	27	NW	25	5	12	13	6.4	50
KNOXVILLE	980	981.7	1016.3	83	63	73.2	-2.5	92	14	55	2	6	0	65	81	6.53	3.20	2.73	11	8	0.0	0	0.7	35	28	W	25	5	14	11	6.6	52
MEMPHIS	258	1005.8	1015.7	87	69	78.3	-0.2	94	21	56	3	12	0	66	67	1.70	-1.98	0.68	9	6	0.0	0	3.0	15	27	NW	23	9	11	10	5.7	66
NASHVILLE	590	994.6	1015.8	87	66	76.3	-1.1	95	18	56	5	14	0	65	71	4.23	0.98	1.36	9	7	0.0	0	2.5	17	27	SW	24	7	12	11	6.0	70
OAK RIDGE R	905			83	61	72.0	-2.5	91	17+	52	2	3	0			6.40	3.16	1.69	10		0.0	0			34Y		18	8	10	12	6.4	
TEXAS																																
ABILENE	1762	951.2	1011.1	92	72	81.9	1.6	101	28	65	11+	24	0	66	61	2.85	0.18	2.14	5	4	0.0	0	8.8	17	34	NW	11	10	15	5	4.9	74
AMARILLO	3604	889.6	1009.9	85	62	73.7	-3.3	95	9	54	25	11	0	56	62	2.55	-0.34	0.82	15	12	0.0	0	7.9	18	45	W	28	7	16	7	5.6	66
AUSTIN	597	991.2	1012.7	95	73	83.7	1.8	100	29+	65	7+	25	0	66	60	T	-3.22	T	0	0	0.0	0	7.5	17	22	SW	24+	10	17	3	4.5	80
BROWNSVILLE	19	1011.5	1012.1	91	75	83.2	0.5	94	27+	66	6	27	0	72	72	1.51	-1.45	1.21	3	1	0.0	0	10.6	13	29	SE	11	10	17	3	4.5	71
CORPUS CHRISTI	41	1011.2	1012.6	92	74	82.8	0.5	96	29+	66	6+	25	0	71	71	0.35	-2.04	0.32	2	1	0.0	0	12.5	14	29	SE	24+	9	19	2	4.5	79
DALLAS	481	995.9	1012.8	92	74	82.9	1.6	100	28	64	3	21	0	67	61	1.76	-1.48	1.32	4	4	0.0	0	7.8	16	53	SE	11	10	12	8	4.9	73
DEL RIO	1026	974.9	1010.2	97	74	85.2	0.8	101	28+	65	2	29	0	63	51	0.36	-1.93	0.19	2	2	0.0	0	11.8	13	28	9	1	9	15	6	4.8	
EL PASO	3918	879.4	1007.8	92	66	79.1	-1.9	101	23	58	1	22	0	43	34	1.41	0.72	0.63	5	6	0.0	0	3.0	22	45	N	29	15	8	7	3.7	80
FORT WORTH	537	992.9	1012.8	91	72	81.4	-0.1	98	28	62	12+	20	0	66	63	0.72	-2.26	0.63	3	3	0.0	0	6.4	17	25	32	12	13	9	8	4.8	
GALVESTON U	7			85	78	81.7	0.0	89	19+	69	2+	0	0			0.81	-1.84	0.51	4		0.0	0			36	NE	1					76
HOUSTON U	41			90	75	82.5	0.3	98	26	66	2	18	0			0.41	-3.42	0.41	1		0.0	0										
HOUSTON	50	1011.9	1013.9	93	72	82.6	1.0	99	26	67	7+	24	0	70	71	0.17	-3.52	0.17	1	1	0.0	0	6.8	15	29	36	1	13	15	2	4.0	83
LUBBOCK	3254	901.8	1010.4	87	64	75.2	-2.3	95	23	55	1	13	0	58	62	7.95	5.42	5.70	8	11	0.0	0	7.9	17	44	8	1	7	14	9	5.5	
MIDLAND	2851	913.3	1008.9	92	68	79.9	-1.3	101	9+	61	2	23	0	57	52	1.17	-0.46	0.52	10	9	0.0	0	8.9	15	35	16	1	12	13	5	4.7	
PORT ARTHUR	16			91	73	81.9	1.3	97	26	64	4	19	0	69	69	1.06	-3.23	1.04	2	2	0.0	0	4.4	16	33	NW	1	11	18	1	3.8	83
SAN ANGELO	1903	945.1	1010.0	95	72	83.3	0.8	102	28+	64	3	27	0	61	51	2.42	0.60	1.87	6	5	0.0	0	7.1	17	29	29	29+	10	15	5	4.8	
SAN ANTONIO	788	985.1	1012.5	95	74	84.5	2.6	100	26+	64	4	28	0	66	58	0.01	-2.94	0.01	1	0	0.0	0	9.1	15	26	SE	10	8	19	3	5.0	77
VICTORIA	104	1008.8	1013.0	94	73	83.5	2.2	98	26	67	6	27	0	70	68	T	-3.04	T	0	0	0.0	0	9.0	16	36Y	S	11+	7	22	1	4.6	
WACO	501	994.9	1012.6	95	75	84.9	2.9	103	26	70	3+	24	0	68	60	0.36	-2.31	0.25	3	3	0.0	0	8.3	15	32	36	11	15	10	5	4.1	
WICHITA FALLS	994	976.0	1011.7	93	68	80.8	-1.0	104	23	59	3	22	0	66	64	1.84	-1.36	1.10	4	4	0.0	0	8.2	15	40	23	11	7	14	9	5.9	
UTAH																																
MILFORD	5028	844.6		79	46	62.1	-3.3	94	30	35	2	5	0			2.43	2.00	0.95	11		0.0	0						15	10	5	4.1	
SALT LAKE CITY	4220	869.6	1011.3	78	51	64.6	-2.8	94	30	42	2	3	0	46	57	2.73	1.75	0.75	17	19	0.0	0	1.0	10	37	N	21	8	11	11	5.9	69
WENDOVER	4237			74	55	64.9	-4.9	91	30	48	15	2	0			2.00	1.54	0.75	11		0.0	0										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1004.4	1016.9	79	56	67.6	3.4	91	4	37	1	2	0	54	65	3.12	- 0.37	0.66	14	6	0.0	0	1.9	19	28	SW	16	7	5	18	7.1	68
VIRGINIA																																
LYNCHBURG	916	985.1		83	59	71.0	- 2.0	92	16	46	2	5	0	59	69	2.54	- 1.52	2.15	7	4	0.0	0	1.2	15	18	SW	25	12	12	6	4.8	72
NORFOLK	22	1017.6	1018.7	80	62	71.2	- 4.4	93	25	45	2	1	0	62	74	1.37	- 2.24	0.81	5	2	0.0	0	3.4	10	22	N	19+	10	8	12	5.4	76
RICHMOND	164	1012.9	1018.7	85	59	72.1	- 3.0	93	25+	40	2	8	0	61	72	3.58	- 0.17	2.06	5	4	0.0	0	2.6	14	30	W	25	8	10	12	5.6	77
ROANOKE	1149	977.0	1018.3	82	59	70.3	- 3.1	91	16+	47	3	4	0	59	71	3.19	- 0.61	1.41	11	5	0.0	0	1.9	12	23	30	25	11	9	10	5.2	
WALLOPS ISLAND	9	1019.6	1019.8	73	59	65.8		80	21+	43	2+	0	0	61	90	3.25		2.80	5	5	0.0	0	3.5	15	39Y	N	19	10	12	8	5.0	
WASHINGTON																																
OLYMPIA	195	1008.5	1015.8	75	49	62.2	3.1	91	19	42	15	1	0	53	76	1.49	- 0.30	1.04	4	0	0.0	0	1.5	24	23	26	6	9	8	13	5.7	
QUILLAYUTE	179	1009.1	1016.6	67	49	57.6	1.8	82	1	40	30	0	0	51	83	0.40	- 2.98	0.14	9	0	0.0	0	2.7	26	20	NE	1	9	6	15	6.5	48
SEATTLE TACOMA	400	999.7	1015.9	72	53	62.7	2.9	87	19	49	6	0	0	52	72	2.04	0.46	1.25	4	0	0.0	0	1.8	29	20	24	6+	10	8	12	5.5	63
SPOKANE	2356	929.9	1012.6	76	51	63.5	1.6	90	20	42	4	1	0	47	59	1.99	0.50	0.70	10	7	0.0	0	1.3	17	25	SE	1	12	10	8	4.8	71
STAMPEDE PASS R	3958	880.1		63	47	54.6	5.7	83	19	39	7	0	0			1.17	- 2.92	0.59	13		0.0	49						7	8	15	6.3	
WALLA WALLA U	949			83	59	70.6	3.4	96	19+	49	4	11	0			0.31	- 0.91	0.26	3		0.0	0			18	W	6	13	7	10	4.7	79
YAKIMA	1052	974.6	1012.6	82	53	67.8	3.4	95	19	43	4	7	0	47	50	1.12	0.31	0.52	5	2	0.0	0	4.8	31	24	32	10+	18	4	8	4.1	
WEST INDIES																																
SAN JUAN P.R.	13	1013.9	1016.4	88	75	81.8	1.8	94	12+	74	28+	7	0	72	76	3.38	- 2.28	1.06	13	6	0.0	0	6.9	10	28	NE	26	2	18	10	6.3	54
SWAN ISLAND	28			87	77	82.0	- 0.3	89	27+	70	5	0	0			3.17	- 3.29	0.77	15		0.0	0						3	7	20	7.6	
WEST VIRGINIA																																
BECKLEY	2504	931.3	1018.0	77	56	66.6		85	21+	46	2+	0	0	56	70	2.25		1.01	8	4	0.0	0	4.1	16	25	16	3	8	10	12	6.1	
CHARLESTON	939	983.4	1017.1	85	59	71.6	- 0.4	93	16+	46	3+	8	0	60	69	1.83	- 1.86	1.07	7	2	0.0	0	1.2	14	17	3	28	7	15	8	5.4	
ELKINS	1970	948.5	1018.9	81	52	66.5	- 0.6	89	17+	36	2	0	0	56	74	2.83	- 2.36	1.81	6	7	0.0	0	0.9	15	18	25	25	7	12	11	6.0	
HUNTINGTON	827	987.5	1017.2	85	62	73.1	1.1	94	17	52	1	7	0	63	73	1.11	- 2.99	0.57	5	4	0.0	0	2.3	15	16	27	22	7	12	11	5.9	
PARKERSBURG U	615			86	62	73.7	1.1	93	17+	48	2	7	0			1.14	- 3.13	0.79	3		0.0	0			22	SW	14					72
WISCONSIN																																
GREEN BAY	682	989.8	1015.0	76	56	66.2	0.7	88	15+	44	1	0	0	57	73	8.47	5.11	1.83	17	10	0.0	0	1.3	19	34	W	9	8	5	17	6.7	48
LA CROSSE	651	989.8	1014.1	79	58	68.5	- 0.3	92	30	43	2	1	0	59	74	9.33	5.13	3.94	13	8	0.0	0	3.0	16	52	36	8	8	3	19	7.1	
MADISON	858	984.1	1015.0	78	55	66.2	0.1	89	15	40	3+	0	0	57	73	6.46	2.51	1.92	14	12	0.0	0	2.3	18	25	NW	9+	6	6	18	6.7	57
MILWAUKEE	672	990.9	1015.7	76	57	66.5	3.2	91	15	45	2	2	0	56	69	7.38	3.74	2.02	14	8	0.0	0	1.6	17	29	SW	8	8	6	16	6.4	60
WYOMING																																
CASPER	5338	837.1	1012.7	72	45	58.5	- 4.6	87	30	38	24	0	0	43	63	3.75	2.50	1.54	16	14	0.0	0	1.6	27	43	19	14	8	8	14	6.2	
CHEYENNE	6126	812.7	1013.5	69	47	57.7	- 5.3	85	30	41	7	0	0	45	68	2.63	0.52	1.05	17	18	0.0	0	1.4	24	32	NW	9	2	12	16	7.1	50
LANDER	5563	828.7	1012.7	68	47	57.5	- 4.5	86	30	40	24	0	0	45	68	5.06	3.70	1.10	18	16	0.0	0	1.6	27	36	NW	27	4	10	16	7.0	55
SHERIDAN	3964	878.4	1014.4	68	45	56.8	- 5.1	80	29	32	24	0	1	46	68	6.11	3.54	1.43	18	9	0.0	0	1.5	30	35	SE	1	4	10	16	7.0	56

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	994.2	1016.4	30.6	18.9	24.6	-1.8	34.4	20+	15.0	2	10	0	18.9	75	111	9	42	9	8	0	0	1.2	9	14.8	E	21	9	7	14	6.0	59
HUNTSVILLE	183	993.6	1016.4	31.1	20.0	25.4	-0.4	36.1	18	16.1	2	13	0	17.2	62	107	21	36	9	10	0	0	1.5	14	10.3	36	29+	10	12	8	5.5	
MOBILE	64	1007.5	1015.2	33.3	22.8	28.1	0.6	37.8	26	20.0	5+	24	0	21.7	75	73	-85	23	13	11	0	0	0.4	13	9.8	12	16	2	22	6	6.2	
MONTGOMERY	59	1008.8	1016.1	31.1	20.6	25.8	-0.5	36.1	20	15.6	2	18	0	20.0	74	94	-12	40	11	13	0	0	1.4	7	11.2	NE	19	5	14	11	6.1	59
ALASKA												B																				
ANCHORAGE	35	1010.2	1015.1	16.7	10.0	13.4	0.2	23.3	17	6.1	17	2	0	7.2	67	37	12	17	15	0	0	0	1.8	19	13.0	16	12+	1	5	24	8.9	29
ANNETTE	34	1013.5	1017.4	19.4	10.0	14.7	2.3	26.7	17	7.8	12+	12	0	9.4	75	76	-68	38	11	0	0	0	0.7	24	10.3	16	27	5	8	17	7.2	
BARROW	9	1015.2	1015.9	2.8	-1.1	0.8	0.2	10.6	15	-3.9	10	0	27	0.0	96	7	-2	3	9	0	48	51	1.2	6	10.7	11	20	2	4	24	8.5	
BARTER ISLAND	12	1013.5	1015.3	4.4	-0.6	1.9	0.7	12.8	21	-2.2	11+	0	21	-0.6	87	25	12	9	8	0	T	T	0.8	7	13.4	26	25	1	6	23	8.5	
BETHEL	38	1007.5	1013.1	16.7	7.8	12.2	1.3	24.4	22	2.8	6+	6	0	7.2	75	67	37	16	17	0	0	0	1.3	22	12.5	23	5	2	3	25	8.6	
COLD BAY	29	1008.8	1012.6	10.6	5.6	8.2	0.8	17.2	20	1.7	10+	0	0	5.0	81	63	13	22	16	0	0	0	4.4	16	17.0	17	6	0	2	28	9.2	
FAIRBANKS	133	994.9	1011.9	22.8	10.6	16.6	1.9	32.8	18	3.9	7	20	0	6.1	54	29	-7	8	10	3	0	0	1.1	24	12.5	7	20	5	11	14	6.6	
JUNEAU	4	1016.3	1017.0	18.3	7.2	12.7	1.4	26.7	17	3.3	8+	9	0	8.3	79	73	-13	25	10	0	0	0	0.2	7	10.7	12	27	6	4	20	7.5	39
KING SALMON	15	1011.2	1013.3	14.4	6.1	10.3	-0.4	21.1	21+	-1.1	11	2	1	5.0	71	74	38	14	19	0	0	0	1.5	18	13.0	9	12	0	3	27	9.1	
KOTZEBUE	3	1013.9	1014.3	11.7	3.9	7.8	1.2	26.7	18	-3.3	3	1	5	3.3	77	9	-4	4	5	0	T	178	2.6	32	14.8	31	23	6	8	16	6.3	
MC GRATH	105	1000.7	1013.4	17.8	7.2	12.5	-1.1	27.2	17	2.2	3	8	0	6.7	71	49	7	14	12	2	0	0	0.9	22	10.3	29	28	0	6	24	8.8	
NOME	4	1012.9	1013.7	13.3	2.8	8.1	0.3	23.3	17	-3.3	3	1	5	0.6	60	11	-12	5	10	0	T	51	1.0	32	12.5	26	21	6	12	12	6.3	46
ST. PAUL ISLAND	7	1009.8	1010.8	8.9	4.4	6.7	1.8	13.9	21	2.2	18+	0	0	5.0	91	31	2	7	13	0	0	0	1.5	9	14.3	14	13	0	3	27	9.2	
SHEMYA	37	1009.5	1013.3	7.8	3.9	5.8	0.3	10.6	26	1.7	28	0	0	4.4	93	18	-15	11	10	0	0	0	2.6	36	13.4	34	8	0	2	28	9.6	
YAKUTAT	9	1016.3	1017.4	12.8	7.8	10.3	0.0	22.8	17	3.3	17+	1	0	7.8	87	126	-2	39	15	0	0	0	0.7	22	10.3	14	1	2	0	28	9.2	
ARIZONA																																
FLAGSTAFF	2131	787.3	1012.2	22.2	4.4	13.4	-1.8	30.0	30	-1.7	9	0	5	0.6	46	27	9	22	3	4	0	0	2.5	21	10.3	21	5	17	11	2	3.0	
PHOENIX	340	969.2	1007.1	35.6	18.9	27.3	-1.4	41.1	30+	13.9	1	26	0	7.2	30	12	10	11	3	2	0	0	0.4	23	15.6Y	SSW	12	23	6	1	1.8	93
TUCSON	788	922.1	1007.6	35.0	18.9	27.1	-1.1	40.6	22	12.8	11	25	0	6.1	30	11	3	6	5	4	0	0	1.7	24	15.2	S	25	20	7	3	2.7	89
WINSLOW	1492	849.6	1010.1	30.0	12.2	20.9	-2.6	35.6	30+	6.1	6	10	0	0.0	28	27	20	18	3	5	0	0	2.9	21	14.3	19	5	19	8	3	3.0	
YUMA	59	1000.0	1007.3	36.7	20.6	28.4	-1.6	43.3	30	13.9	1	25	0	7.8	30	T	0	T	0	0	0	0	2.1	21	12.5	S	25	28	2	0	0.6	100
ARKANSAS																																
FORT SMITH	136	997.6	1013.8	31.7	20.0	25.8	-0.1	35.0	21+	12.2	3	14	0	19.4	70	50	-61	39	6	7	0	0	1.0	13	19.7	W	21	3	15	12	6.8	61
LITTLE ROCK	78	1005.8	1015.0	32.2	20.6	26.4	0.3	34.4	24+	13.3	4	19	0	19.4	68	77	-15	38	9	10	0	0	0.8	17	11.6	N	23+	6	15	9	5.8	75
TEXARKANA	119	1001.7	1014.5	31.7	21.7	26.5	0.2	34.4	20	14.4	4	16	0	20.6	72	82	-17	75	4	3	0	0	1.8	18				12	11	7	4.8	
CALIFORNIA																																
BAKERSFIELD	145	993.6	1010.7	31.7	16.7	24.0	-1.1	40.6	30+	8.9	1	16	0	8.3	41	5	3	5	2	1	0	0	2.1	33	8.9	31	4	20	10	0	1.9	
BISHOP	1252	870.3		30.6	9.4	19.9	-1.1	39.4	30	-1.7	1	12	1			T	-2	T	0		0	0						22	6	2	2.6	
BLUE CANYON	1609			19.4	10.6	14.9	-0.2	29.4	30+	-1.1	1	0	1			65	41	24	8		89	152			9.8	4	12	20	3	7	3.4	
EUREKA U	13			14.4	10.6	12.6	-0.5	20.0	30	9.4	18+	0	0			8	-11	8	2		0	0			9.8	NW	21+	3	7	20	7.7	40
FRESNO	100	999.3	1010.8	32.2	14.4	23.5	-0.2	41.7	30+	9.4	1	16	0	11.7	53	4	2	4	2	2	0	0	2.2	29	10.7	NW	4	22	5	3	2.2	87
LONG BEACH	10	1012.2	1013.4	23.3	13.3	18.5	-1.2	29.4	27	8.3	2	0	0	11.1	69	T	-1	T	0	0	0	0	1.3	24	8.0	21	10+	12	12	6	4.7	
LOS ANGELES	30	1009.5	1013.1	20.0	13.9	17.2	-1.1	22.2	22	10.0	2	0	0	12.2	77	T	-1	T	0	0	0	0	3.3	26	11.2Y	W	2	9	14	7	5.1	
LOS ANGELES U	82			23.3	14.4	19.1	-0.9	29.4	27	10.6	2	0	0			0	-2	0	0		0	0			6.7	SW	2+	14	9	7	4.4	66
MT SHASTA R	1080			24.4	8.3	16.3	0.6	35.0	30	0.6	3	3	0			47	15	19	5		T	0										
OAKLAND	2	1013.5	1013.8	18.3	12.8	15.5	-1.6	25.0	29	11.1	15	0	0	11.1	80	27	24	24	3	0	0	0	3.4	27	9.8	31	17+	10	8	12	5.7	
RED BLUFF	104	998.6	1011.0	31.1	15.6	23.2	-1.4	41.1	30+	8.3	3	16	0	10.6	51	22	11	19	3	2	0	0	0.3	17	11.6	SE	18	20	5	5	3.0	84
SACRAMENTO	5	1010.5	1011.3	29.4	12.2	20.8	-0.6	39.4	29	9.4	8+	13	0	12.2	67	15	13	8	4	1	0	0	2.8	21	11.2	SW	18	19	5	6	2.9	86
SANDBERG R	1377	861.2		22.2	9.4	15.9	-2.3	34.4	29	-1.1	1	2	2	3.9	53	0	-1	0	0		0	0	1.4	29	16.1	32	11	22	4	4	2.3	
SAN DIEGO	4	1012.2	1013.2	20.6	14.4	17.6	-1.4	25.0	27	10.6	2	0	0	12.2	73	4	3	4	2	0	0	0	2.0	27	8.9	NW	2	12	7	11	5.4	54
SAN FRANCISCO	2	1013.2	1013.7	19.4	11.1	15.2	-1.1	25.0	28	9.4	21	0	0	10.0	77	22	19	21	2	0	0	0	4.6	29	18.3	W	11	12	7	11	5.2	
SAN FRANCISCO U	16			16.7	11.1	13.9	-1.1	20.0	3	9.4	16	0	0			36	33	35	3		0	0			13.4	W	9					66
SANTA CATALINA	478	957.3		17.8	10.6	14.2	-2.4	29.4	21	7.2	1	0	0	10.6	86	2	-1	1	2	0	0	0	2.4	24				15	7	8	4.6	
SANTA MARIA	72			20.0	10.0	14.8	-0.5	23.3	28	4.4	2	0	0			6	2	4	3		0	0						9	13	8	5.2	
STOCKTON	7	1010.8	1012.0	30.0	13.3	21.5	-1.2	40.0	29	8.9	3	13	0	10.0	55	2	0	4	3	0	0	0	3.4	30	10.3	31	22+	21	3	6	2.9	
COLORADO																																
ALAMOSA	2297			23.3	5.0	14.2	-1.3	28.3	30	2.2	15+	0	0			21	9	10	10		T	0						9	19	2	4.7	
COLORADO SPRINGS	1873	811.7	1012.8	23.3	10.0	16.7	-1.5	28.3	18	7.2	12	0	0	7.8	62	70	29	23	14	17	0	0	0.8	11	15.6	35	4	7	13	10	6.0	
DENVER	1610	836.1	1012.0	22.8	8.9	15.9	-3.3	29.4	27	5.6	2	0	0	10.0	73	119	83	57	18	20	0	0	0.3	7	15.6	SW	20	4	14	12	6.5	54
GRAND JUNCTION	1480	850.0	1009.4	27.8	12.8	20.3	-1.5	33.9	30+	8.3	14+	5	0	5.6	43	34	23	11	8	10	0	0	0.3	9	21.9	SW	5	10	13	7	4.9	68
PUEBLO	1428	854.7	1010.8	28.3	12.8	20.6	-1.1	33.9	18	8.3	12	6	0	8.9	52	52	21	27	11	12	0	0	1.3	9	19.2	N	28	9	12	9	5.4	73

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1017.6	1018.4	24.4	14.4	19.6	-0.4	32.2	16	5.0	1	1	0	14.4	76	68	- 19	26	7	1	0	0	1.2	19	13.9	30	25+	12	8	10	5.3	
HARTFORD	52	1011.5	1017.9	27.8	15.0	21.4	1.1	35.6	16+	4.4	1	6	0	13.3	66	97	3	33	13	5	0	0	1.3	18	11.6	NE	20	8	5	17	6.6	55
NEW HAVEN	2	1018.0		24.4	13.9	19.3	0.3	30.0	16+	4.4	1	0	0			57	- 33	26	8		0	0			13.0	N	20	12	8	10	5.3	68
DELAWARE																																
WILMINGTON	24	1015.6	1018.6	27.8	16.1	21.8	-0.1	33.3	16	7.8	1	1	0	16.1	73	76	- 27	42	6	2	0	0	1.4	19	9.4	27	25	11	8	11	5.4	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.9	1018.4	30.0	17.8	23.7	0.3	35.0	13	9.4	1	10	0	16.1	64	38	- 43	23	5	2	0	0	2.1	17	10.7	NW	25	11	5	14	5.8	73
FLORIDA																																
APALACHICOLA U	4			30.0	22.8	26.3	-0.5	33.3	19	20.0	3	5	0			156	22	51	14	13	0	0			11.2	E	15	7	15	8	5.9	51
DAYTONA BEACH	9	1014.6	1016.1	30.0	21.1	25.6	-0.2	33.9	27	18.9	15+	3	0	21.1	81	191	43	51	15	18	0	0	1.6	8	11.2	25	25	0	17	13	7.4	
FORT MYERS	5	1014.9	1015.3	31.7	22.8	27.4	0.3	35.0	1	20.0	2	17	0	21.1	72	188	- 39	54	18	21	0	0	0.1	9	13.0	12	13	5	18	7	5.9	
JACKSONVILLE	6	1015.2	1016.2	30.6	22.2	26.3	-0.8	36.1	19	18.9	3	7	0	21.1	78	328	167	79	21	15	0	0	1.5	5	34.0	NE	30	0	16	14	7.5	37
KEY WEST	1	1013.9	1014.7	31.7	26.1	29.1	1.4	33.3	29+	23.3	13	15	0	23.3	72	218	117	61	17	18	0	0	2.0	16	15.6	SE	11	3	14	13	6.6	60
LAKELAND U	65			31.7	21.7	26.5	-0.5	35.6	1	19.4	4	15	0			145	- 38	62	16		0	0						1	19	10	6.7	57
MIAMI	2	1014.6	1015.0	30.6	22.2	26.6	-0.5	34.4	22	19.4	7	9	0	22.2	81	406	219	120	21	19	0	0	1.5	16	16.5	13	12	0	13	17	7.7	
ORLANDO	33	1011.5	1015.8	32.2	21.7	26.8	-0.6	35.0	1	20.0	2	17	0	21.7	80	283	107	51	19	21	0	0	0.8	8	17.9	32	5	1	15	14	7.2	
PENSACOLA	34	1011.9	1015.8	31.1	22.2	26.6	-0.7	33.9	25+	18.3	3	14	0	21.7	79	130	- 8	49	14		0	0	0.5	14	15.2	SE	15	4	17	9	6.2	69
TALLAHASSEE	17	1013.5	1015.8	32.8	21.7	27.1	0.3	37.8	20	18.9	11	20	0	21.1	76	127	- 39	29	14	16	0	0	1.2	7	13.0	30	21	4	11	15	6.6	
TAMPA	6	1014.9	1015.2	31.7	21.7	26.6	-0.4	35.6	1	19.4	4	12	0	21.1	76	119	- 66	49	10	15	0	0	0.4	3	13.0	14	15	1	20	9	6.8	48
WEST PALM BEACH	5	1014.6	1015.2	30.6	21.1	26.0	-1.2	33.3	29+	18.9	14	5	0	22.2	83	289	98	62	19	22	0	0	1.2	15	15.6	31	5	1	17	12	6.9	
GEORGIA																																
ATHENS	244	988.8	1017.2	28.3	17.8	22.9	-2.4	34.4	19	10.6	2	7	0	17.8	77	336	237	252	12	9	0	0	1.3	8	9.4	30	26	3	14	13	6.8	
ATLANTA	308	980.7	1017.1	27.2	17.8	22.5	-2.3	32.2	19	10.6	2	1	0	17.2	75	78	- 20	26	15	11	0	0	1.6	8	16.5	NW	18	4	16	10	6.6	65
AUGUSTA	44	1011.5	1016.7	29.4	17.2	23.6	-2.5	34.4	25	11.7	2	8	0	17.8	76	119	41	33	10	7	0	0	1.2	7	11.2	2	18+	2	17	11	7.0	
COLUMBUS	117			30.6	20.0	25.4	-0.9	36.7	20+	14.4	2	8	0	19.4	75	275	182	84	16		0	0	1.7	7	10.7	32	25	6	12	12	6.0	
MACON	108	1003.7	1016.4	30.6	17.8	24.1	-3.0	36.1	19	11.1	2	13	0	17.2	70	100	15	54	10	7	0	0	1.6	5	11.2	SW	22	3	17	10	6.8	52
ROME	194			29.4	16.7	22.9	-1.7	35.0	18	12.2	7+	9	0			102	6	26	15		0	0										
SAVANNAH	14	1014.6	1016.4	30.0	20.0	25.1	-1.4	35.0	25	15.0	2	8	0	20.0	78	111	- 18	50	16	10	0	0	1.4	7	13.0	E	6	0	11	19	7.7	39
HAWAII																																
HILO	8	1014.6	1015.9	29.4	21.1	25.3	1.8	30.6	19+	19.4	11	0	0	19.4	73	159	- 13	48	25	0	0	0	0.8	16	8.5	E	30	1	14	15	7.2	42
HONOLULU	2	1014.6	1015.1	30.6	22.2	26.5	1.0	32.8	22+	20.0	13+	3	0	17.2	58	62	53	58	6	0	0	0	3.1	6	12.5	NE	27	15	11	4	4.3	72
KAHULUI	15	1012.5	1014.9	30.6	20.0	25.1	0.0	32.2	22	16.7	11	1	0	19.4	70	64	59	60	6	0	0	0	4.0	5	13.4	NE	25	14	10	6	4.7	78
LIHUE	31	1011.2	1016.3	28.3	21.7	25.1	0.3	29.4	24+	18.3	3	0	0	19.4	73	53	16	24	10	0	0	0	2.8	6	11.2	E	25	9	15	6	5.2	78
IDAHO																																
BOISE	865	913.3	1011.6	26.7	11.7	18.9	0.2	35.0	30	4.4	2	6	0	9.4	59	27	5	12	7	7	0	0	0.9	27	15.2	W	21+	13	9	8	4.6	77
IDAHO FALLS 46W R	1504			21.7	7.2	14.3	-1.2	32.2	30	0.6	3	1	0			66	38	21	17		0	0										
LEWISTON	431			27.8	12.8	20.3	2.1	35.0	20+	7.8	13	6	0			49	5	32	10		0	0						10	8	12	5.5	
POCATELLO	1358	861.5	1012.4	22.8	7.8	15.3	-1.8	32.8	30	2.8	4	1	0	7.2	65	84	59	21	16	14	0	0	1.4	22	17.0	W	7	7	6	17	6.6	55
ILLINOIS																																
CAIRO U	96			29.4	20.6	25.0	-0.5	35.0	14	13.3	3	10	0			88	- 17	40	7		0	0			18.8	NW	21	6	9	15	6.5	59
CHICAGO O HARE	201	991.2	1015.4	26.7	15.6	21.0	1.0	32.8	15	6.1	3	2	0	15.6	72	202	101	78	13	8	0	0	0.7	17	16.1	18	12	5	11	14	6.6	
CHICAGO MIDWAY	185	993.2		26.7	17.2	21.9	0.5	33.3	15	9.4	2	2	0	15.0	68	222	119	75	15	11	0	0	1.5	16	21.0	W	16	5	11	14	6.4	62
MOLINE	177	993.2	1014.3	27.2	16.1	21.6	-0.3	32.8	30+	6.1	2	2	0	17.2	77	207	96	128	13	12	0	0	1.7	18	15.2	SW	8	5	8	17	6.9	52
PEORIA	199	991.5	1015.1	28.3	16.7	22.4	0.3	33.3	15	8.9	2	3	0	16.1	71	52	- 52	33	10	7	0	0	1.6	18	13.4	W	10	4	9	17	7.1	56
ROCKFORD	221	988.2	1014.7	25.6	15.0	20.2	-0.7	31.1	15	6.7	3	0	0	13.9	70	253	144	84	12	11	0	0	1.4	19	17.0	21	12	6	10	14	6.5	
SPRINGFIELD	179	992.9	1014.6	28.9	17.8	23.2	-0.1	34.4	16	9.4	2	5	0	17.2	70	65	- 49	16	12	7	0	0	1.6	18	16.1	W	10	5	7	18	6.9	63
INDIANA																																
EVANSVILLE	116	1002.0	1015.8	28.9	17.2	23.1	-1.2	34.4	14	12.2	26+	7	0	17.2	71	41	- 54	25	9	7	0	0	0.9	19	11.2	NW	18	4	10	16	7.0	58
FORT WAYNE	241	986.8	1016.5	27.8	15.6	21.4	0.0	33.3	16+	8.9	26+	3	0	13.3	62	61	- 45	27	8	5	0	0	1.2	20	13.4	W	9	5	11	14	6.5	67
INDIANAPOLIS	241	987.5	1016.2	28.9	17.8	23.3	1.6	33.9	15	11.1	26+	5	0	16.7	67	27	- 90	12	7	2	0	0	0.8	19	11.6	SW	24	4	13	13	6.5	55
SOUTH BEND	236	988.2	1015.7	26.7	16.7	21.4	0.9	32.2	16	8.3	2	1	0	14.4	66	139	49	54	12	9	0	0	1.5	21	13.0	29	16	6	10	14	6.6	
IOWA																																
BURLINGTON	211			26.7	16.7	21.7	-0.6	31.7	15	10.0	2	0	0	16.7	74	128	0		10	8	0		1.6	18	15.6	22	10	3	11	16	7.0	
DES MOINES	286	980.0	1014.2	25.6	15.6	20.6	-1.1	31.1	30	8.3	2	0	0	16.1	77	188	68	56	18	15	0	0	1.5	17	19.2	SE	9	5	9	16	7.0	56

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DUBUQUE	322	976.0		25.0	15.0	20.1	0.2	30.0	15	8.3	25	0	0			171	65	52	13		0	0						5	9	16	7.0	
SIOUX CITY	334	973.9	1013.1	25.6	15.6	20.4	-1.5	32.8	30	8.3	2	1	0	15.6	75	223	113	36	16	16	0	0	1.2	17	25.0	S	13	4	11	15	6.8	70
WATERLOO	265	982.4	1013.7	25.6	13.9	19.6	-1.6	30.0	30	5.6	2	0	0	14.4	73	140	18	54	13	6	0	0	1.4	18	11.2	16	7+	6	6	18	7.1	
KANSAS																																
CONCORDIA	448	960.0	1012.1	27.8	15.6	21.5	-1.9	33.3	14+	10.0	25+	3	0	17.2	80	359	252	139	15	15	0	0	2.1	14	30.0	NE	9	6	8	16	6.5	62
DODGE CITY	787	922.1	1011.0	28.9	16.1	22.7	-0.9	36.1	8	10.6	2	10	0	14.4	65	139	62	36	14	15	0	0	2.6	17	24.1	S	28	4	15	11	6.5	76
GOODLAND	1113	887.2	1011.9	26.1	11.7	18.9	-2.1	33.3	27	7.2	1	1	0	12.8	76	82	14	37	12	14	0	0	0.6	14	17.9	19	6	5	12	13	6.5	
TOPEKA	267	981.7	1013.1	27.2	17.2	22.3	-1.4	32.2	19	9.4	2	1	0	17.8	78	386	272	140	14	15	0	0	1.7	16	18.8	NW	7	2	12	16	7.3	48
WICHITA	403	965.1	1012.0	28.9	18.3	23.6	-1.1	34.4	4	12.8	2	8	0	16.7	69	143	36	27	16	17	0	0	3.3	17	22.8	NW	29	2	13	15	7.0	52
KENTUCKY																																
COVINGTON	265	985.8	1016.9	28.3	17.2	22.8	0.7	33.9	16+	11.1	26	5	0	15.0	63	44	- 55	21	8	4	0	0	1.2	19	10.3	30	21	6	10	14	6.4	
LEXINGTON	294	982.1	1017.1	27.2	17.2	22.3	-0.8	33.3	14	11.1	2	5	0	16.7	73	67	- 53	30	11	6	0	0	1.3	15	10.3	20	22	10	7	13	6.1	
LOUISVILLE	145	998.6	1016.1	28.3	17.8	23.0	0.0	33.3	16+	12.8	2	5	0	17.8	73	112	11	31	9	7	0	0	1.3	16	11.6	NW	25	7	9	14	6.4	57
LOUISIANA																																
ALEXANDRIA	28	1010.5	1014.6	32.2	20.0	26.1	-0.4	35.0	28+	12.8	4	20	0	21.1	77	53	- 56	32	3	4	0	0	0.8	15	7.6	28	21	7	21	2	4.9	
BATON ROUGE	20	1012.5	1015.1	32.8	21.1	27.1	-0.1	35.6	19	16.7	5+	21	0	20.6	71	70	- 34	27	7	4	0	0	0.4	17	9.4	7	14	9	19	2	4.5	
LAKE CHARLES	3	1013.9	1014.9	32.8	22.8	27.8	0.4	35.0	27+	17.2	4	21	0	22.2	77	42	- 78	24	5	5	0	0	1.2	16	10.7	3	1	12	16	2	3.9	
NEW ORLEANS	1	1014.2	1015.0	32.8	22.2	27.6	0.8	36.7	27	19.4	8+	21	0	21.1	71	61	- 52	27	8	3	0	0	0.1	11	11.2	12	12+	15	13	2	4.1	
SHREVEPORT	77	1005.1	1014.1	32.8	21.7	27.2	0.2	36.1	30	16.7	4	22	0	21.1	72	23	- 62	81	3	1	0	0	1.7	17	7.6	22	29+	8	19	3	4.9	74
MAINE																																
CARIBOU	190	993.9		23.3	10.6	16.7	1.7	31.1	4	1.1	1	0	0			43	- 60	13	10		0	0						1	13	16	7.4	
PORTLAND	14	1015.2	1017.7	23.3	11.7	17.4	0.7	33.3	16	2.2	1	2	0	12.2	76	158	77	142	8	5	0	0	1.0	17	11.2	E	20	6	7	17	6.5	48
MARYLAND																																
BALTIMORE	45	1012.9	1018.4	29.4	15.6	22.6	0.1	35.6	16	6.7	1	10	0	15.0	65	48	- 36	31	4	3	0	0	1.3	17	19.2	SW	22	11	10	9	5.1	70
MASSACHUSETTS																																
BLUE HILL OBS R	192			25.0	13.3	19.0	0.6	33.3	16+	6.1	1	2	0			109	14	57	10		0	0			19.7	NE	20					59
BOSTON	5	1016.9	1017.8	24.4	14.4	19.6	-0.3	34.4	16	8.3	1	3	0	12.8	69	88	0	37	13	5	0	0	1.3	20	13.0	W	25+	12	7	11	5.6	62
NANTUCKET	13	1018.3	1018.7	19.4	10.6	14.8	-1.4	25.0	28	4.4	4	0	0	12.8	90	86	11	77	4	0	0	0	1.9	20	14.8	NE	20	10	6	14	6.1	64
PITTSFIELD	357			26.1	12.2	19.1	1.8	31.7	16+	1.1	1	0	0			131	23	44	10		0	0										
WORCESTER	301	982.1	1018.7	25.0	13.3	18.9	0.8	32.2	16	6.1	1	1	0	11.7	66	94	- 3	28	12	7	0	0	1.1	25	15.6	28	25	10	7	13	5.9	
MICHIGAN																																
ALPENA	210	991.2	1016.1	25.0	11.1	18.1	2.2	31.1	14	3.9	1	0	0	12.2	75	207	139	51	19	10	0	0	0.6	12	11.6	NW	13	6	7	17	6.7	61
DETROIT	189			27.8	17.2	22.6	1.7	34.4	16	6.7	1	4	0	13.9	60					9			0.8	22	10.3	28	30+					
DETROIT M WAYNE CO	193	991.9	1015.7	27.8	15.0	21.3	1.1	33.9	16+	7.8	1	4	0	14.4	68	107	23	37	10	8	0	0	1.1	21	13.9	W	16	5	16	9	6.3	62
DETROIT WILLOW RUN	217	988.5	1016.3	27.8	14.4	21.2	0.3	35.0	16	5.0	1	3	0	12.2	57	65	- 18	25	9	5	0	0	1.1	23	15.6	29	16	6	16	8	6.1	
FLINT	235	988.2	1015.8	26.1	14.4	20.3	1.1	31.1	16+	5.0	1	0	0	14.4	70	136	57	37	12	7	0	0	1.5	21	20.6	25	10	3	14	13	7.1	
GRAND RAPIDS	239	986.8	1015.6	26.7	15.0	20.7	1.0	31.7	15	6.7	1	0	0	13.9	68	209	124	64	13	10	0	0	1.1	20	20.6	NW	11	4	12	14	6.5	59
HOUGHTON LAKE	350	974.9	1016.5	25.6	12.8	19.1		29.4	15+	4.4	1	0	0	13.3	73	144		33	20	11	0	0	0.5	20	9.4	27	16	6	9	15	6.6	
LANSING	256	984.4	1015.6	27.8	15.0	21.4	1.7	33.3	16+	4.4	2	4	0	13.9	64	172	87	38	14	8	0	0	1.6	22	13.0	W	13	4	12	14	6.7	59
MARQUETTE U	206			21.1	10.6	15.8	0.2	31.7	14	5.6	11	0	0			93	5	25	18		0	0			10.7	SW	3	8	4	18	6.6	54
MUSKEGON	191	992.9	1015.5	26.7	15.0	20.8	1.5	31.1	3	10.0	3+	0	0	13.3	65	139	70	81	13	11	0	0	1.5	20	10.3	28	12+	5	11	14	6.6	
SAULT STE MARIE	220	989.5	1016.0	23.3	8.9	16.1	1.1	30.0	3	0.6	24	0	0	10.0	73	73	- 11	17	11	4	0	0	0.4	15	10.7	NW	30+	4	8	18	7.2	53
MINNESOTA																																
DULUTH	435	963.8	1015.0	20.0	8.9	14.6	-0.3	27.2	29	5.0	22+	0	0	8.9	71	132	24	47	17	6	0	0	1.0	11	16.5	NE	11	6	4	20	7.4	47
INTERNATIONAL FALLS	359	971.6	1014.4	22.2	9.4	15.7	0.2	28.9	29	1.7	23	0	0	8.9	66	106	8	29	11	6	0	0	0.2	21	11.2	26	20	3	13	14	6.7	
MINNEAPOLIS	254	983.7	1013.7	24.4	14.4	19.4	0.1	30.6	30	8.9	25	0	0	13.3	70	191	90	35	19	9	0	0	0.8	17	25.0	NW	30	8	7	15	6.5	59
ROCHESTER	395	967.2	1014.4	24.4	13.9	18.9	-0.5	31.1	30	7.2	2	0	0	13.3	74	212	99	61	17	11	0	0	1.8	19	12.5	28	15	6	7	17	6.8	
ST CLOUD	315	976.0	1013.4	23.9	12.2	17.9	-0.6	30.6	29	6.1	2	0	0		71	178	64	41	18		0	0						7	9	14	6.5	
MISSISSIPPI																																
JACKSON	94	1003.7	1015.6	31.7	19.4	25.7	-0.8	35.6	19	13.9	5	18	0	20.6	77	96	- 1	47	4	4	0	0	0.8	14	13.4	NW	27	9	18	3	5.1	79
MERIDIAN	88	1004.7	1015.7	32.8	20.0	26.2	-0.2	36.7	20	16.7	4	19	0	18.3	67	51	- 53	28	2	1	0	0	0.1	12	7.2	34	26	8	17	5	5.3	
MISSOURI																																
COLUMBIA	237	986.1	1014.1	27.8	17.8	22.8	-0.6	32.2	15+	10.6	3+	2	0	17.2	72	126	16	33	10	12	0	0	1.8	17	14.3	SW	10	4	9	17	7.2	62

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
KANSAS CITY	226	986.8	1013.4	27.8	17.8	22.7	-1.7	31.7	19+	10.0	2	0	0	17.8	75	247	131	44	14	14	0	0	1.9	17	18.3	NW	7	3	12	15	7.3	48
SAINT JOSEPH	247			28.3	16.7	22.4	-0.9	32.8	19	7.2	2	2	0	17.8	81	276	125		15	12	0		1.7	15	15.6	31	11	4	12	14	6.7	
ST LOUIS	163	994.9	1015.1	28.3	18.3	23.3	-0.1	33.9	14	10.0	3	3	0	18.9	77	113	4	34	11	7	0	0	1.6	19	14.8	SW	12	3	11	16	7.1	67
SPRINGFIELD	386	970.2	1014.7	28.9	17.2	23.0	-0.4	32.8	15+	7.2	3	2	0	17.2	73	181	53	40	13	11	0	0	1.9	17	15.2	NW	20	4	10	16	6.8	56
MONTANA																																
BILLINGS	1087	890.6	1013.5	21.1	10.6	16.0	-2.4	30.6	29	5.6	24	0	0	8.9	66	132	67	43	16	7	0	0	0.8	36	12.1	NE	18+	9	7	14	6.2	55
GLASGOW	696	932.6		22.8	9.4	15.9	-0.9	31.7	27	2.8	23	0	0			57	- 19	34	10		0	0						5	10	15	7.0	
GREAT FALLS	1116	888.6	1014.2	21.1	10.6	15.7	0.2	31.1	29	3.9	23	0	0	6.7	58	93	19	22	13	4	0	0	0.7	29	15.2	SW	17	7	5	18	6.9	57
HAVRE	787	922.8	1013.9	22.2	8.3	15.4	-0.7	31.1	26	2.2	23	0	0	6.7	60	18	- 52	6	7	1	0	0	0.6	27	22.4	NW	3	9	7	14	6.5	60
HELENA	1167	880.8	1014.6	21.7	8.9	15.5	0.2	31.1	29	3.9	24	0	0	7.2	63	60	3	11	14	6	0	0	1.8	31	11.2	N	6	9	7	14	6.3	58
KALISPELL	904	910.6	1014.3	22.2	7.2	14.8	0.1	28.9	21+	2.2	23	0	0	8.3	67	60	4	25	11	7	0	0	0.9	36	10.3	22	29+	10	6	14	5.4	
MILES CITY	801	921.1	1012.9	23.3	11.1	17.4	-1.3	32.8	27	7.8	23	1	0	9.4	66	133	64		17	7	0		0.4	36								
MISSOULA	972	903.5	1014.5	22.8	8.9	15.7	1.0	31.1	29	3.9	23	0	0	7.8	65	68	19	14	14	7	0	0	0.8	30	11.6	N	24+	9	5	16	6.1	59
NEBRASKA																																
GRAND ISLAND	561	947.5	1012.8	25.6	14.4	20.1	-1.6	33.3	30	5.6	2	2	0	15.6	78	355	258	115	17	16	0	0	1.1	14	17.0	33	13	5	10	15	6.7	
LINCOLN U	351			26.7	16.1	21.2	-1.7	32.8	30	6.7	2	1	0			328	214	84	17		0	0			18.8	S	10	4	7	19	7.0	58
NORFOLK	471			25.6	13.9	19.7	-1.9	33.9	30	6.1	2	1	0			310	202	69	15		0	0						4	9	17	6.9	
NORTH PLATTE	846	916.0	1012.5	23.9	12.2	18.1	-2.5	30.6	4	6.1	25	0	0	13.3	77	154	71	36	14	17	0	0	1.0	9	22.8	NW	14	4	10	16	6.7	59
OMAHA	298	978.3	1013.2	27.2	16.1	21.6	-1.3	31.7	30	6.7	2	0	0	16.7	75	250	135	56	16	14	0	0	1.6	15	25.0	N	4	4	7	19	7.1	56
SCOTTSBLUFF	1206	878.8	1012.6	23.9	11.1	17.3	-2.1	32.8	30	5.6	24	1	0	11.1	73	107	28	21	20	15	0	0	0.9	10	21.9	32	20	2	13	15	6.6	
VALENTINE	789			24.4	11.7	18.1	-1.7	34.4	30	5.0	25	1	0			120	41	42	14		0	0			19.7	NW	14	4	9	17	6.9	49
NEVADA																																
ELKO	1539	843.2	1011.6	25.6	8.9	17.1	1.5	36.7	30	0.0	2	5	1	6.7	58	30	12	8	14	6	0	0	0.4	23	11.2	18	19+	9	7	14	5.7	
ELY	1906	808.0	1011.5	21.1	3.9	12.6	-2.2	32.2	30	- 2.2	1	1	2	3.3	60	72	59	37	13	8	20	T	1.4	20	15.2	S	1	13	10	7	4.8	65
LAS VEGAS	659	932.6	1007.4	34.4	18.3	26.4	-1.8	42.2	30	10.6	1	21	0	2.2	22	21	20	19	3	1	0	0	1.8	21	19.7	NW	19	24	5	1	1.5	95
RENO	1342	864.2	1012.1	25.6	5.6	15.5	-0.1	36.7	30	1.7	3+	5	0	5.6	55	15	6	14	4	3	0	0	1.2	31	15.2	NW	21	13	10	7	4.3	86
WINNEMUCCA	1310	865.9	1011.7	25.0	7.2	15.9	-0.5	36.1	30	- 1.1	3	4	2	4.4	51	39	20	17	11	5	0	0	0.4	34	13.4	SE	18+	7	12	11	5.5	52
NEW HAMPSHIRE																																
CONCORD	104	1005.8	1018.2	26.1	11.7	18.9	0.9	33.3	16	- 0.6	1	1	1	12.8	74	97	6	26	13	5	0	0	0.5	19	15.6	NE	12	10	7	13	6.1	58
MT WASHINGTON OBS	1909			12.2	6.1	9.0	1.8	15.0	24+	- 1.1	1	0	1			176	11	40	16	2	0	25			38.9Y	W	25	0	6	24	9.0	30
NEW JERSEY																																
ATLANTIC CITY	20	1016.6	1019.2	27.8	13.3	20.6	-0.6	33.3	25+	2.8	1	3	0	13.9	71	35	- 37	29	3	0	0	0	1.7	19	8.9	19	22	12	13	5	4.8	71
ATLANTIC CITY U	3			23.9	16.7	20.3	-0.2	28.9	25	10.0	1	0	0			34	- 43	30	3						17.0	NNE	19					
NEWARK	2	1017.3	1018.3	27.8	16.7	22.2	0.4	35.0	16	9.4	1	5	0	13.9	63	84	- 3	44	7	5	0	0	1.7	19	10.7	33	20	9	11	10	5.5	
TRENTON U	17			28.3	17.2	22.9	1.3	33.9	16+	10.6	1	7	0			55	- 36	27	5		0	0			11.6	S	22	10	12	8	5.4	64
NEW MEXICO																																
ALBUQUERQUE	1619	837.1	1009.6	30.0	13.9	21.9	-1.9	35.6	27	9.4	7	7	0	2.2	32	43	29	12	11	11	0	0	1.3	16	20.6	E	29	14	12	4	3.8	75
CLAYTON	1515			26.7	12.2	19.4	-1.8	32.2	23	8.9	13	1	0			77	39	15	13		0	0						8	14	8	5.2	
RATON	1944			26.1	10.0	18.1	-0.4	30.6	26+	5.0	12	0	0			58	14	17	11		0	0						4	18	8	6.1	
ROSWELL	1102	889.3		32.8	15.6	24.1	-1.0	37.2	9	8.3	1	18	0	10.6	52	90	64	23	10	10	0	0	1.7	16	18.8	NW	4	12	11	7	4.7	74
SILVER CITY	1638			30.0	12.8	21.4	-2.2	34.4	28+	6.7	12+	5	0			26	11	12	5		0	0						15	11	4	3.7	
NEW YORK																																
ALBANY	84	1007.1	1017.8	27.8	13.9	21.1	1.4	35.6	16	2.2	1	3	0	13.3	64	72	- 10	34	12	5	0	0	1.3	20	17.0	NW	25	8	4	18	6.8	61
BINGHAMTON	485	960.4	1018.5	25.6	14.4	20.1	2.6	30.6	16+	5.6	1	0	0	13.9	71	74	- 24	14	15	8	0	0	1.3	22	20.1	NW	15	6	10	14	6.3	66
BUFFALO	215	991.5	1016.9	28.3	16.7	22.5	4.3	32.8	21	6.7	1	2	0	13.3	58	64	- 1	20	10	3	0	0	2.6	21	13.0	SW	25+	9	13	8	5.4	72
NEW YORK U	40	1014.6	1017.9	27.8	17.2	22.7	0.8	35.6	16	8.9	1	5	0	13.3	60	118	34	81	8	3	0	0	0.7	21	11.2	N	20					68
J.F. KENNEDY	4	1017.6	1018.5	23.3	15.0	19.3	-1.9	30.6	25	7.2	1	0	0	13.9	76	86	1	31	8	2	0	0	2.5	19	14.3	30	25	10	11	9	5.6	
NEW YORK LA GUARDIA	3	1016.3	1018.1	27.2	17.2	22.1	0.2	35.0	16	8.3	1	5	0	13.3	61	80	- 6	35	8	4	0	0	1.3	18	14.8	W	25	9	12	9	5.7	
ROCHESTER	167	998.0	1018.0	27.8	14.4	21.3	1.9	32.8	16	4.4	1	1	0	13.3	64	40	- 25	18	8	2	0	0	1.1	22	13.4	SW	25	11	11	8	5.1	77
SYRACUSE	125	1002.4	1017.2	27.8	13.9	20.8	1.2	31.1	16+	4.4	1	0	0	13.9	68	40	- 36	13	7	4	0	0	0.6	19	14.8	W	17	9	15	6	5.1	63
NORTH CAROLINA																																
ASHEVILLE	652	943.1	1018.3	25.0	13.3	19.3	-1.8	30.6	18	7.8	6	0	0	15.0	81	113	24	62	10	3	0	0	0.3	14	7.6	19	21	1	15	14	6.7	68
CAPE HATTERAS R	2	1017.6	1018.0	25.0	17.8	21.4	-2.6	30.0	25	12.2	1	0	0	18.3	81	26	- 79	11	8	2	0	0	1.6	6	11.6	SW	19	6	8	16	6.8	49
CHARLOTTE	224	990.5	1017.6	27.8	17.8	22.8	-2.2	32.8	25	10.6	2	1	0	17.2	72	78	- 13	24	8	5	0	0	0.8	9	8.0	NE	4	3	18	9	6.6	77
GREENSBORO	273	987.1	1018.3	28.9	17.2	23.2	-0.6	35.6	24	11.1	1	7	0	18.3	77	54	- 35	18	8	2	0	0	0.8	9	7.6	N	25	7	12	11	6.1	57

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
RALEIGH	132	1002.4	1018.0	28.3	16.1	22.2	-1.7	33.3	25+	11.7	2+	3	0	16.7	75	116	22	87	9	3	0	0	1.3	10	10.3	28	25	8	14	8	5.8	64
WILMINGTON	9	1016.6	1017.8	28.9	20.0	24.6	-0.8	34.4	25+	13.9	2+	5	0	18.9	73	153	45	58	12	4	0	0	1.9	8	14.3	N	30	3	12	15	7.0	66
NORTH DAKOTA																																
BISMARCK	502	954.6	1013.9	22.8	10.0	16.2	-1.9	32.8	29	4.4	23	1	0	8.3	63	22	-65	11	11	0	0	0	0.5	7	13.0	W	29	6	6	18	7.0	55
FARGO	273	981.0	1013.5	23.3	10.6	17.0	-1.2	31.7	29	2.2	23	0	0	10.0	66	65	-13	23	9	4	0	0	0.4	9	15.2	S	3	3	10	17	7.1	45
WILLISTON	579	945.5	1013.1	24.4	9.4	16.9	-0.3	32.8	27	1.7	23	2	0	8.3	61	23	-61	7	11	4	0	0	0.4	29	20.1	W	3	8	7	15	6.3	70
OHIO																																
AKRON	368	973.2	1017.2	28.9	16.1	22.4	1.7	33.9	16+	8.3	2	6	0	15.0	68	26	-83	15	7	6	0	0	1.1	20	10.3	15	28+	8	11	11	5.6	
CINCINNATI OBS	232			28.9	17.2	22.9	-0.1	34.4	15	10.6	2+	7	0			47	-59	15	8		0	0			7.6	W	21					73
CLEVELAND	237	988.2	1017.0	28.3	16.1	22.1	2.2	33.9	16+	7.2	2	4	0	14.4	65	30	-57	12	8	3	0	0	1.1	20	14.3	S	29	8	11	11	5.8	61
COLUMBUS	247	987.8	1017.2	28.3	16.1	22.1	0.6	33.3	15+	8.3	2	5	0	15.0	65	74	-31	30	7	5	0	0	1.1	18	16.1	W	21	8	11	11	6.1	63
DAYTON	305	981.4	1016.8	28.9	17.8	23.5	1.6	35.0	15	11.1	2	6	0	15.6	63	101	-3	64	9	2	0	0	1.3	19	16.1	E	28	9	8	13	6.1	68
MANSFIELD	395			27.8	15.6	21.6	1.7	33.3	14	8.3	2	4	0	15.0	69	41	-66	24	7	5	0	0	1.4	20				9	9	12	5.8	
TOLEDO	206	991.9	1016.6	28.3	15.0	21.7	1.6	35.0	15	7.2	2	5	0	13.9	65	49	-47	32	7	6	0	0	1.2	23	11.6	SW	21	5	11	14	6.4	65
YOUNGSTOWN	359	975.3	1017.5	27.8	14.4	21.2	1.7	33.3	15+	4.4	1	4	0	13.9	68	54	-37	26	8	5	0	0	1.0	18	12.1	25	16	4	15	11	6.2	
OKLAHOMA																																
OKLAHOMA CITY	392	967.2	1012.4	30.6	20.0	25.2	-0.3	35.0	19	13.9	3	12	0	18.3	67	58	-56	34	5	6	0	0	2.6	15	16.5	S	9	6	14	10	6.0	63
TULSA	198	989.5	1013.3	30.0	19.4	24.7	-0.4	34.4	24+	12.2	3	8	0	19.4	74	117	-2	53	9	8	0	0	2.5	16	15.2	W	11	6	10	14	6.6	54
OREGON																																
ASTORIA	2	1015.9	1016.8	18.3	10.6	14.6	0.6	23.9	1	6.1	30	0	0	12.2	88	29	-48	20	9	0	0	0	2.3	28	10.3	33	29	5	7	18	7.1	
BURNS U	1265	872.0	1013.1	23.9	8.3	16.2	0.7	33.3	30	0.6	2	1	0	5.6	53	21	-1	5	9		0	0	1.6	34				9	19	2	4.9	
EUGENE	109	1001.7	1015.2	26.1	10.6	18.2	2.2	33.3	18	6.7	10	1	0	11.1	67	43	7	22	3	1	0	0	1.2	32	10.7	2	29+	12	5	13	5.0	
MEACHAM	1234	876.4	1013.5	20.0	8.3	14.3	2.2	28.3	18	4.4	11+	0	0	5.0	57	31	-31	21	3		0	0	1.1	30				11	3	16	5.7	
MEDFORD	396	966.8	1013.8	30.0	10.6	20.2	2.3	39.4	29	2.8	2	11	0	8.3	52	7	-19	7	4	3	0	0	1.4	31	11.2	36	12	15	12	3	3.2	
PENDLETON	452	960.4	1013.1	28.9	12.8	20.9	2.2	36.7	19	6.1	4	11	0	6.7	44	10	-19	8	2	0	0	0	1.6	27	11.6	27	6	13	8	9	4.4	
PORTLAND	6	1013.9	1015.1	25.6	12.2	18.8	2.2	32.8	19	7.8	1	2	0	11.1	66	26	-17	19	4	1	0	0	2.2	31	13.0	SE	1	9	8	13	5.8	59
SALEM	60	1008.1	1015.4	26.1	10.0	17.9	2.0	33.3	18	5.0	3	3	0	10.0	65	18	-19	13	5	1	0	0	1.3	32	11.2	14	1	13	5	12	5.1	
SEXTON SUMMIT R	1169	883.5	1013.6	21.7	8.9	15.3	2.1	30.6	19+	3.3	9	0	0	6.7	65	7	-32	10	1		0	0	3.8	34	12.1	36	1	16	10	4	3.2	
PACIFIC AREA																																
CANTON ISLAND	2			30.6	25.0	27.9	-0.9	31.7	24+	22.8	30+	0	0			120	52	39	13		0	0						10	11	9	5.5	
ENIWETOK	4	1009.1	1009.7	31.1	25.6	28.3	0.1	32.8	8+	23.9	25+	6	0	24.4	81	195	109	48	19		0	0	5.1	8								
TAGUAC GUAM R	110			30.0	22.8	26.4	-0.4	31.7	14	20.0	14	0	0			213	64	40	24		0	0			9.8	SE	24+					58
JOHNSTON	2	1012.5	1013.3	29.4	25.0	27.1	0.3	30.6	27+	23.3	30+	0	0	22.2	76	47	26	21	14	0	0	0	6.2	10	15.2	E	28	14	6	10	5.2	56
KOROR R	29	1005.4	1009.1	31.1	24.4	27.8	0.5	32.2	30+	22.8	28+	5	0	23.9	85	437	107	105	23	3	0	0	0.8	23	17.9	SW	2	0	2	28	9.2	67
KWAJALEIN	2	1008.8	1009.6	30.0	24.4	27.4	0.0	31.7	7+	22.8	18	0	0	24.4	82	359	139	66	22	3	0	0	4.1	8	13.4	11	2	1	12	17	7.9	
MAJURO	3	1009.5	1009.8	30.0	25.0	27.4	0.6	30.6	29+	23.3	28+	0	0	23.9	81	279	-47	56	26	2	0	0	3.1	9	12.1	E	22	1	9	20	8.0	48
MARCUS ISLAND	6	1010.2	1012.2	30.6	25.0	27.8	-0.4	31.7	30+	21.1	15	0	0	23.9	80	101	34	29	13	3	0	0	2.0	19	14.3	S	14	6	8	16	7.0	79
PAGO PAGO	4	1012.5	1012.6	28.3	22.8	25.5		30.0	5+	18.9	22	0	0	22.8	85	298		49	20	2	0	0	3.7	12	12.1	E	18	5	11	14	6.9	46
PONAPE R	37	1003.7	1009.1	31.1	22.8	26.9	0.2	32.2	24+	21.1	12	4	0	23.9	86	292	-133	49	27	5	0	0	1.6	11	8.0	E	15	1	8	21	8.2	44
TRUK MOEN ISLAND	2	1008.8	1009.2	30.6	23.9	27.1	0.1	32.8	14	22.2	22	1	0	23.9	85	359	57	83	21	4	0	0	1.2	9	10.3	W	30	1	3	26	9.0	58
WAKE	3	1012.5	1012.7	30.6	25.6	27.9	0.4	31.7	14	22.2	30+	0	0	23.3	76	106	58	30	20	2	0	0	3.6	9	12.1	S	26	0	13	17	7.6	69
YAP R	19	1006.8	1008.5	30.6	23.9	27.2	-0.6	32.2	24	21.1	7	1	0	24.4	86	424	152	116	24	0	0	0	0.3	16	11.2	S	16	0	7	23	9.1	61
PENNSYLVANIA																																
ALLENTOWN	118	1004.7	1018.4	28.3	14.4	21.4	0.7	35.0	16	7.2	1	5	0	13.3	62	104	1	90	4	3	0	0	1.3	21	11.2	29	25	11	9	10	5.2	
ERIE	223	990.9	1017.1	27.2	16.1	21.7	2.4	31.7	16+	4.4	1	0	0	13.9	63	63	-14	48	7	4	0	0	1.6	20	10.7	6	18	11	9	10	5.0	
HARRISBURG	103	1005.4	1018.1	30.0	16.7	23.3	1.4	34.4	16	8.3	1	10	0	14.4	59	48	-39	18	7	6	0	0	0.8	19	10.3	W	22+	9	10	11	5.6	74
PHILADELPHIA	2	1017.3	1018.4	28.3	16.1	22.3	0.6	33.9	24+	6.7	1	6	0	15.6	69	105	2	64	6	3	0	0	1.5	21	10.3	W	22	12	5	13	5.6	65
PITTSBURGH	347	974.3	1017.6	29.4	16.1	22.8	2.6	33.9	17	10.0	26+	7	0	13.3	57	23	-73	12	6	2	0	0	0.8	19	10.7	31	17	2	18	10	6.7	61
READING U	81			29.4	17.2	23.3	0.9	34.4	16	10.0	1	8	0			29	-65	16	5		0	0			15.6	SW	22	12	10	8	5.3	69
SCRANTON	283	984.8	1018.6	27.8	15.6	21.7	1.6	33.3	16+	6.1	1	3	0	15.0	69	114	14	58	10	6	0	0	0.9	20	11.2	E	16	7	14	9	5.7	65
WILLIAMSPORT	160	999.0	1017.9	28.9	15.0	21.8	1.1	33.3	13+	5.6	1	6	0	16.1	74	82	0	41	11	8	0	0	0.6	17	16.1	30	15	10	12	8	5.4	
RHODE ISLAND																																
BLOCK ISLAND	34			20.0	13.3	16.4	-0.7	25.6	27	5.0	1	0	0			63	-2	28	8		0	0						12	7	11	5.5	
PROVIDENCE	16	1015.9	1018.3	25.6	13.3	19.3	0.3	33.9	16	5.0	1	1	0	13.3	72	69	-1	24	9	5	0	0	1.1	17	13.0	1	20	11	7	12	5.5	54

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1014.9	1016.6	29.4	19.4	24.2	-2.0	33.9	25	12.2	2	6	0	18.9	78	103	- 23	53	13	6	0	0	1.7	6	13.9Y	E	15+	1	10	19	7.6	38
CHARLESTON U	3			27.2	21.1	24.3	-2.2	32.8	30+	13.9	2	2	0			106	- 2	80	7		0	0			15.2	NE	6					
COLUMBIA	65	1009.5	1017.5	28.9	17.2	23.1	-3.4	35.0	24	12.2	8+	7	0	17.8	78	106	8	32	9	4	0	0	1.4	7	13.0	27	25	5	15	10	6.4	66
GNVLE SPARTANBURG	292	983.7	1017.9	28.3	17.2	22.6	-2.4	36.1	25	11.1	2	4	0	17.2	76	124	50	54	11	4	0	0	1.1	7	10.3	N	25	5	13	12	6.4	52
SOUTH DAKOTA																																
ABERDEEN	395	966.5	1012.9	23.9	11.7	17.9	-1.3	31.1	30	5.0	2	0	0	12.2	71	130	35	24	17	8	0	0	0.9	5	19.2	19	13	8	5	17	6.6	
HURON	391	966.8	1012.7	25.0	12.8	19.0	-0.8	33.3	30	6.1	2	1	0	14.4	77	211	131	139	18	10	0	0	0.6	11	17.9	NE	18	5	9	16	6.8	54
RAPID CITY	964	903.8	1013.8	21.1	10.0	15.6	-2.7	29.4	30	5.0	24	0	0	11.1	78	172	94	42	18	14	0	0	1.3	1	17.9	W	18	6	8	16	6.7	50
SIOUX FALLS	432	962.4	1013.2	25.0	13.3	19.1	-1.0	32.8	30	4.4	2	1	0	13.9	74	108	- 2	35	17	14	0	0	0.8	16	10.3	32	19+	5	9	16	6.6	
TENNESSEE																																
BRISTOL	459	964.4	1018.0	26.7	13.9	20.5	-2.4	31.1	17	8.9	2+	0	0	15.6	77	54	- 31	22	10	5	0	0	0.6	7	8.0	31	18	7	13	10	5.7	
CHATTANOOGA	203	992.2	1016.7	28.3	17.2	22.8	-2.8	33.9	18	13.3	7+	4	0	17.8	79	41	- 53	16	12	9	0	0	0.8	17	12.1	NW	25	5	12	13	6.4	50
KNOXVILLE	299	981.7	1016.3	28.3	17.2	22.9	-1.4	33.3	14	12.8	2	6	0	18.3	81	166	81	69	11	8	0	0	0.3	35	12.5	W	25	5	14	11	6.6	52
MEMPHIS	79	1005.8	1015.7	30.6	20.6	25.7	-0.1	34.4	21	13.3	3	12	0	18.9	67	43	- 50	17	9	6	0	0	1.3	15	12.1	NW	23	9	11	10	5.7	66
NASHVILLE	180	994.6	1015.8	30.6	18.9	24.6	-0.6	35.0	18	13.3	5	14	0	18.3	71	107	25	35	9	7	0	0	1.1	17	12.1	SW	24	7	12	11	6.0	70
OAK RIDGE R	276			28.3	16.1	22.2	-1.4	32.8	17+	11.1	2	3	0			163	80	43	10		0	0			15.2Y		18	8	10	12	6.4	
TEXAS																																
ABILENE	537	951.2	1011.1	33.3	22.2	27.7	0.9	38.3	28	18.3	11+	24	0	18.9	61	72	5	54	5	4	0	0	3.9	17	15.2	NW	11	10	15	5	4.9	74
AMARILLO	1098	889.6	1009.9	29.4	16.7	23.2	-1.8	35.0	9	12.2	25	11	0	13.3	62	65	- 9	21	15	12	0	0	3.5	18	20.1	W	28	7	16	7	5.6	66
AUSTIN	182	991.2	1012.7	35.0	22.8	28.7	1.0	37.8	29+	18.3	7+	25	0	18.9	60	T	- 82	T	0	0	0	0	3.4	17	9.8	SW	24+	10	17	3	4.5	80
BROWNSVILLE	6	1011.5	1012.1	32.8	23.9	28.4	0.3	34.4	27+	18.9	6	27	0	22.2	72	38	- 37	31	3	1	0	0	4.7	13	13.0	SE	11	10	17	3	4.5	71
CORPUS CHRISTI	12	1011.2	1012.6	33.3	23.3	28.2	0.3	35.6	29+	18.9	6+	25	0	21.7	71	9	- 52	8	2	1	0	0	5.6	14	13.0	SE	24+	9	19	2	4.5	79
DALLAS	147	995.9	1012.8	33.3	23.3	28.3	0.9	37.8	28	17.8	3	21	0	19.4	61	45	- 38	34	4	4	0	0	3.5	16	23.7	SE	11	10	12	8	4.9	73
DEL RIO	313	974.9	1010.2	36.1	23.3	29.6	0.4	38.3	28+	18.3	2	29	0	17.2	51	9	- 49	5	2	2	0	0	5.3	13	12.5	9	1	9	15	6	4.8	
EL PASO	1194	879.4	1007.8	33.3	18.9	26.2	-1.1	38.3	23	14.4	1	22	0	6.1	34	36	18	16	5	6	0	0	1.3	22	20.1	N	29	15	8	7	3.7	80
FORT WORTH	164	992.9	1012.8	32.8	22.2	27.4	-0.1	36.7	28	16.7	12+	20	0	18.9	63	18	- 57	16	3	3	0	0	2.9	17	11.2	32	12	13	9	8	4.8	
GALVESTON U	2			29.4	25.6	27.6	0.0	31.7	19+	20.6	2+	0	0			21	- 47	13	4		0	0			16.1	NE	1					76
HOUSTON U	12			32.2	23.9	28.1	0.2	36.7	26	18.9	2	18	0			10	- 87	10	1		0	0										
HOUSTON	15	1011.9	1013.9	33.9	22.2	28.1	0.6	37.2	26	19.4	7+	24	0	21.1	71	4	- 89	4	1	1	0	0	3.0	15	13.0	36	1	13	15	2	4.0	83
LUBBOCK	992	901.8	1010.4	30.6	17.8	24.0	-1.3	35.0	23	12.8	1	13	0	14.4	62	202	138	145	8	11	0	0	3.5	17	19.7	8	1	7	14	9	5.5	
MIDLAND	869	913.3	1008.9	33.3	20.0	26.6	-0.7	38.3	9+	16.1	2	23	0	13.9	52	30	- 12	13	10	9	0	0	4.0	15	15.6	16	1	12	13	5	4.7	
PORT ARTHUR	5			32.8	22.8	27.7	0.7	36.1	26	17.8	4	19	0	20.6	69	27	- 82	26	2	2	0	0	2.0	16	14.8	NW	1	11	18	1	3.8	83
SAN ANGELO	580	945.1	1010.0	35.0	22.2	28.5	0.4	38.9	28+	17.8	3	27	0	16.1	51	61	15	47	6	5	0	0	3.2	17	13.0	29	29+	10	15	5	4.8	
SAN ANTONIO	240	985.1	1012.5	35.0	23.3	29.2	1.4	37.8	26+	17.8	4	28	0	18.9	58	T	- 75	T	1	0	0	0	4.1	15	11.6	SE	10	8	19	3	5.0	77
VICTORIA	32	1008.8	1013.0	34.4	22.8	28.6	1.2	36.7	26	19.4	6	27	0	21.1	68	T	- 77	T	0	0	0	0	4.0	16	16.1Y	S	11+	7	22	1	4.6	
WACO	153	994.9	1012.6	35.0	23.9	29.4	1.6	39.4	26	21.1	3+	24	0	20.0	60	9	- 59	6	3	3	0	0	3.7	15	14.3	36	11	15	10	5	4.1	
WICHITA FALLS	303	976.0	1011.7	33.9	20.0	27.1	-0.6	40.0	23	15.0	3	22	0	18.9	64	47	- 35	28	4	4	0	0	3.7	15	17.9	23	11	7	14	9	5.9	
UTAH																																
MILFORD	1533	844.6		26.1	7.8	16.7	-1.8	34.4	30	1.7	2	5	0			62	51	24	11		0	0						15	10	5	4.1	
SALT LAKE CITY	1286	869.6	1011.3	25.6	10.6	18.1	-1.6	34.4	30	5.6	2	3	0	7.8	57	69	44	19	17	19	0	0	0.4	10	16.5	N	21	8	11	11	5.9	69
WENDOVER	1291			23.3	12.8	18.3	-2.7	32.8	30	8.9	15	2	0			51	39	19	11		0	0										
VERMONT																																
BURLINGTON	101	1004.4	1016.9	26.1	13.3	19.8	1.9	32.8	4	2.8	1	2	0	12.2	65	79	- 9	17	14	6	0	0	0.8	19	12.5	SW	16	7	5	18	7.1	68
VIRGINIA																																
LYNCHBURG	279	985.1		28.3	15.0	21.7	-1.1	33.3	16	7.8	2	5	0	15.0	69	65	- 39	55	7	4	0	0	0.5	15	8.0	SW	25	12	12	6	4.8	72
NORFOLK	7	1017.6	1018.7	26.7	16.7	21.8	-2.4	33.9	25	7.2	2	1	0	16.7	74	35	- 57	21	5	2	0	0	1.5	10	9.8	N	19+	10	8	12	5.4	76
RICHMOND	50	1012.9	1018.7	29.4	15.0	22.3	-1.7	33.9	25+	4.4	2	8	0	16.1	72	91	- 4	52	5	4	0	0	1.2	14	13.4	W	25	8	10	12	5.6	77
ROANOKE	350	977.0	1018.3	27.8	15.0	21.3	-1.7	32.8	16+	8.3	3	4	0	15.0	71	81	- 15	36	11	5	0	0	0.8	12	10.3	30	25	11	9	10	5.2	
WALLOPS ISLAND	3	1019.6	1019.8	22.8	15.0	18.8		26.7	21+	6.1	2+	0	0	16.1	90	83		71	5	5	0	0	1.6	15	17.4Y	N	19	10	12	8	5.0	
WASHINGTON																																
OLYMPIA	59	1008.5	1015.8	23.9	9.4	16.3	1.7	32.8	19	5.6	15	1	0	11.7	76	38	- 8	26	4	0	0	0	0.7	24	10.3	26	6	9	8	13	5.7	
QUILLAYUTE	55	1009.1	1016.6	19.4	9.4	14.2	1.0	27.8	1	4.4	30	0	0	10.6	83	10	- 76	4	9	0	0	0	1.2	26	8.9	NE	1	9	6	15	6.5	48
SEATTLE TACOMA	122	999.7	1015.9	22.2	11.7	17.1	1.6	30.6	19	9.4	6	0	0	11.1	72	52	12	32	4	0	0	0	0.8	29	8.9	24	6+	10	8	12	5.5	63
SPOKANE	718	929.9	1012.6	24.4	10.6	17.5	0.9	32.2	20	5.6	4	1	0	8.3	59	51	13	18	10	7	0	0	0.6	17	11.2	SE	1	12	10	8	4.8	71
STAMPEDE PASS R	1206	880.1		17.2	8.3	12.6	3.2	28.3	19	3.9	7	0	0			30	- 74	15	13		0	1245						7	8	15	6.3	
WALLA WALLA U	289			28.3	15.0	21.4	1.9	35.6	19+	9.4	4	11	0			8	- 23	7	3		0	0			8.0	W	6	13	7	10	4.7	79

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	974.6	1012.6	27.8	11.7	19.9	1.9	35.0	19	6.1	4	7	0	8.3	50	28	8	13	5	2	0	0	2.1	31	10.7	32	10*	18	4	8	4.1	
WEST INDIES																																
SAN JUAN P.R.	4	1013.9	1016.4	31.1	23.9	27.7	1.0	34.4	12+	23.3	28+	7	0	22.2	76	86	- 58	27	13	6	0	0	3.1	10	12.5	NE	26	2	18	10	6.3	54
SWAN ISLAND	9			30.6	25.0	27.8	-0.2	31.7	27+	21.1	5	0	0			81	- 84	20	15		0	0						3	7	20	7.6	
WEST VIRGINIA																																
BECKLEY	763	931.3	1018.0	25.0	13.3	19.2		29.4	21+	7.8	2+	0	0	13.3	70	57		26	8	4	0	0	1.8	16	11.2	16	3	8	10	12	6.1	
CHARLESTON	286	983.4	1017.1	29.4	15.0	22.0	-0.2	33.9	16+	7.8	3+	8	0	15.6	69	46	- 47	27	7	2	0	0	0.5	14	7.6	3	28	7	15	8	5.4	
ELKINS	600	948.5	1018.9	27.2	11.1	19.2	-0.3	31.7	17+	2.2	2	0	0	13.3	74	72	- 60	46	6	7	0	0	0.4	15	8.0	25	25	7	12	11	6.0	
HUNTINGTON	252	987.5	1017.2	29.4	16.7	22.8	0.6	34.4	17	11.1	1	7	0	17.2	73	28	- 76	14	5	4	0	0	1.0	15	7.2	27	22	7	12	11	5.9	
PARKERSBURG U	187			30.0	16.7	23.2	0.6	33.9	17+	8.9	2	7	0			29	- 80	20	3		0	0			9.8	SW	14					72
WISCONSIN																																
GREEN BAY	208	989.8	1015.0	24.4	13.3	19.0	0.4	31.1	15+	6.7	1	0	0	13.9	73	215	130	46	17	10	0	0	0.6	19	15.2	W	9	8	5	17	6.7	48
LA CROSSE	198	989.8	1014.1	26.1	14.4	20.3	-0.2	33.3	30	6.1	2	1	0	15.0	74	237	130	100	13	8	0	0	1.3	16	23.2	36	8	8	3	19	7.1	
MADISON	262	984.1	1015.0	25.6	12.8	19.0	0.1	31.7	15	4.4	3+	0	0	13.9	73	164	64	49	14	12	0	0	1.0	18	11.2	NW	9+	6	6	18	6.7	57
MILWAUKEE	205	990.9	1015.7	24.4	13.9	19.2	1.8	32.8	15	7.2	2	2	0	13.3	69	187	95	51	14	8	0	0	0.7	17	13.0	SW	8	8	6	16	6.4	60
WYOMING																																
CASPER	1627	837.1	1012.7	22.2	7.2	14.7	-2.6	30.6	30	3.3	24	0	0	6.1	63	95	64	39	16	14	0	0	0.7	27	19.2	19	14	8	8	14	6.2	
CHEYENNE	1867	812.7	1013.5	20.6	8.3	14.3	-2.9	29.4	30	5.0	7	0	0	7.2	68	67	13	27	17	18	0	0	0.6	24	14.3	NW	9	2	12	16	7.1	50
LANDER	1696	828.7	1012.7	20.0	8.3	14.2	-2.5	30.0	30	4.4	24	0	0	7.2	68	129	94	28	18	16	0	0	0.7	27	16.1	NW	27	4	10	16	7.0	55
SHERIDAN	1208	878.4	1014.4	20.0	7.2	13.8	-2.8	26.7	29	0.0	24	0	1	7.8	68	155	90	36	18	9	0	0	0.7	30	15.6	SE	1	4	10	16	7.0	56

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F) 1966 - 1967

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
ALABAMA														
BIRMINGHAM	0	0	3	203	331	635	643	645	248	51	65	2	2826	2551
HUNTSVILLE	0	0	1	178	376	728	660	692	255	69	66	0	3025	3070
MOBILE	0	0	0	32	173	374	370	363	100	0	3	0	1415	1560
MONTGOMERY	0	0	0	77	266	515	521	474	166	21	16	1	2057	2291
ALASKA														
ANCHORAGE	214	324	553	1008	1419	1674	1791	1411	1292	890	547	261	11384	10648
ANNETTE	161	227	307	591	784	802	921	716	890	620	480	191	6690	7069
BARROW	850	928	1012	1438	1752	2401	2395	2280	2282	1771	1321	939	19369	20174
BARTER ISLAND	730	874	925	1435	1727	2352	2347	2405	2356	1840	1283	881	19155	19862
BETHEL	365	408	569	1195	1318	1914	1783	1546	1366	1015	692	321	12492	13196
COLD BAY	500	486	607	956	977	1153	1185	1017	936	798	717	540	9872	9880
FAIRBANKS	92	247	441	1255	1929	2643	2496	2014	1704	991	594	138	14544	14279
JUNEAU	265	382	466	812	1191	1188	1291	963	1261	824	592	300	9535	9075
KING SALMON	381	450	533	1168	1329	1736	1777	1396	1182	907	643	428	11930	11343
KOTZEBUE	372	386	640	1327	1539	2259	1967	1894	1685	1358	1067	562	15056	16105
MC GRATH	290	407	577	1273	1684	2457	2350	1838	1466	987	613	306	14248	14283
NOME	480	468	670	1214	1429	1957	1639	1643	1487	1252	1039	547	13825	14171
ST. PAUL ISLAND	599	559	619	926	901	1151	1113	1033	980	876	824	622	10203	11199
SHEMYA	623	518	511	748	821	979	1051	985	984	907	787	672	9586	9687
YAKUTAT	396	462	537	899	1216	1231	1423	1132	1316	943	691	424	10670	9092
ARIZONA														
FLAGSTAFF	14	32	185	556	757	1089	1111	824	799	816	498	265	6946	7152
PHOENIX	0	0	0	8	139	397	437	256	102	93	10	0	1442	1765
TUCSON	0	0	0	20	126	386	416	256	115	113	20	0	1452	1800
WINSLOW	0	0	4	278	555	983	1038	711	485	440	182	6	4682	4782
YUMA	0	0	0	0	82	249	299	126	56	70	1	0	883	1217
ARKANSAS														
FORT SMITH	0	0	8	207	325	770	735	695	272	63	48	0	3123	3292
LITTLE ROCK	0	0	3	198	309	679	717	682	240	52	33	0	2913	3219
TEXARKANA	0	0	0	124	212	636	574	553	161	41	27	0	2328	2533
CALIFORNIA														
BAKERSFIELD	0	0	1	32	222	572	566	422	271	361	48	7	2502	2122
BISHOP	0	0	34	205	549	771	772	592	535	595	160	44	4257	4227
BLUE CANYON	82	51	125	233	619	778	808	598	892	1056	415	231	5888	5507
EUREKA U	254	275	209	358	368	472	541	482	561	560	399	307	4786	4643
FRESNO	0	0	1	65	238	606	579	444	322	366	59	11	2691	2492
LONG BEACH	0	0	0	5	130	265	315	205	206	308	64	30	1528	1711
LOS ANGELES	0	0	0	1	102	224	254	150	171	263	64	61	1290	1799
LOS ANGELES U	0	0	0	0	88	145	179	81	133	260	43	25	954	1349
MT SHASTA R	69	44	129	381	699	860	896	695	839	842	342	165	5961	5722
OAKLAND	64	25	12	98	263	447	452	349	360	398	171	151	2790	2870
RED BLUFF	0	0	0	31	266	506	548	387	440	462	92	29	2761	2515
SACRAMENTO	1	0	4	60	303	580	584	461	435	456	98	34	3016	2773
SANDBERG U	5	17	64	163	489	703	685	510	700	896	362	212	4806	4209
SAN DIEGO	0	0	0	4	113	236	302	197	183	245	72	48	1400	1439
SAN FRANCISCO	135	89	57	148	301	489	483	376	383	416	208	163	3248	3012
SAN FRANCISCO U	205	188	78	102	241	417	375	325	372	420	230	229	3182	3001
SANTA CATALINA	7	8	29	55	209	240	221	126	390	515	224	232	2256	2052
SANTA MARIA	113	44	67	128	268	463	424	361	430	490	244	183	3215	2967
STOCKTON	0	0	5	47	273	555	576	466	398	442	77	32	2871	2676
COLORADO														
ALAMOSA	8	86	286	651	910	1362	1423	1172	855	690	498	217	8158	8529
COLORADO SPRINGS	0	33	111	489	728	1099	981	889	679	496	401	95	6001	6423
DENVER	0	9	61	391	699	1018	954	832	679	498	388	135	5664	6283
GRAND JUNCTION	0	2	16	256	628	1092	1268	795	508	396	213	21	5195	5641
PUEBLO	0	4	33	413	666	1091	937	803	600	310	213	16	5086	5462
CONNECTICUT														
BRIDGEPORT	0	0	55	308	549	961	960	1047	968	597	424	35	5904	5617
HARTFORD	0	0	98	398	554	1019	993	1126	976	530	349	18	6061	6172
NEW HAVEN	0	0	100	393	557	976	940	1046	962	584	422	35	6015	5897
DELAWARE														
WILMINGTON	0	0	84	346	545	931	888	991	788	402	295	5	5275	4930
DIST.OF COLUMBIA														
WASH NATL AP	0	0	41	246	462	843	735	859	611	249	178	3	4227	4224
FLORIDA														
APALACHICOLA U	0	0	0	11	152	338	312	320	103	2	3	0	1241	1308
DAYTONA BEACH	0	0	0	3	88	217	168	192	37	5	0	0	710	879
FORT MYERS	0	0	0	0	44	105	70	90	2	0	0	0	311	442
JACKSONVILLE	0	0	0	20	173	346	281	293	92	7	0	0	1212	1239
KEY WEST	0	0	0	0	1	6	5	13	0	0	0	0	25	108
LAKELAND U	0	0	0	3	80	166	117	155	24	0	0	0	545	661
MIAMI	0	0	0	0	27	41	28	41	0	0	0	0	137	214
ORLANDO	0	0	0	1	70	169	119	157	25	0	0	0	542	766
PENSACOLA	0	0	0	30	193	398	402	381	116	1	4	0	1525	1463
TALLAHASSEE	0	0	0	33	190	405	344	362	105	7	2	0	1448	1485
TAMPA	0	0	0	7	85	198	129	175	23	0	0	0	617	683
WEST PALM BEACH	0	0	0	0	44	77	56	70	0	0	0	0	247	253
GEORGIA														
ATHENS	0	0	4	170	356	627	605	634	262	77	77	18	2830	2929
ATLANTA	0	0	5	177	379	663	645	642	270	67	78	20	2946	2983
AUGUSTA	0	0	0	122	341	590	537	573	227	47	49	5	2491	2397
COLUMBUS	0	0	0	63	277	505	489	496	172	18	17	3	2040	2383
MACON	0	0	0	94	308	526	514	509	182	33	37	9	2212	2136
ROME	0	0	8	232	425	709	692	704	319	91	88	12	3280	3326
SAVANNAH	0	0	0	50	259	480	413	428	159	26	12	1	1828	1819
IDAHO														
BOISE	7	18	68	476	654	1039	885	742	707	627	279	79	5581	5809
IDAHO FALLS 46W R	11	51	179	736	948	1470	1311	1182	992	809	494	217	8280	8475
LEWISTON	18	12	19	400	641	769	776	656	702	550	217	26	4786	5542
POCATELLO	2	26	133	623	812	1263	1083	888	846	720	372	178	6946	7033
ILLINOIS														
CAIRO U	0	0	30	249	434	817	770	833	382	129	63	4	3711	3821
CHICAGO O HARE	1	12	127	420	669	1170	1148	1257	878	491	362	19	6554	6639
CHICAGO MIDWAY	0	4	83	363	653	1116	1113	1198	814	437	330	10	6121	6155
MOLINE	0	6	116	386	695	1137	1202	1289	802	404	305	10	6352	6408
PEORIA	0	10	106	419	666	1103	1151	1205	766	371	291	7	6095	6025
ROCKFORD	0	7	122	417	773	1238	1244	1341	892	513	385	22	6954	6830
SPRINGFIELD	0	5	100	388	618	1065	1091	1074	662	289	230	10	5532	5429

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MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1966 - 1967

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
INDIANA														
EVANSVILLE	0	0	57	341	554	923	864	928	498	218	161	11	4555	4435
FORT WAYNE	1	20	188	525	735	1116	1139	1201	885	444	357	13	6624	6205
INDIANAPOLIS	0	0	77	402	631	995	997	1040	652	353	219	2	5368	5699
SOUTH BEND	4	31	128	412	658	1079	1109	1220	880	474	337	8	6340	6439
IOWA														
BURLINGTON	0	6	111	376	676	1110	1168	1171	733	381	299	6	6037	6114
DES MOINES	0	13	136	375	789	1239	1276	1192	767	421	308	22	6538	6808
DUBUQUE	2	22	163	453	826	1246	1341	1405	924	501	360	21	7264	7376
SIOUX CITY	0	14	131	400	881	1293	1410	1196	771	459	320	19	6894	6951
WATERLOO	0	33	152	438	869	1306	1384	1365	878	520	357	27	7329	7320
KANSAS														
CONCORDIA	0	6	76	285	711	1119	1129	923	617	317	253	20	5456	5479
DODGE CITY	0	5	54	273	651	1110	938	789	561	259	205	23	4868	4986
GOODLAND	0	11	66	436	731	1160	970	889	699	433	359	47	5801	6141
TOPEKA	0	2	64	316	620	1053	1032	875	570	247	205	15	4999	5182
WICHITA	0	0	33	247	499	996	945	798	463	160	143	5	4289	4620
KENTUCKY														
COVINGTON	0	0	70	428	602	969	910	1043	622	305	175	9	5133	5265
LEXINGTON	0	3	62	340	570	908	851	967	468	223	138	23	4553	4683
LOUISVILLE	0	0	35	324	531	907	882	949	453	209	139	13	4442	4660
LOUISIANA														
ALEXANDRIA	0	0	0	135	197	514	566	507	162	7	11	0	2099	1921
BATON ROUGE	0	0	0	55	143	390	426	393	97	2	9	0	1515	1560
LAKE CHARLES	0	0	0	41	113	348	395	322	86	0	2	0	1307	1459
NEW ORLEANS	0	0	0	33	150	376	390	353	129	2	3	0	1436	1385
SHREVEPORT	0	0	0	99	181	570	553	511	140	13	13	0	2080	2184
MAINE														
CARIBOU	64	106	393	683	899	1354	1567	1629	1468	912	682	121	9878	9767
PORTLAND	19	29	264	549	710	1181	1254	1330	1187	699	544	92	7858	7511
MARYLAND														
BALTIMORE	0	0	68	353	555	905	846	955	715	338	254	6	4995	4654
MASSACHUSETTS														
BLUE HILL OBS R	1	7	157	397	610	1046	1009	1160	1054	644	440	74	6597	6368
BOSTON	0	1	88	322	535	950	921	1075	977	596	403	58	5926	5634
NANTUCKET	8	7	179	420	567	888	919	1003	1001	721	537	182	6432	5891
PITTSFIELD	26	33	277	563	722	1210	1192	1300	1157	710	534	45	7769	7578
WORCESTER	4	19	218	489	649	1141	1097	1242	1115	691	493	73	7231	6969
MICHIGAN														
ALPENA	27	60	281	574	932	1302	1346	1465	1232	739	575	56	8589	8506
DETROIT	0	0	112	390	703	1090	1077	1169	928	483	360	5	6317	6232
DETROIT M WAYNE CO	0	13	136	427	688	1119	1097	1148	894	505	406	9	6442	6293
DETROIT WILLOW RUN	2	29	183	505	760	1182	1157	1212	964	526	415	13	6948	6258
FLINT	13	41	241	531	787	1215	1204	1302	1052	526	444	27	7383	6885
GRAND RAPIDS	0	12	146	426	680	1102	1120	1242	950	554	410	9	6651	6998
HOUGHTON LAKE	19	65	280	592	911	1295	1335	1484	1168	678	510	33	8370	
LANSING	4	25	196	491	767	1209	1174	1318	1012	513	395	13	7117	6909
MARQUETTE U	24	84	225	565	956	1267	1375	1448	1131	767	587	172	8601	8393
MUSKEGON	1	14	155	455	741	1106	1120	1230	970	582	395	5	6774	6696
SAULT STE MARIE	35	97	288	638	1028	1421	1473	1600	1339	865	631	132	9547	9048
MINNESOTA														
DULUTH	36	145	304	670	1187	1589	1662	1714	1243	832	592	210	10184	10000
INTERNATIONAL FALLS	9	112	334	724	1371	1801	1912	1893	1385	866	608	151	11166	10606
MINNEAPOLIS	0	40	185	536	1042	1446	1556	1572	1086	600	404	30	8497	8382
ROCHESTER	5	56	210	527	988	1407	1531	1521	1041	610	439	28	8363	8295
ST CLOUD	1	68	221	591	1143	1543	1634	1668	1193	681	446	74	9263	8879
MISSISSIPPI														
JACKSON	0	0	0	155	270	581	570	574	192	20	26	0	2388	2203
MERIDIAN	0	0	0	149	257	513	555	530	180	18	21	0	2223	2289
MISSOURI														
COLUMBIA	0	1	64	305	501	946	979	937	543	243	209	9	4737	5046
KANSAS CITY	0	2	29	203	478	931	956	874	548	213	193	11	4438	4711
ST JOSEPH	0	12	60	267	560	1085	1123	950	545	200	188	15	5005	5484
ST LOUIS	0	0	78	336	534	931	932	940	530	257	188	12	4738	4900
SPRINGFIELD	0	2	66	309	488	959	922	902	462	213	177	7	4507	4561
MONTANA														
BILLINGS	0	54	83	446	910	1104	1069	852	1039	755	461	152	6925	7049
GLASGOW	5	78	136	588	1225	1422	1624	1396	1335	835	429	149	9222	8996
GREAT FALLS	7	85	101	537	1075	1143	1190	914	1166	878	396	168	7660	7750
HAVRE	3	72	140	594	1274	1444	1480	1164	1253	935	418	178	8955	8700
HELENA	8	51	117	570	930	1157	1120	898	1107	807	396	171	7332	8129
KALISPELL	68	128	162	733	1023	1161	1118	964	1059	766	449	190	7821	8191
MILES CITY	0	64	87	521	1169	1353	1284	1094	1103	711	402	91	7879	7723
MISSOULA	23	46	94	645	921	1097	1045	848	952	712	416	145	6944	8125
NEBRASKA														
GRAND ISLAND	0	20	108	353	799	1192	1252	1009	699	391	331	36	6190	6530
LINCOLN U	0	8	106	314	730	729	1232	993	671	338	264	25	5813	5864
NORFOLK	0	22	149	415	894	1275	1362	1160	764	463	352	34	6890	6979
NORTH PLATTE	0	34	136	442	863	1250	1240	950	771	465	427	70	6648	6684
OMAHA	0	13	107	354	741	1132	1216	1020	615	295	249	17	5759	6218
SCOTTSBLUFF	0	31	106	500	801	1165	1049	917	729	484	428	92	6302	6673
VALENTINE	0	51	179	476	928	1237	1221	1081	843	512	439	62	7029	7425
NEVADA														
ELKO	8	27	126	584	769	1427	1227	932	852	737	413	123	7225	7433
ELY	9	35	177	592	801	1169	1193	1019	817	904	485	313	7514	7733
LAS VEGAS	0	0	0	47	286	578	606	397	189	261	25	0	2389	2709
RENO	45	45	184	473	715	951	859	685	750	737	317	177	5938	6332
WINNEMUCCA	12	31	119	552	726	1059	996	767	800	760	358	170	6350	6761
NEW HAMPSHIRE														
CONCORD	6	5	244	520	697	1196	1241	1323	1164	683	496	57	7632	7383
MT WASHINGTON OBS	515	539	837	1124	1132	1595	1738	1862	1729	1328	1224	495	14118	13817
NEW JERSEY														
ATLANTIC CITY	0	0	85	373	513	888	801	996	813	411	341	23	5244	4812
ATLANTIC CITY U	0	0	47	263	463	835	800	903	796	405	293	8	4813	4741
NEWARK	0	0	63	286	480	876	864	991	842	425	331	5	5163	5067
TRENTON U	0	0	79	305	494	876	836	966	800	403	266	2	5027	4980

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MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1966 - 1967

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
NEW MEXICO														
ALBUQUERQUE	0	0	15	247	541	942	980	682	396	211	109	0	4123	4348
CLAYTON	0	22	57	361	558	1012	859	784	538	306	249	22	4768	5158
RATON	0	25	99	466	666	1086	1076	903	648	430	309	37	5745	6228
ROSWELL	0	5	5	257	425	788	731	577	244	59	52	0	3143	3793
SILVER CITY	0	0	8	230	429	796	772	597	379	290	132	5	3638	3705
NEW YORK														
ALBANY	3	5	216	502	673	1163	1169	1312	1111	639	447	11	7251	6875
BINGHAMTON	8	16	252	552	709	1186	1107	1297	1098	634	531	27	7417	7286
BUFFALO	7	19	199	495	700	1124	1086	1239	1047	560	457	4	6937	7062
NEW YORK U	0	0	63	270	475	901	849	999	843	462	305	5	5172	4871
J.F. KENNEDY	0	0	60	295	513	904	883	1033	930	554	408	22	5602	5219
NEW YORK LA GUARDIA	0	0	39	256	469	866	823	960	839	454	308	5	5019	4811
ROCHESTER	0	16	190	458	639	1053	1046	1216	998	551	486	8	6661	6748
SYRACUSE	6	7	186	473	652	1104	1059	1275	1030	595	453	13	6853	6756
NORTH CAROLINA														
ASHEVILLE	1	1	87	405	593	838	810	834	465	226	185	51	4496	4466
CAPE HATTERAS R	0	0	0	77	296	562	505	551	449	245	107	15	2807	2612
CHARLOTTE	0	0	2	231	437	724	664	695	343	128	122	14	3360	3191
GREENSBORO	0	0	14	237	438	751	676	742	376	130	111	14	3489	3805
RALEIGH	0	0	11	216	425	709	623	723	361	151	105	13	3337	3393
WILMINGTON	0	0	0	57	276	530	442	485	252	79	15	7	2143	2347
NORTH DAKOTA														
BISMARCK	4	93	228	577	1307	1517	1664	1562	1138	795	491	129	9505	8851
FARGO	0	84	230	644	1253	1642	1723	1716	1178	795	480	96	9841	9226
WILLISTON	0	94	190	593	1297	1455	1649	1525	1285	775	435	99	9397	9243
OHIO														
AKRON	3	10	148	445	690	1044	1006	1116	825	433	368	8	6096	6037
CINCINNATI OBS	0	1	74	359	600	947	894	1002	581	289	195	12	4954	4806
CLEVELAND	6	15	162	452	655	1063	1000	1087	858	461	393	17	6169	6351
COLUMBUS	1	5	106	440	671	999	929	1093	756	374	300	9	5683	5660
DAYTON	0	3	88	420	674	984	959	1112	763	378	277	1	5659	5622
MANSFIELD	7	20	189	480	723	1108	1060	1148	852	442	364	13	6406	6403
TOLEDO	1	15	147	451	729	1150	1105	1170	929	479	390	16	6582	6494
YOUNGSTOWN	5	19	211	494	728	1130	1093	1200	919	508	453	18	6778	6417
OKLAHOMA														
OKLAHOMA CITY	0	0	6	166	338	837	713	647	307	71	77	0	3162	3725
TULSA	0	0	13	202	376	859	776	724	362	100	101	0	3513	3860
OREGON														
ASTORIA	160	142	169	405	514	595	651	603	697	623	404	194	5157	5186
BURNS U	45	62	162	548	781	1116	1045	836	921	806	381	161	6864	6957
EUGENE	25	31	53	352	517	611	633	566	614	564	285	64	4315	4726
MEACHAM	174	138	241	626	876	1096	1077	915	1052	943	557	236	7931	7874
MEDFORD	26	11	53	352	571	749	781	678	634	569	206	50	4680	5008
PENDLETON	19	10	48	333	590	736	691	621	659	571	218	21	4517	5127
PORTLAND	27	16	56	345	531	635	655	591	647	535	246	50	4334	4635
SALEM	44	24	74	375	530	637	642	620	669	604	323	73	4615	4754
SEXTON SUMMIT R	180	116	194	397	690	861	916	684	935	902	434	209	6518	6254
PENNSYLVANIA														
ALLENTOWN	0	0	136	463	640	1070	1038	1134	921	484	375	12	6273	5810
ERIE	5	10	151	420	644	1006	993	1137	941	518	471	18	6314	6451
HARRISBURG	0	0	69	312	592	1024	966	1061	806	364	306	3	5503	5251
PHILADELPHIA	0	0	83	362	538	908	893	1001	817	396	280	6	5284	5101
PITTSBURGH	2	6	156	435	659	1035	1007	1097	765	387	332	4	5885	5987
PITTSBURGH U	0	2	125	386	593	975	895	1013	710	371	296	5	5371	5291
READING U	0	0	91	325	533	911	858	1006	787	382	264	2	5159	4945
SCRANTON	1	0	170	451	642	1063	998	1154	923	475	379	12	6268	6254
WILLIAMSPORT	5	4	196	531	703	1075	1035	1157	946	437	371	5	6465	5934
RHODE ISLAND														
BLOCK ISLAND	0	0	101	371	523	883	898	1012	977	676	507	105	6053	5804
PROVIDENCE	1	1	135	417	577	994	963	1093	976	598	424	48	6227	5954
SOUTH CAROLINA														
CHARLESTON	0	0	0	51	280	498	442	460	194	50	29	4	2008	2033
CHARLESTON U	0	0	0	28	219	440	409	427	181	23	12	3	1742	1794
COLUMBIA	0	0	0	127	351	596	554	605	270	67	71	10	2651	2484
GNVLE SPARTANBURG	0	0	6	202	394	675	643	663	276	88	85	14	3046	3044
SOUTH DAKOTA														
ABERDEEN	0	60	212	560	1181	1409	1544	1491	982	647	395	56	8537	8473
HURON	0	62	208	535	1083	1362	1403	1404	884	556	393	38	7928	8223
RAPID CITY	0	83	158	504	905	1180	1143	1042	917	622	473	162	7189	7345
SIOUX FALLS	0	41	188	508	1016	1406	1462	1385	858	563	399	37	7863	7839
TENNESSEE														
BRISTOL	0	0	23	303	533	843	821	868	455	218	216	29	4309	4143
CHATTANOOGA	0	0	7	252	459	756	737	743	351	94	93	8	3500	3254
KNOXVILLE	0	0	9	232	472	767	709	748	330	112	121	8	3508	3494
MEMPHIS	0	0	9	227	344	732	707	715	301	60	35	0	3130	3232
NASHVILLE	0	0	13	255	423	763	697	763	300	106	69	1	3390	3578
OAK RIDGE R	0	0	15	288	511	820	754	797	378	138	135	10	3846	3817
TEXAS														
ABILENE	0	0	0	119	198	633	532	508	154	14	23	0	2181	2624
AMARILLO	0	23	22	250	395	908	743	675	356	159	135	9	3675	3985
AUSTIN	0	0	0	31	109	453	446	380	77	0	2	0	1498	1711
BROWNSVILLE	0	0	0	4	48	185	238	151	32	0	0	0	658	600
CORPUS CHRISTI	0	0	0	5	68	267	304	222	42	0	0	0	908	914
DALLAS	0	0	0	80	183	606	491	470	133	12	19	0	1994	2363
DEL RIO	0	0	0	26	93	434	417	299	54	0	0	0	1323	1504
EL PASO	0	0	2	126	307	695	718	469	173	56	25	0	2571	2700
FORT WORTH	0	0	0	79	182	627	514	503	146	15	21	0	2087	2405
GALVESTON U	0	0	0	16	63	298	356	287	61	0	0	0	1081	1235
HOUSTON U	0	0	0	24	85	344	334	270	57	0	0	0	1114	1278
HOUSTON	0	0	0	27	99	359	342	298	68	0	0	0	1193	1396
LUBBOCK	0	8	3	170	283	827	748	652	289	85	84	3	3152	3578
MIDLAND	0	3	4	159	242	663	654	516	176	23	22	0	2462	2591
PORT ARTHUR	0	0	0	46	115	383	417	325	111	0	2	0	1399	1447
SAN ANGELO	0	0	0	127	192	614	568	459	113	2	19	0	2094	2255
SAN ANTONIO	0	0	0	57	131	456	470	366	80	0	0	0	1560	1546
VICTORIA	0	0	0	17	83	327	350	267	50	0	0	0	1094	1173
WACO	0	0	0	52	126	557	511	450	114	4	14	0	1828	2030
WICHITA FALLS	0	2	0	119	247	723	593	538	167	30	41	0	2460	2832

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
UTAH														
MILFORD	0	7	75	478	700	1205	1354	872	688	662	336	131	6508	6497
SALT LAKE CITY	0	4	57	460	649	1101	1097	763	638	564	287	76	5696	6052
WENDOVER	0	0	37	452	717	1206	1076	769	658	580	223	71	5789	5778
VERMONT														
BURLINGTON	17	26	280	551	725	1285	1269	1490	1225	722	533	29	8152	8269
VIRGINIA														
LYNCHBURG	0	0	46	294	496	844	752	855	583	237	212	17	4336	4166
NORFOLK	0	0	22	191	437	725	588	699	533	244	157	21	3617	3421
RICHMOND	0	0	47	293	466	833	738	841	560	230	171	17	4196	3865
ROANOKE	0	0	51	317	527	837	740	838	505	202	206	28	4251	4150
WALLOPS ISLAND				257	499	859	826	843	740	374	295	40	4758	
WASHINGTON														
OLYMPIA	129	99	161	485	624	700	745	653	739	599	350	96	5380	5236
QUILLAYUTE	*	191	208	479	586	656	709	628	755	655	431	214	5732	5745
SEATTLE TACOMA	95	54	106	414	585	658	695	614	700	548	292	92	4853	5145
SPOKANE	30	42	67	544	838	975	956	799	859	677	370	96	6253	6655
STAMPEDE PASS R	346	294	320	723	943	1081	1130	961	1134	979	683	318	8912	9283
WALLA WALLA U	18	4	22	312	568	692	619	551	587	505	182	11	4071	4805
YAKIMA	30	11	28	394	629	880	814	659	716	593	228	30	5012	5941
WEST VIRGINIA														
BECKLEY	5	27	172	469	625	993	905	1012	620	335	306	43	5512	
CHARLESTON	0	1	44	315	507	910	815	932	517	275	217	17	4550	4476
ELKINS	15	29	207	531	679	1027	963	1039	692	430	378	47	6037	5675
HUNTINGTON	0	3	60	369	535	889	790	919	528	269	194	13	4569	4446
PARKERSBURG U	0	0	86	378	586	920	839	957	585	296	202	1	4850	4754
WISCONSIN														
GREEN BAY	10	74	253	531	917	1377	1386	1444	1093	620	467	44	8216	8029
LA CROSSE	1	18	158	450	873	1325	1406	1472	978	494	355	17	7547	7589
MADISON	11	40	252	533	862	1290	1321	1407	978	574	462	46	7776	7863
MILWAUKEE	4	41	198	496	804	1249	1249	1325	978	596	458	47	7445	7635
WYOMING														
CASPER	0	47	122	609	862	1225	1180	1037	878	664	488	193	7305	7410
CHEYENNE	0	51	166	526	781	1049	1036	945	800	622	490	221	6687	7278
LANDER	2	47	142	667	919	1261	1188	1036	869	703	466	225	7525	7870
SHERIDAN	0	86	138	584	1023	1244	1221	988	991	707	482	238	7702	7683

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Note: "Heating Degree Days" has been discontinued in the June issues of this publication. Data which would usually be shown in that table for June are shown in the last three columns of the above Table.

* began August 1966

STORM SUMMARY

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS
Alabama	2	2	0	0	5					0	2	5	0	2	0	4	0									0	0	4	3
Alaska *																													
Arizona *																													
Arkansas														1	0	4	0												
California						0	0	0	4																				
Colorado	9	7	0	4	5	0	0	5	5	0	0	4	4	1	0	0	0									0	0	5	5
Connecticut						0	0	0	3	0	0	4	4																
Delaware *																													
Florida	4	4	0	0	6									2	0	0	0												
Georgia	1	1	0	0	4	0	0	3	0					1	0	0	0									0	0	H5	5
Hawaii *																													
Idaho	1	1	0	0		0	0	5	6	0	0	?	?	1	1	3	0												
Illinois	5	4	0	0	5	0	0	3	5	0	0	5	4	3	2	4	0									0	0	L4	5
Indiana	2	2	0	0	4									0	3	0	0									0	0	5	5
Iowa	18	9	0	8	6	0	0	5	6	0	2	6	5	0	0	5	0									0	0	6	5
Kansas	20	9	2	40	7	0	1	6	7	0	6	7	6	0	1	5	4									0	0	4	5
Kentucky						0	0	?	?	0	1	°5	C	0	2	5	0												
Louisiana						0	0	0	5	0	0	5	0	0	0	4	0									0	0	5	0
Maine	1	1	0	0	4	0	0	2	2	0	0	4	0	0	0	3	0									0	0	R5	4
Maryland										0	0	3	0	1	0	4	0												
Massachusetts						0	0	0	4	0	0	4	0	0	0	4	0									0	0	5	4
Michigan	1	1	0	0	0	0	0	0	3	0	6	5	0	2	9	5	0									0	10	5	0
Minnesota	12	6	0	0	5	0	0	5	6	2	60	7	6	1	2	4	3									0	1	5	6
Mississippi	1	1	0	0	?	0	0	0	3	0	3	°5	C	1	0	0	0									0	0	5	0
Missouri	8	5	0	0	4					0	2	0	0	1	0	0	0									F1	0	0	0
Montana						0	0	5	0					0	3	0	0									0	0	6	6
Nebraska	35	9	0	5	6	0	2	5	6	0	0	6	0	0	0	4	0												
Nevada						0	0	3	2																				
New Hampshire						0	0	0	2	0	0	4	0	1	4	4	0									0	0	3	0
New Jersey																4													
New Mexico	4	4	0	0	4	0	0	°5	C	0	1	3	0	0	0	3	0									3	0	5	0
New York									4		1	4			1	4												4	
North Carolina						0	0	0	5	0	0	5	5	1	1	5	0									0	0	6	6
North Dakota	4	2			5			4	5			4				4													
Ohio	3	2	0	0	4	0	0	0	6	0	0	4	0	3	0	5	0									0	0	°5	C
Oklahoma	23	4	4	2	6	0	0	6	6	0	0	6	5	0	1	4	0									0	0	4	0
Oregon						0	0	3	4	0	0	3	3	0	0	3	3									0	0	R4	3
Pacific Area *																													
Pennsylvania						0	0	0	4	0	0	5	0	0	1	5	0									0	0	5	0
Puerto Rico														1	0	0	0												
Rhode Island *																													
South Carolina														2	0	0	0									0	0	5	4
South Dakota	11	5	0	3	6	0	0	5	6	0	0	6	5	0	2	0	0												
Tennessee						0	0	5	4	1	2	5	4	0	1	5	0									0	0	R5	0
Texas	22	10	0	0	6	0	0	6	6	0	2	5	6													2	0	6	0
Utah	1	1	0	0	0									1	0	0	0												
Vermont										0	0	4	0	0	0	4	0									0	0	R3	2
U. S. Virgin Is. *																													
Virginia *																													
Washington *																													
West Virginia						0	0	0	2	0	0	2	1	0	0	2	0									0	0	B4	3
Wisconsin	12	7	0	0	6	0	0	4	5	1	0	6	5	0	1	5	0												
Wyoming	4	4	0	3	4	0	0	°5	C																				

C Crop damage
° Includes crop damage
H Heavy rains
L Local flooding
R Rain
F Flash flood
B Cloudbursts

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JUNE 1967

Elmer R. Nelson, Office of Hydrology

The most damaging floods during June occurred in the lower Missouri Basin. Preliminary estimates of flood damage in Nebraska was close to $50 million, and in Kansas and Missouri close to $30 million. It was the heaviest flooding since the early 1950's. Record to near record crests were reported on some tributaries in Nebraska and Kansas. Two lives were lost from drowning in Nebraska.

Forecasts of river conditions and flash flood advisories by River Forecast Center, Kansas City, Mo., were timely and accurate. Flood warnings and bulletins were given adequate dissemination by the Weather Bureau over the ESSA Weather Wire Service and through the press, radio, and TV facilities. Ample time was provided for residents to move to places of safety and to protect livestock and movable property.

HUDSON BAY DRAINAGE

Red River of the North Basin.--Heavy thundershowers over the headwaters of the Red River of the North in the Wahpeton, N. Dak., - Breckenridge, Minn., area, on the 12-14th, caused a rapid rise in the Wild Rice and Ottertail Rivers in Minnesota and in the mainstem. The Red River of the North crested at Wahpeton, 1.2 feet below flood stage on the 15th and at Fargo, N. Dak., 5.3 feet above flood stage on the 19th. The crest at Fargo was 2.6 feet higher than in April. There was no flooding along the Wild Rice or Ottertail Rivers. Large areas of level land were slow to drain in Richland County, N. D. This caused extensive damage to farm crops, which were drowned out and had to be reseeded to late crops. The damage was due to slow runoff rather than flooding of streams. Little damage occurred in the Fargo-Moorhead area. This was the fourth consecutive month with flooding in the Red River of the North Basin.

ATLANTIC SLOPE DRAINAGE

Heavy rains in the central and coastal sections of Maine on the 20th-21st produced minor lowland flooding.

Heavy thundershowers in excess of 3 inches in some areas of Dutchess County, N. Y. produced considerable lowland flooding in the Wappinger Creek Valley during the night of the 22d-23d. Several highways were temporarily blocked. The streams receded within their banks during the afternoon of the 23d. Damage was minor.

Local flash flooding occurred in Cheltenham-Elkins area of North Philadelphia, Pa., during the evening of the 18th. Flooding resulted from the backup of storm sewers and overflow of small creeks. Heavy flooding was reported in northwest and northeast Philadelphia. The hardest hit was Cheltenham township, where officials declared a disaster emergency with 22 persons homeless. Damage was estimated at $400,000.

Streams in eastern North Carolina were generally very low in the beginning of June and remained low until the middle of the third week. New low water records were established during this period on the lower Little River at Ft. Bragg, N. C., with a record low stage of 0.9 foot, and on the Haw River at Haw River, N. C., with a low stage of 1.7 feet. The Roanoke River at Randolph, Va., had a low stage of 4.2 feet, which equalled the previous low monthly record. Heavy rain on the morning of the 18th produced rises of 10 to 17 feet along the Neuse River and 6 to 17 feet along the Tar River. The heaviest rain, ranging from 3 to 6 inches, fell over a small portion of the Cape Fear River through the upper Neuse into the headwaters of the Tar River. This rain produced stages of from 1 to 2 feet above bankfull in the upper reach to 7 feet in flood along the middle portion to about 1 foot below bankfull in the lower reach. The crest of 19.9 feet at Smithfield, N. C., on the 20th, set a new high water record for this station for the month of June. There was no flooding along the Tar River. No damage of consequence is believed to have occurred.

Heavy rains in northern Georgia during the first part of June resulted in a rise in pool elevations on the Savannah River above Clark Hill Reservoir. Resultant releases combined with rainfall during the latter third of the month produced some flooding below Augusta, Ga. Flood damage was light to locally moderate and confined mostly to agricultural interests.

Severe local flash flooding occurred on tributaries of the Oconee River in the Athens, Ga., area on the 4-5th. This flooding was due to torrential rains on the 4th, which exceeded 10 inches. One whole section of Athens along the North Oconee River was inundated. Many persons were evacuated from their homes. Preliminary estimates place damage to all classes of property at $1 million or more.

EAST GULF OF MEXICO DRAINAGE

Light flooding occurred on the Pearl River at Jackson, Miss., on the 2d and 3d and at Bogalusa, La., on the 3d-7th. This light overflow was due to heavy rain on the last day of May and the first day of June in the basin from Jackson to Monticello, Miss. The Pearl River was at a relatively high stage before the commencement of the heavy rains. No damage was evident from the light overflow.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Minor flooding occurred along the lower portion of the Minnesota, Zumbro, and Root Rivers in Minnesota, the upper Iowa River at Dorchester, Iowa, and the Kickapoo River in Wisconsin during June. The flooding resulted from precipitation on the 4th-8th and 10th-16th. The heaviest precipitation reported during a 24-hour period was 5.35 inches at Dakota, Minn., which occurred in a 2-hour period or less on the evening of the 15th. Wilmar, Minn., recorded 4.98 inches during the early morning hours of the 16th. Additional precipitation occurred on the 19th-20th, 22d-24th, and 26th-30th. A moderate rise occurred along the Mississippi River from St. Paul, Minn., downstream through Guttenberg, Iowa but no flooding resulted.

A wet period, beginning May 27 and continuing until June 25 caused considerable flooding in streams in Iowa. Streams were running unusually low before the onset of this wet regime. The heaviest precipitation occurred in the Raccoon and lower Des Moines Basins, ranging from 13 to 16.5 inches during June. The heavy concentration of precipitation prolonged the flooding along the Raccoon and lower Des Moines Rivers. A significant feature of the flooding was the long continued flood crests. The Raccoon River at Des Moines, Iowa remained above 14 feet or slightly higher for a period of 36 hours. Crests at Perry and Van Meter, Iowa were more than 5 feet above flood stage. On the Des Moines River, crests exceeded flood stage by over 6 feet at Tracy and Eddyville, Iowa. Damage was limited to flooding of agricultural land.

The Big Muddy River at Murphysboro, Ill., rose above flood stage on the 23d and continued rising during the remainder of the month.

The Mississippi River rose briefly above flood stage

for 1 to 3 days between the 17th and 19th from Hannibal, Mo., to Dam 24, Clarksville, Mo. Flooding was minor and stages were only a few tenths of a foot above flood stage. From Alton, Ill., downstream to Chester, Ill., the river rose to above flood stage between the 19th and 20th except for St. Louis, Mo., where it remained below flood stage until the 30th. The stages were still rising slowly at the end of the month with levels up to 3 feet above flood stage.

Missouri Basin.--Shallow flooding occurred in the headwaters of the Missouri Basin in Montana during June. The Big Hole River at Divide; the Gallatin River at Gallatin Gateway and Logan; and the Sun River at Great Falls were out of their banks on several occasions during the month. Some damage occurred to irrigation headgates and bridges. Damage to fields and crops was relatively light. Shallow lowland flooding with little damage occurred along the Gallatin and Sun Rivers.

Heavy flooding occurred along the Smith River above Ulm, Mont., on the 14th-15th. Considerable damage resulted to farmland, highways, utilities, and bridges from the heavy runoff. Cattle had to be removed to higher ground to prevent loss.

Record flooding occurred on the Musselshell River in central Montana on two occasions during the month. The first rise was due to heavy rain on the 6th and 7th. At Lavina, Mont., 2.07 inches of rain occurred in 3 hours from 8 to 11 p.m. More than 5 inches occurred in 24 hours. By the 8th, the Musselshell River and tributaries had exceeded flood stage with the greatest runoff of record. Streamflow was already heavy from snowmelt. A number of families were evacuated from their homes at Delphia, Musselshell, and Harlowton, Mont., but damage to dwellings was not extensive. At Roundup, Mont., where the river level reached a foot higher than the previous high of June 1948, 250 families were evacuated. Preliminary estimates of flood damage exceeded $2 million.

Generally minor flooding occurred on the Yellowstone River and most of its tributaries in Montana and Wyoming during June. Most of the flooding occurred during the period from the 10th to the 26th. Moderate to heavy showers along the north slopes of the Beartooth Mountains along with melting snow caused many of the smaller streams to overflow their banks. Up to 10 inches or more of rain was received in some of the basins, with an estimated average of 4 to 8 inches. Flood damage to roads and bridges was most extensive in Carbon, Stillwater, and Sweetwater Counties in Montana. The most extensive loss from the heavy rains and flooding will be in the restoration of ranch-and farmlands and streambanks.

Minor flooding occurred on the Floyd River at Alton, Iowa on the 15th and 16th and on the James River at Huron, S. Dak., on the 18th and 19th. Flooding was confined mainly to meadowland and some farmland near the riverbanks. No damage was reported from the local overflows.

Showers and thunderstorms during the period from the 4th through the 16th caused up to 3 feet of overflow in the Little Sioux Basin in northwestern Iowa between the 9th and 21st. Damage to land and crops was estimated at $200,000.

Locally heavy rains and thunderstorms during the night of the 4th and the morning of the 5th over much of central and southeastern Nebraska produced considerable runoff and minor small stream flooding. These rains further saturated the soil already dampened by the rains of May 25 through 31. The rains of the 4th-5th caused some flooding in Wahoo Creek near Wahoo and Ithaca, Nebr., Shell Creek near Platte Center, and the North Branch of the Elkhorn River at Hadar, Nebr. Additional excessive rains between the 10th and 24th produced heavy runoff and flooding in the Elkhorn and Platte River Basins in Nebraska from the 13th through the 24th. Locally heavy rains over southeastern Nebraska during the night of the 8th and the morning of the 9th caused overflow of Wahoo Creek at Wahoo, Nebr., isolating this town as all highways were inundated. Severe damage resulted from the flooding of the Wood River in the Grand Island, Nebr., area from the locally heavy rains on the 14th-15th. The Platte River crested at Grand Island on the 14th, 2.6 feet above flood stage. The major flood crest in Grand Island occurred on the 16th. About 5,000 people were evacuated from the flood area which inundated about one-third of the city on the 16th. Residents said it was the worst flooding in Grand Island in 30 years. At Louisville, Nebr., the flooding Platte River caused people to evacuate 100 homes on the 16th. Losses of livestock were held to a minimum because of timely warnings. Spring crops, such as corn, oats, alfalfa, and other hay crops, suffered heavy damage. Highway installations, railroad bridges, and fills were damaged. Several public parks were partially flooded. Recently-constructed flood protection levees in the Elkhorn Basin prevented damage in many communities, such as Pierce, Pilger, West Point, Hooper, and Waterloo, Nebr., where damage had occurred almost every spring in former years. Agricultural damage was high throughout the Platte River Basin. Thousands of acres of valuable farmland and crops were inundated. Many crops were lost due to erosion and sediment deposition. The total preliminary estimates of flood damage in Nebraska was close to $50 million.

Disastrous flooding occurred over a major portion of the lower Missouri Valley, as the rampaging Missouri River and tributaries inundated many thousands of acres. It was the heaviest flooding since the early 1950's. Below Kansas City, Mo., the flooding was more severe than in 1951 or 1952, as stages several feet above bankfull persisted for a longer period. Numerous levees were breached and water was trapped behind the levees over a large area. However, damage was not as high this month as in 1951. Flooding on the Kansas River this month was relatively minor compared to 1951. It had only a small effect on the Kansas City area, whereas in 1951 the combination of floods from the Kansas and the Missouri Rivers caused damage of staggering proportions. The flooding in the lower Missouri Basin began during the latter part of May due to heavy rain from May 28 to June 1. The rainfall totals during that period ranged from 4 to 5 inches in eastern Kansas and Missouri. Rainfall in southeastern Nebraska and southwestern Missouri was considerably lighter. As the month began, flooding was in progress on the Grand, the Little Platte, and the Blackwater Rivers. Locally heavy rain in southern Iowa and northern Missouri on the 4th and 5th caused flooding on the Nishnabotna and Grand Rivers. Heavy rain continued to fall and spread over the lower Missouri Basin from the 7th through the 13th. Flooding began on the Missouri River on the 9th and by the 12th flooding was occurring on most of the major tributaries. Additional general and locally heavy rains during the last half of the month prolonged and augmented the flooding.

Record crests occurred on the upper Big Blue River at Seward and Crete, Nebr., the record crest of 22.8

feet on the 16th exceeded the previous record stage of 22.34 feet recorded on June 18, 1957, by 0.5 foot. At Crete, the record crest of 29.9 feet on the 16th exceeded the previous record stage of 28.74 feet on July 10, 1950 by 1.2 feet. Downstream, the flooding was the highest since 1951 at Beatrice, Nebr., and generally since 1960 elsewhere in the upper basin. The Black Vermillion River at Frankfort, Kans. rose within a foot of record levels.

On the Marais des Cygnes River in Kansas the overflows reached the highest levels in the last 5 years. Tributary flooding on Pottawatomie Creek was within 2 feet of record levels near Garnett, Kans. The Big Sugar Creek near Farlinville, Kans., reached a record stage of 30.4 feet on the 21st. This was 0.1 foot higher than the previous record stage of 30.3 feet recorded on Sept. 13, 1961.

Kansas River tributaries developed the heaviest flooding since 1951 on the Wakarusa River, Mill Creek, Clarks Creek, and Soldier Creek near Topeka, Kans., on June 12. The previous record stage, adjusted to channel modifications was 16.06 ft. on July 12, 1951. At Delia, Kans., Soldiers Creek rose to within 2.5 ft. of the record 1951 levels and Wakarusa River, near Lawrence, Kans., within 0.8 foot. The Kansas River at Topeka, Kans., was the highest since 1951 with a crest of 22.9 feet (flood stage 21 feet). Heavy flooding was reported on Cross Creek at Rossville, Kans., Stranger Creek, and Delaware River. Light to moderate overflows were recorded on the Marmaton River at Fort Scott, Kans., the Solomon River from Beloit to Niles, Kans., the lower Smoky Hill, the upper Republican River at Clay Center, Kans., Elk Creek at Clyde, Kans., and Medicine Creek in Nebraska were at or near record stages.

Flooding began along the mainstem of the Missouri River on the 9th at St. Joseph, Mo. By the 14th, the mainstem was out of its banks in the reach from Nebraska City, Nebr., to its confluence with the Mississippi River, a distance of 562 miles. Crests ranged generally from 3.3 feet above flood stage at Kansas City to 9 feet above flood stage at Waverly, Mo. By the 29th, the Missouri was within its banks as far downstream as Napoleon, Mo. Flooding continued into July at and below Lexington, Mo.

Heavy agricultural losses resulted from the flooding in the lower Missouri Basin. Thousands of acres of farmland were inundated. Some reseeding was attempted by airplane. However, for many crops it was too late in the season to replant. Industrial losses were heavy. One major barge Line reported nearly $1 million loss in revenue. In many of the flooded areas, people had to evacuate their homes. Preliminary estimates of flood damage in the lower Missouri Basin, excluding the Elkhorn and Platte Basins in Nebraska, totalled nearly $30 million.

Ohio Basin.--Locally heavy rains over the upper Little Wabash Basin in Illinois on the 11th and 13th caused minor overflow at Wilcox, Ill. on the 12th-15th. Little or no damage resulted since higher stages were experienced in March and May.

Heavy rain on evening of the 3rd and morning of 4th caused flooding on the French Broad River at and above Asheville, N. C. The rainfall averaged 9 to 10 inches in the headwaters and 4 to 7 inches in the reach in and around Asheville and Blantyre. Downstream from Asheville the rainfall was estimated to be 2 inches or less. The heaviest flooding occurred in the reach from Rosman to Blantyre, N. C. A few people were evacuated in the Rosman, N. C. area. Landslides occurred both in and out of the French Broad Basin in southwestern North Carolina. No damage or casualties were reported.

White Basin.--The Cache River at Patterson, Ark., continued in flood from May 16 to June 17. It crested on May 21-22, 1.5 feet above flood stage. Locally heavy rain (7.73 inches) on June 30 caused a sudden rise of 2 feet on this normally sluggish river to above flood stage at Patterson on the 30th.

Arkansas Basin.--Minor flooding occurred on the Little Arkansas River at Sedgwick, Kans., on the 29th-30th. Little, if any, damage resulted from this overflow.

Heavy rains on the 10th-12th caused minor flooding on the Chikaskia at Corbin, Kans., the Cimarron at Dover, Okla., the Little Caney at Copan, Okla., and the Neosho at Commerce and Miami, Okla. Brief flash flooding was reported on Red Rock Creek near Billings, Okla., on roads west of Kingfisher, Okla., and on a small area in Claremore, Okla. The duration of most of the overflows was a few hours except for the Little Caney at Copan, Okla., which was in flood from the 11th to the 13th. The crest at Copan (22.75 ft.) was the highest at that point since Apr. 4, 1965 (24.04 ft.). Flood damages were primarily confined to lowlands and were considered minor.

Considerable flooding occurred during the last decade of June along much of the Cottonwood River and in Montgomery County along the middle reach of the Verdigris River. One death from drowning was reported in Montgomery County. Flood damages were heavy and estimated at over $2 million.

Local flash flooding occurred along creeks and tributaries near Leedey, Okla., during the evening of the 11th from heavy rain. Four or more inches of rain fell in 3 hours. Heavy showers over the southern reaches of the Washita River during the night of the 25th-26th resulted in local flooding in the Sulphur, Okla., area.

Red Basin.--The Sulphur River at Hagansport, Tex., continued in flood from May 30 to June 5. It crested nearly 8 feet above flood stage in the beginning of June. Downstream at Naples, Tex., flood stage was reached on the 2d and continued in flood until the 11th. The crest on the 4th was 8.2 feet above flood stage. This flooding was due to heavy rains during the last few days of the month.

Lower Mississippi Basin.--Heavy rains on May 21 caused the upper Big Black River at Pickens, Miss., to rise above flood stage on May 22 and continue in flood until May 28. The crest on May 23 was 2 feet above flood stage. Light damage resulted to crops and pasturelands in the Pickens area.

Heavy local rain on June 1 caused the Big Black River at Bovina, Miss., to exceed flood stage by 3.7 ft. late on June 1. It reached near flood stage during the last week in May from the heavy rain in the upper basin on May 21. The Big Black River receded below flood stage at Bovina on June 5. Damage from the over flow was light.

WEST GULF OF MEXICO DRAINAGE

Minor flooding occurred along the Calcasieu River at Hineston, La., on the 5th-7th. No damage resulted from the light overflow.

Minor overflow occurred along the East Fork of the Trinity River below the Lavon Reservoir in Texas during the last 2 weeks of the month. There was some flash flooding on Chambers and Richland Creeks on the 12th. No damage was reported from the overflows.

Some flooding occurred in the headwaters of the Brazos Basin on June 1 along a normally dry creek near the town of Smyer, Tex., west of Lubbock. Minor damage

resulted to low-lying crops that normally would not be affected. There were 2 deaths from drowning.

Heavy rains over portions of northern Mexico and extreme southwestern Texas caused pronounced rises on the Rio Grande from Presidio, Tex., downstream from the 26th to the 28th. This was due mainly to a heavy inflow from the Conchos River in northern Mexico. The Rio Grande rose as much as 9 feet in places in Big Bend National Park. No flooding was reported.

Local flash flooding occurred in the El Paso, Tex., area on the evening of the 29th. However, most property damage was due to high winds and some hail.

GREAT BASIN

Cool weather from May 25 into the first part of June checked the rapidly rising and overflowing streams in the Great Basin caused by snowmelt runoff. A second peak was reached around June 5. An unprecedented cool spell through the 16th kept runoff at safe levels and allowed streams to discharge large volumes of water which reduced the flood potential. The final surge, near the 21st, caused the uppermost streams to crest at higher stages than reported on the two previous occasions. Some meadowlands were temporarily flooded along the upper reaches of the Weber and Provo Rivers in Utah and the upper Bear River in Wyoming. Flood damages were minor.

PACIFIC SLOPE DRAINAGE

The 1967 runoff season on the Columbia River above Grand Coulee Dam opened with record or near record snowpack at intermediate and high elevations in the Columbia tributary drainages. Precipitation during May and June in eastern Washington and northern Idaho were near or above normal. Temperatures were below normal in May and early June with cool periods occurring at intervals. The spacing of the cool periods retarded the snow melt and prevented buildup of streamflows to flood levels. The Kootenai River at Bonners Ferry, Idaho exceeded flood stage on the 4th-13th and again on the 20th-24th. The peak stage for the season on June 11 was 32.9 feet (flood stage 31 feet). This peak was well below the critical stage (37.0 feet) for the town of Bonners Ferry and also for most of the agricultural areas. Minor overflow occurred upstream at Rexford, Mont. Preliminary estimates of damage, as furnished by the Corps of Engineers, is $225,000.

The Methow River at Pateros, Wash., exceeded flood stage by 0.5 foot on the 22d. The flooding was due to snowmelt runoff and heavy rainfall late on the 21st and early 22d. Serious damage was prevented as the river was out of its banks less than 24 hours.

Backwater from the Columbia River caused the Willamette River to exceed flood stage on the 8th and to continue in flood until the 30th. It crested on the 23d-27th, 2.4 feet above flood stage. In the mid-Columbia Basin, flows at Priest Rapids Dam, Wash., exceeded flood stage on the 6th and continued above flood stage through the remainder of the month. At Vancouver, Wash., the Columbia reached flood stage on the 4th and continued out of its banks until the 30th. It crested on the 24th-26th, 5.5 feet above flood stage. Flood damages in the lower Columbia Basin from The Dalles Dam downstream were estimated to be nearly $1 million.

Above normal temperature in western Washington and over the northern Cascade Mountains from the 15th to the 20th caused heavy runoff from the melting of the heavy late season snowpack in the Skagit and other high basins. This heavy snowmelt runoff plus 1 inch of rain from the 21st to the 22d caused the Skagit River and a few of its minor tributaries in northwest Washington to rise above flood stage during the period from the 21st to the 23d. Flooding occurred in the Skagit Basin from Rockport, Wash., to the mouth of the river south and west of Mt. Vernon, Wash. One wooden bridge was destroyed on Illabot Creek near Rockport, Wash. Flood control projects underway were temporarily interrupted. One road was closed and several were damaged.

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red River of the North, Fargo, N. Dak.	17	15	23	22.3	19
ATLANTIC SLOPE DRAINAGE					
Neuse: Neuse, N. C.	14	19	22	15.25	21
Smithfield, N. C.	13	19	23	19.9	20
Goldsboro, N. C.	14	24	27	15.4	25
Savannah: Millhaven, Ga.	15	14	21	15.5	17
Clyo, Ga.	11	13	Jul. 2	13.7	22-24
EAST GULF OF MEXICO DRAINAGE					
Pearl: Jackson, Miss.	18	2	3	19.7	2
Bogalusa, La.	15	3	7	16.4	5
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Minnesota: Jordan, Minn.	20	19	26	22.1	22
Savage, Minn.	698	20	27	699.1	23
Zumbro: Theilman, Minn.	38	17	17	38.0	17
Rochester, Minn.	9	16	16	9.1	16
Root: Hokah, Minn.	47	16	17	(49.2 (48.7	16 9
Upper Iowa: Dorchester, Iowa	14	10	11	15.0	10
Kickapoo: La Farge, Wis.	12	16	17	12.3	16
Soldiers Grove, Wis.	723	18	19	724.4	18
Gays Mills, Wis.	698	18	19	698.9	18
Steuben, Wis.	8	(11 (18	13 21	8.2 9.2	12 20
West Fork Cedar: Finchford, Iowa	12	12	14	13.4	12
Iowa: Steamboat Rock, Iowa	10	10	13	12.5	11
Marshalltown, Iowa	13	11	19	15.5	13
Skunk: Oskaloosa, Iowa	15	10	19	18.15	13
Boone: Webster City, Iowa	10	10	12	12.6	10
North Raccoon: Jefferson, Iowa	10	10	17	15.6	11
South Raccoon: Redfield, Iowa	14	9	10	17.1	10
Raccoon: Perry, Iowa	12			17.0	12
Van Meter, Iowa	13	10	21	18.1	12
Des Moines, Iowa	12	10	20	14.45	14
North: Norwalk, Iowa	14			20.5	14
South: Ackworth, Iowa	19	12	12	25.35	12
Des Moines: Des Moines (SE 14th), Iowa	21	11	21	25.7	13
Tracy, Iowa	14	11	24	20.4	16
Eddyville, Iowa	15	11	24	21.6	15
Ottumwa, Iowa	10	11	24	14.9	17
Big Muddy: Murphysboro, Ill.	16	23	1/		
Mississippi: Hannibal, Mo.	16	18	18	16.2	18
Louisiana, Mo.	15	17	19	15.3	18
Clarksville, Mo.	25	19	19	25.3	19
Alton, Ill.	21	20	Jul. 4	23.2	Jul. 1
St. Louis, Mo.	30	30	Jul. 2	30.4	Jul. 2
Chester, Ill.	27	19	Jul. 6	30.3	Jul. 1
Cape Girardeau, Mo.	32	23	Jul. 7	34.1	Jul. 2,3
Missouri Basin					
Big Hole: Melrose, Mont.	6	May 30 22	16 23	6.5 6.1	2 23
Divide, Mont.	6	May 29	27	7.0	May 30 8-9
Gallatin: Gallatin Gateway, (Nr) Mont.	32	20	22	32.1	20-22
Logan, Mont.	7	16	25	7.9	23
Sun: Great Falls, Mont.	12	1 13 19	5 15 21	14.0 14.0 15.0	2 14 19
Great Falls, (14th Street), Mont.	15	15	25	15.85	19
Floyd: Alton, Iowa	12	15	16	13.7	16

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
James: Huron, S. Dak.	11	18	19	11.3	19
Maple: Mapleton, Iowa	12	(9 (13 (17	9 13 17	12.3 12.4 12.9	9 13 17
Little Sioux: Spencer, Iowa	10	16	17	12.9	17
Linn Grove, Iowa	12	19	21	13.75	21
North Branch Elkhorn: Pierce, Nebr.	12	13 15 19 24	14 17 21 24	14.25 14.1 14.6 12.1	14 15 19 24
Hadar, Nebr.	12	7 13 19	7 18 21	12.5 17.2 17.0	7 14 20
Elkhorn: Norfolk, Nebr.	10	14	15	11.0	15
West Point, Nebr.	12	14	16	12.9	15
Winslow, Nebr.	14	15	16	16.0	15
Waterloo, Nebr.	15	16	17	15.55	16
Wood: Gibbon, (Nr), Nebr.				16.8	15
Alda, Nebr.				12.2	16
Wahoo Creek: Ithaca, Nebr.	19	14	14	21.0	14
Salt Creek: Ashland, Nebr.	11	9	23	17.7	21
Platte: Grand Island, Nebr.	3	10	19	5.6	14
North Bend, Nebr.	6	15	16	6.85	15
Louisville, Nebr.	9	9	18	11.5	16
West Nishnabotna: Randolph, Iowa	19	10 21	(10 (21	21.9 22.65	10 21
Nishnabotna: Hamburg, Iowa	18	5 8	6 18	22.00 (24.8 (25.4 (25.0 (22.0 (24.0	5 8 10 12 14 16
Nemaha: Falls City, Nebr.	20	12	12	24.6	12
Tarkio: Fairfax, Mo.	17	10 12	10 12	20.35 19.0	10 12
Nodaway: Clarinda, Iowa	14	(10 (12 (21	10 12 21	18.4 15.6 16.2	10 12 21
One Hundred and Two: Maryville, Mo.	14	12	14	21.8 15.6	13 14
Little Platte: Smithville, Mo.	24	(May 31 (12 (21 (24 (28	1 14 21 24 29	24.6 29.1 26.1 27.3 28.9	1 12 21 24 28
Platte: Agency, (nr) Mo.	20	(12 (28	17 29	24.35 21.7	14 28
Frenchman Creek: Palisade, Nebr.	7	7	7	7.5	7
Sappa Creek: Beaver City, (nr) Nebr.	16	15	15	18.85	15
Stamford, Nebr.	14	16	16	16.75	16
Elk Creek: Clyde, Kans.	12	16	16	18.6	16
Republican: Orleans, Nebr.	11	21	22	11.7	21
Clay Center, Kans.	15	(10 (16	13 17	16.5 18.7	11 16
Solomon: Beloit, Kans.	20	22	22	20.8	22
Glasco, Kans.	22	23	23	22.05	23
Minneapolis, Kans.	26	22	24	27.2	22
Niles, Kans.	24	22	24	25.7	23
Chapman Creek: Chapman, (nr.) Kans.	19	21	22	21.5 21.5	21 22
Lyon Creek: Woodbine (nr.), Kans.	17	(20 (21 (24	20 22 24	20.35 25.8 24.9	20 21 24
Clark Creek: Junction City, (nr.) Kans.	16	(12 (20	12 20	18.5 16.8	12 20
Lincoln Creek: Seward, Nebr.	15	(11 (14	13 18	16.7 19.3	12 15
West Fork Big Blue: Dorchester, (nr.) Nebr.	15	(13 (15	14 18	15.45 18.5	14 16
Turkey Creek: Wilber, Nebr.	11	(8 (16	13 20	14.45 14.25	10 17

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest* Stage	Crest* Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Mill Creek: Washington, Kans.	18	16	17	(22.0	16
				(26.0	16-17
Little Blue: Deweese, Nebr.	8	12	12	11.55	12
		15	16	10.65	16
Gilead, Nebr.				10.4	13
Hanover, Kans.	15	17	18	15.8	18
Black Vermillion: Frankfort, Kans.	19	5	6	24.9	6
		10	13	(24.0	11
				(28.4	12
		21	21	20.25	21
Fancy Creek: Winkler, Kans	11	12	12	13.4	12
Big Blue: Ulysses, Nebr.	15	10	18	20.2	10
				21.1	16
Staplehurst, Nebr.				19.6	14-15,16
Seward, Nebr.	18	11	13	18.9	12
		14	18	22.8	16
Crete, Nebr.	18	8	21	(22.65	8
				(24.1	10
				(29.9	16
Beatrice, Nebr.	16	10	21	20.6	12
				26.6	18
Barneston, Nebr.	18	11	13	20.9	12
		16	21	26.4	19
Marysville, Kans.	35	19	21	37.2	20
Blue Rapids, Kans	1101	12	14	(1105.4	12
				(1104.8	19
Vermillion Creek: Wamego 11NE, Kans.	24	5	6	26.4	6
Mill Creek: Paxico, Kans.	19	(12	12	25.6	12
		(21	21	27.6	21
		(24	24	23.6	24
Soldier Creek: Delia, (nr.) Kans.	17	(5	6	(17.6	5
		(		(19.6	6
		(10	13	21.5	12
		(21	21	18.3	21
Topeka, (nr.) Kans.	12	10	13	19.9	12
		21	21	20.1	21
Delaware: Valley Falls, Kans.	22	6	6	22.15	6
		11	13	(25.8	11
				(27.5	12
Wakarusa: Lawrence (nr.), Kans.	23	12	14	28.7	12
		21	24	30.8	21-22
Stranger Creek: Easton, Kans.	15	(5	6	19.95	6
		(9	10	16.35	10
		(11	13	19.9	12
		(21	24	19.7	22
Tonganoxie, (nr.) Kans.	22	(7	7	22.3	7
		(11	14	26.2	12
		(21	23	23.95	21
Kansas: Manhattan, Kans.	18	24	25	19.0	24
Topeka, Kans.	21	21	22	22.9	21
Lecompton, Kans.	17	12	12	18.9	12
		21	22	20.6	21
Lawrence, Kans.	18	12	12	18.5	12
		21	22	20.0	21
Kansas City, Mo.	23	12	14	27.2	13
		20	25	(28.3	22
				(25.1	24
Blue: Kansas City, Mo.	21	(20	20	27.2	20
		(21	21	32.1	21
		(24	24	26.7	24
Little Blue: Lake City (nr.) Mo.	18	(12	12	19.9	12
		(13	13	22.7	13
		(21	23	25.2	22
		(24	25	20.6	25
		(29	29	23.4	29
Thompson: Trenton, Mo.	20	13	13	21.5	13
Grand: Pattonsburg, Mo.	25	12	15	29.75	13
Gallatin, Mo.	21	13	15	25.2	14
		28	28	21.3	28
Chillicothe, Mo.	24	(1	2	25.2	2
		(6	6	25.4	6
		(12	17	33.1	14
		(27	29	28.2	28
Sumner, Mo.	26	May 31	4	30.8	2
		6	8	30.1	7
		12	21	37.7	16
		22	24	27.75	23

River and station	Flood stage	Above flood stages -dates From–	Above flood stages -dates To–	Crest* Stage	Crest* Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Grand: Brunswick, Mo.	12	(3	3	12.0	3
		(7	9	13.65	8
		(11	Jul. 4	24.5	18
Chariton: Chariton, Iowa	15	11	19	18.05	14
Promise City, Iowa	18	21	21	18.9	21
Rathbun, Mo.	18	19	(19	18.2	19
		24	(24	21.5	24
Novinger, Mo.	20	13	14	23.1	14
Prairie Hill, Mo.	15	13	17	20.2	15
Lamine: Clifton City, Mo.	19	21	23	25.0	22
Blackwater: Valley City, Mo.	20	(May 30	1	26.75	May 30
		(12	13	25.7	12
		(17	17	26.4	17
		(20	23	28.9	22
		(24	25	24.8	24
		(28	29	26.1	28
Blue Lick, Mo.	25	23	Jul. 2	31.6	25
Dragoon Creek: Burlingame (nr.), Kans.	15	21	21	19.5	21
Pottawatomie Creek: Garnett (nr.), Kans.	26	12	12	26.9	12
		21	22	33.4	21
Big Sugar Creek: Farlinville (nr.), Kans.	24	21	21	30.4	21
Marmaton: Ft. Scott (nr.), Kans.	38	21	22	39.05	22
SAC: Stockton, Mo.	19	30	30	19.1	30
South Grand: Brownington, Mo.	19	(1	4	23.0	2
		(22	Jul. 2	28.9	25
Marais Des Cygnes: Reading, Kans.	18	(12	12	20.0	12
		(20	22	25.65	21
		(24	24	18.3	24
Melvern, Kans.	23	21	22	26.9	22
Quenemo, Kans.	28	21	23	35.1	22
Ottawa, Kans.	27	(12	13	28.7	12
		(20	25	33.6	22
Osawatomie, Kans.	28	13	15	33.1	14
		21	27	38.9	22
La Cygne, Kans.	25	13	16	28.4	16
		21	29	32.7	23
Trading Post, Kans.	24	21	30	30.35	25
Osage: Schell City, Mo.	25	1	3	26.5	2
		13	Jul. 7	35.3	Jul. 1
Osceola, Mo.	22	27	Jul. 5	29.5	Jul. 1
Lakeside, Mo. (Bagnell Dam)	60	23	Jul. 9	61.4	Jul. 4
St. Thomas, Mo.	23	29	Jul. 6	23.5	Jul. 3
Warsaw, Mo.	31	25	Jul. 6	33.4	Jul. 3
Missouri: Nebraska City, Nebr.	18	(10	11	18.7	10
		(14	19	23.0	17
		(21	22	19.7	21
Rulo, Nebr.	17	10	26	22.3	18
St. Joseph, Mo.	17	9	24	(22.6	13
				(22.2	19
Atchison, Kans.	22	11	13	25.9	13
		16	25	26.1	19
Leavenworth, Kans.	19	11	25	23.5	14
				23.1	20
Kansas City, Mo.	22	12	14	24.0	13
		21	24	25.3	22
Napoleon, Mo.	17	12	29	(22.5	13
				(23.3	22
Lexington, Mo.	22	10	Jul. 2	(30.1	14
				(31.15	22
Waverly, Mo.	18	10	Jul. 4	(27.0	14
				(27.6	23
Glasgow, Mo.	25	13	Jul. [illegible]	31.2	24
Boonville, Mo.	21	12	Jul. 3	28.1	25
Jefferson City, Mo.	23	13	Jul. 3	28.0	27
Hermann, Mo.	21	14	Jul. 6	29.8	29
St. Charles, Mo.	25	14	Jul. 6	33.6	30

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	To—	Crest* Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio Basin					
Little Wabash: Wilcox, Ill.	16	12	15	18.3	13
French Broad: Rosman, N. C.	8	3	4	10.55	4
Blantyre, N. C.	17	5	6	20.9	5
Asheville, N. C.	8	5	6	8.6	6
Cache: Patterson, Ark.	7	May 16	17	8.5	May 21-22
		30	Jul. 20	9.0	Jul. 8
Arkansas Basin					
Little Arkansas: Sedgwick, Kans.	18	29	30	19.9	29
Chikaskia: Corbin, Kans.	10	13	13	11.5	13
Cimarron: Dover, Okla.	17	11	11	17.3	11
Little Caney: Copan, Okla.	21	11	13	22.75	12
Cottonwood: Cottonwood Falls, Kans.	9	21	24	14.5	22
Plymouth, Kans.	28	21	26	33.8	22
Emporia, Kans.	20	21	27	25.8	23
Neosho: Americus, Kans.	27	21	22	28.65	22
Neosho Rapids, Kans.	22	21	26	24.1	26
LeRoy, Kans.	23	21	22	25.8	21
Iola, Kans.	20	21	23	25.6	22
Chanute, Kans.	24	21	23	27.2	23
Commerce, Okla.	15	12	12	15.2	12
		23	27	16.2	26
		29	Jul. 2		

River and station	Flood stage	Above flood stages -dates From—	To—	Crest* Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Poteau: Panama, Okla.	24	May 29	1	24.4	1
Red Basin					
Sulphur: Hagansport, Tex.	38	May 30	5	45.7	1,2
Naples, Tex.	22	2	11	30.2	4
Lower Mississippi					
Big Black: Pickens, Miss.	16	May 22	May 28	18.0	May 23
Bovina, Miss.	28	1	5	31.7	5
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Hineston, La.	12	5	7	13.2	5
PACIFIC SLOPE DRAINAGE					
Kootenai: Bonners Ferry, Idaho	31	4	13	32.9	11
		20	24	31.9	23
Methow: Pateros, Wash.	10	22	23	10.5	22
Willamette: Portland, Oreg.	18	8	Jul. 3	20.4	23-27
Columbia: Priest Rapids, Wash.	422	6	Jul. 4	425.8	26
Vancouver, Wash.	16	4	Jul. 8	21.5	24-26
Skagit: Concrete, Wash.	29	22	22	29.3	22
Mount Vernon, Wash.	21	21	23	22.5	22

* Provisional
1/ Continued at the end of the month
_ Record Stage

RAWINSONDE DATA

Average monthly values

JUNE 1967

ALBANY, N. Y. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	17.0	14.1	19	1.1
1000	30	160	16.8	12.6	20	.9
950	30	600	17.1	9.7	26	1.8
900	30	1,060	15.7	8.1	29	3.6
850	30	1,544	13.0	5.6	28	4.0
800	30	2,051	9.8	1.6	29	4.7
750	30	2,581	6.4	-2.0	28	4.7
700	30	3,148	3.2	-7.3	28	5.7
650	30	3,740	-.1	-12.1	27	6.2
600	30	4,383	-3.5	-16.7	27	6.6
550	30	5,056	-7.2	-20.9	27	7.8
500	30	5,804	-11.7	-26.3	27	8.2
450	30	6,596	-16.9	-31.5	28	8.3
400	30	7,478	-23.1	-36.9	28	8.9
350	30	8,442	-30.4	-43.8	28	10.4
300	30	9,520	-38.7	-49.2	27	13.1
250	30	10,747	-48.0		27	15.2
200	30	12,184	-57.8		28	16.3
175	30	13,019	-60.8		28	17.1
150	30	13,976	-61.1		28	15.3
125	30	15,107	-61.4		28	11.3
100	30	16,492	-60.8		29	8.4
80	30	17,887	-58.7		31	4.3
70	30	18,726	-57.7		32	2.5
60	30	19,703	-55.9		03	2.0
50	29	20,868	-53.5		08	3.4
40	28	22,309	-51.5		09	4.8
30	28	24,188	-48.9		08	6.3
25	28	25,390	-47.0		08	8.0
20	23	26,876	-44.9		09	9.0
15	14	28,769	-41.7			
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ALBUQUERQUE, N. MEX. 838 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	15.4	1.9	12	1.8
1000	30	81				
950	30	526				
900	30	1,000				
850	30	1,493				
800	30	2,010	16.0	1.7	21	1.5
750	30	2,551	12.8	-1.1	25	2.8
700	30	3,131	8.7	-4.0	24	4.8
650	30	3,734	4.2	-7.3	24	5.3
600	30	4,385	-.9	-10.4	24	7.3
550	30	5,066	-5.9	-15.9	24	10.7
500	30	5,814	-10.6	-22.8	24	14.0
450	30	6,610	-15.3	-30.5	25	15.6
400	30	7,498	-21.4	-35.7	25	17.1
350	30	8,469	-28.7	-42.2	25	18.6
300	30	9,554	-37.0	-48.8	25	23.0
250	29	10,795	-46.1		25	27.4
200	29	12,246	-55.4		25	32.1
175	29	13,089	-59.1		25	31.0
150	29	14,071	-62.9		25	26.9
125	28	15,156	-66.3		25	20.3
100	28	16,504	-66.3		25	9.8
80	28	17,855	-64.9		21	1.7
70	28	18,673	-62.3		12	1.8
60	27	19,632	-59.2		09	3.6
50	27	20,779	-57.2		09	5.9
40	26	22,192	-54.8		09	6.5
30	26	24,047	-50.9		09	6.6
25	26	25,238	-49.0		09	6.5
20	26	26,709	-46.6		09	6.8
15	24	28,631	-43.7		09	8.3
10	23	31,392	-38.0		08	11.9
7	11	33,866	-33.8			
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AMARILLO, TEXAS 890 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	18.2	13.3	18	3.3
1000	30	85				
950	30	536				
900	30	1,010				
850	30	1,493	18.5	10.8	21	8.0
800	30	2,012	16.4	6.9	22	9.5
750	30	2,557	13.4	2.4	23	9.2
700	30	3,136	9.4	-.9	24	7.9
650	30	3,746	5.0	-5.4	24	7.7
600	30	4,394	.2	-9.7	24	7.0
550	30	5,081	-5.0	-13.9	24	8.0
500	30	5,828	-9.8	-19.7	25	10.7
450	30	6,634	-14.6	-27.2	25	12.0
400	30	7,517	-20.5	-34.4	25	14.1
350	30	8,491	-27.6	-39.9	25	15.5
300	30	9,581	-36.1	-47.1	25	17.8
250	30	10,822	-45.5		25	22.6
200	30	12,277	-55.4		25	26.1
175	30	13,119	-60.1		26	27.4
150	30	14,071	-63.8		26	24.1
125	30	15,179	-67.4		26	18.0
100	30	16,518	-68.0		26	7.6
80	30	17,866	-64.8		18	1.9
70	30	18,684	-62.7		13	2.5
60	30	19,640	-60.1		10	4.3
50	30	20,783	-57.4		09	5.3
40	30	22,201	-54.4		09	6.5
30	29	24,061	-50.9		09	7.1
25	28	25,256	-48.7		09	6.6
20	27	26,727	-46.4		09	6.1
15	25	28,645	-43.8		08	6.9
10	17	31,368	-38.9		09	8.4
7	6	33,844	-36.2			
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ANCHORAGE, ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	11.2	6.4	18	2.4
1000	30	129	10.9	6.5	18	3.0
950	30	557	9.1	5.0	17	3.9
900	30	1,002	6.3	3.4	17	4.1
850	30	1,469	3.5	.9	16	4.5
800	30	1,959	.5	-2.3	15	5.7
750	30	2,474	-2.0	-6.8	16	5.3
700	30	3,021	-5.0	-9.9	17	5.2
650	30	3,595	-8.1	-13.9	18	4.4
600	30	4,218	-11.6	-18.8	18	4.7
550	30	4,875	-15.7	-23.2	19	4.9
500	30	5,593	-20.1	-26.2	19	5.6
450	30	6,360	-25.5	-32.0	20	5.9
400	30	7,210	-31.9	-38.4	20	5.8
350	30	8,139	-39.2	-44.3	20	6.3
300	30	9,177	-46.9		21	7.2
250	30	10,366	-53.0		22	7.9
200	30	11,802	-51.9		22	7.6
175	30	12,673	-49.6		22	5.7
150	30	13,683	-49.1		22	4.8
125	30	14,878	-49.3		22	3.6
100	30	16,339	-49.6		20	2.0
80	30	17,801	-49.1		17	1.6
70	30	18,677	-48.7		13	1.5
60	30	19,692	-48.0		10	2.4
50	30	20,896	-47.2		10	4.0
40	30	22,377	-45.9		10	5.3
30	30	24,298	-44.1		08	7.9
25	30	25,525	-42.8		09	9.3
20	30	27,036	-40.9		09	10.1
15	25	28,998	-37.7		09	10.7
10	15	31,791	-33.4		09	11.5
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* ANNETTE, ALASKA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	37	11.1	8.8	27	.3
1000	30	147	11.2	8.0	30	1.0
950	30	581	10.7	4.9	33	1.3
900	30	1,025	8.8	1.2	23	.5
850	30	1,496	6.7	-1.7	22	1.8
800	30	1,993	4.3	-5.5	24	2.7
750	30	2,516	1.3	-9.5	25	3.8
700	30	3,068	-1.6	-13.3	26	4.4
650	30	3,652	-5.1	-16.2	27	5.1
600	30	4,281	-8.5	-19.8	26	6.9
550	30	4,946	-12.7	-24.3	26	7.9
500	30	5,673	-17.6	-27.7	27	8.4
450	30	6,449	-23.2	-32.5	27	10.0
400	30	7,307	-29.3	-38.4	27	11.8
350	30	8,246	-36.3	-43.5	27	11.2
300	30	9,298	-44.1		28	14.4
250	30	10,500	-52.1		28	16.9
200	30	11,924	-56.7		28	16.5
175	30	12,774	-54.9		28	13.0
150	30	13,762	-53.6		28	10.6
125	30	14,934	-53.8		29	7.5
100	30	16,366	-54.0		30	5.4
80	30	17,799	-53.3		32	3.1
70	30	18,659	-52.9		35	2.1
60	30	19,655	-52.2		06	2.3
50	30	20,837	-51.2		08	3.4
40	30	22,291	-49.8		07	5.0
30	28	24,184	-47.4		08	8.3
25	27	25,397	-45.8		09	9.1
20	27	26,890	-43.5		09	10.4
15	26	28,838	-39.8		08	11.8
10	25	31,645	-34.1		09	13.7
7	24	34,164	-29.2		09	14.5
5	18	36,590	-24.8			

ATHENS, GEORGIA 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	18.2	16.9	05	1.5
1000	30	151				
950	30	592	19.0	15.1	06	1.6
900	30	1,057	17.2	12.9	05	1.3
850	30	1,543	14.6	9.9	04	1.3
800	30	2,054	11.5	5.7	36	.8
750	30	2,592	8.9	-.3	33	.3
700	30	3,161	6.0	-4.3	30	1.1
650	30	3,758	2.8	-8.8	31	1.9
600	30	4,409	-.5	-14.0	30	2.6
550	30	5,095	-4.2	-17.6	29	3.1
500	30	5,847	-8.8	-21.6	30	3.0
450	30	6,651	-13.5	-27.9	32	3.4
400	30	7,543	-19.7	-34.5	32	5.3
350	30	8,521	-27.1	-40.2	32	6.1
300	30	9,614	-35.2	-48.1	32	7.6
250	30	10,859	-44.8		32	8.5
200	30	12,317	-55.1		32	11.6
175	30	13,160	-59.9		32	13.0
150	29	14,110	-63.2		32	13.3
125	29	15,222	-65.9		32	10.0
100	29	16,571	-66.6		33	6.0
80	29	17,925	-65.0		02	3.7
70	29	18,741	-63.0		05	4.2
60	29	19,697	-59.8		07	6.5
50	29	20,845	-56.0		09	7.6
40	29	22,274	-53.3		09	7.1
30	29	24,140	-49.9		09	7.0
25	29	25,336	-48.0		09	6.7
20	27	26,818	-45.7		08	7.6
15	26	28,744	-43.0		08	8.2
10	24	31,509	-37.0		08	9.9
7	8	33,999	-30.6			
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* BARROW, ALASKA 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-.1	-.3	08	1.5
1000	30	128	.4	-.7	07	.9
950	30	542	2.3	-1.9	34	1.1
900	30	977	1.8	-4.8	32	1.5
850	30	1,437	.3	-7.2	31	1.7
800	30	1,922	-1.5	-9.4	31	2.7
750	30	2,433	-4.2	-12.9	30	2.9
700	30	2,976	-7.4	-15.4	29	2.7
650	30	3,544	-10.8	-19.0	29	3.0
600	30	4,162	-14.6	-22.1	30	3.6
550	30	4,813	-18.7	-27.3	29	3.8
500	30	5,522	-23.6	-32.5	28	4.5
450	30	6,277	-29.0	-38.7	28	4.5
400	30	7,119	-35.3	-44.8	28	3.9
350	30	8,037	-41.9	-47.9	28	4.2
300	30	9,066	-48.7		28	4.7
250	30	10,257	-50.8		28	6.4
200	30	11,718	-47.8		28	4.4
175	30	12,602	-46.8		28	4.0
150	30	13,624	-46.5		29	3.7
125	30	14,834	-46.6		30	2.0
100	30	16,315	-46.3		29	1.0
80	30	17,845	-45.5		02	1.1
70	30	18,689	-45.0		06	1.7
60	30	19,719	-44.5		07	2.1
50	30	20,942	-43.8		08	3.0
40	30	22,442	-43.1		08	3.7
30	27	24,386	-41.8		07	5.9
25	26	25,238	-40.8		08	6.0
20	24	27,145	-39.0		08	6.7
15	10	29,108	-35.9			
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BARTER IS., ALASKA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	.7	-.8	11	.7
1000	30	119	2.0	.7	13	.8
950	30	538	4.7	-1.3	25	1.3
900	30	977	4.2	-3.9	27	3.0
850	30	1,440	1.9	-6.1	27	3.9
800	30	1,928	-.7	-8.3	27	4.7
750	30	2,440	-3.6	-11.4	28	5.2
700	30	2,984	-6.8	-15.7	28	5.1
650	30	3,554	-10.2	-18.5	27	5.3
600	30	4,173	-13.9	-22.7	27	5.4
550	30	4,823	-18.1	-27.4	27	5.7
500	30	5,536	-22.9	-32.8	27	6.4
450	30	6,293	-28.6	-38.2	27	7.0
400	30	7,134	-35.1	-43.7	27	7.7
350	30	8,053	-41.6	-45.4	27	9.0
300	30	9,085	-47.2		28	9.1
250	30	10,282	-50.2		28	8.5
200	30	11,748	-47.1		28	6.8
175	30	12,635	-46.2		28	5.7
150	30	13,660	-46.0		29	5.1
125	30	14,872	-46.2		29	4.2
100	30	16,357	-45.9		30	2.7
80	30	17,845	-45.0		33	1.7
70	30	18,737	-44.4		01	1.6
60	30	19,770	-43.9		04	2.0
50	30	20,997	-43.1		06	3.1
40	29	22,503	-42.4		07	4.4
30	28	24,448	-41.6		08	6.5
25	28	25,687	-40.6		08	7.3
20	28	27,211	-38.9		08	7.9
15	26	29,190	-36.1		08	9.4
10	23	32,047	-31.1		08	10.0
7	16	34,580	-27.9		09	10.8
5	7	36,980	-25.3			

BETHEL, ALASKA 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	9.6	7.7	23	1.5
1000	30	105	9.8	6.7	23	1.2
950	30	529	8.3	4.3	16	1.8
900	30	975	5.4	1.9	15	2.9
850	30	1,441	2.4	-.7	15	3.3
800	30	1,928	-.4	-4.8	14	3.3
750	30	2,441	-3.2	-8.0	15	3.5
700	30	2,986	-6.0	-12.1	15	3.5
650	30	3,559	-9.0	-15.4	15	3.1
600	30	4,180	-12.8	-19.3	15	3.2
550	30	4,832	-17.0	-24.6	15	3.4
500	30	5,548	-21.4	-29.7	15	4.2
450	30	6,311	-26.5	-34.2	16	3.1
400	30	7,158	-32.6	-40.6	16	5.6
350	30	8,084	-39.7	-45.0	17	4.8
300	30	9,121	-47.4		18	5.8
250	30	10,307	-53.3		17	6.5
200	30	11,749	-50.4		17	5.2
175	30	12,624	-49.0		17	4.1
150	30	13,636	-48.7		17	4.7
125	30	14,834	-49.0		16	3.2
100	30	16,298	-49.1		15	4.0
80	29	17,757	-49.3		13	3.5
70	29	18,632	-49.1		11	3.5
60	29	19,644	-48.7		11	4.5
50	29	20,843	-48.2		10	5.3
40	29	22,315	-47.5		10	7.4
30	29	24,222	-45.9		09	7.6
25	28	25,442	-44.5		09	10.0
20	28	26,941	-42.8		09	10.5
15	27	28,890	-40.2		09	12.2
10	22	31,696	-35.4		09	13.7
7	9	34,192	-32.1			
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BISMARCK, N. DAK. 955 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	505	10.7	7.7	09	.9
1000	30	118				
950	30	550	11.8	7.3	12	.8
900	30	1,005	13.1	5.7	20	.6
850	30	1,484	10.6	4.3	21	1.5
800	30	1,986	7.7	1.2	25	2.2
750	30	2,511	4.5	-1.1	26	3.4
700	30	3,075	1.2	-4.3	28	3.7
650	30	3,663	-2.1	-10.4	28	4.8
600	30	4,301	-5.6	-15.6	28	6.0
550	30	4,972	-9.7	-21.6	28	8.1
500	30	5,708	-14.3	-26.5	27	9.8
450	30	6,494	-19.7	-32.7	27	10.8
400	30	7,364	-26.0	-38.4	27	12.6
350	30	8,316	-33.4	-45.1	27	14.3
300	30	9,380	-41.5	-50.4	26	16.8
250	30	10,593	-50.0		25	20.4
200	29	12,029	-55.7		25	22.7
175	28	12,883	-55.7		26	19.8
150	28	13,866	-55.2		26	17.0
125	28	15,029	-55.7		27	12.9
100	28	16,447	-56.6		26	8.9
80	28	17,861	-56.2		27	4.4
70	28	18,709	-55.6		29	2.1
60	28	19,694	-54.5		02	.8
50	28	20,865	-52.9		07	2.4
40	28	22,310	-51.1		08	4.7
30	28	24,192	-48.3		09	6.9
25	27	25,393	-46.7		09	8.2
20	27	26,880	-44.4		09	9.1
15	26	28,824	-41.2		09	10.9
10	23	31,605	-36.3		09	13.3
7	18	34,092	-32.0		09	13.1
5	8	36,399	-29.5			

BOISE, IDAHO 914 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	868	12.6	9.3	14	2.2
1000	30	98				
950	30	533				
900	30	995	14.9	7.3	12	1.3
850	30	1,478	13.9	4.1	35	1.4
800	30	1,987	10.8	1.1	33	1.4
750	30	2,519	6.9	-1.1	32	1.7
700	30	3,085	2.9	-4.4	29	2.0
650	30	3,675	-1.5	-7.3	28	3.2
600	30	4,314	-5.9	-13.2	26	4.5
550	30	4,984	-10.1	-20.5	26	4.4
500	30	5,719	-15.1	-26.0	26	4.0
450	30	6,500	-20.6	-31.5	26	4.4
400	30	7,369	-27.1	-38.5	26	4.6
350	30	8,317	-34.7	-44.7	26	5.6
300	30	9,375	-42.9	-49.1	27	5.1
250	30	10,582	-51.3		27	5.1
200	30	12,016	-55.2		28	6.7
175	30	12,868	-55.2		28	7.6
150	30	13,852	-55.7		27	7.9
125	30	15,009	-57.2		27	6.9
100	30	16,416	-58.1		27	5.5
80	28	17,812	-57.6		27	2.3
70	27	18,652	-57.4		23	.8
60	27	19,628	-56.4		10	1.3
50	26	20,786	-54.7		08	2.8
40	24	22,217	-53.2		08	4.7
30	24	24,080	-50.8		08	6.4
25	24	25,273	-48.5		09	7.5
20	23	26,754	-45.6		09	8.9
15	19	28,680	-42.0		09	11.5
10	13	31,457	-35.7			
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* BOOTHVILLE, LA. 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1	24.4	22.7	14	.6
1000	30	127	24.3	22.3	17	1.1
950	30	577	21.5	18.6	18	2.2
900	30	1,044	19.1	14.0	17	2.8
850	30	1,533	16.0	10.3	15	2.8
800	30	2,047	13.1	5.6	15	2.7
750	30	2,587	10.2	.7	14	1.5
700	30	3,159	7.2	-4.1	08	.9
650	30	3,762	3.8	-7.7	36	1.8
600	30	4,412	.4	-13.5	36	3.0
550	30	5,101	-3.3	-18.3	36	3.4
500	30	5,853	-7.5	-24.5	35	4.2
450	30	6,663	-12.5	-28.0	35	5.4
400	30	7,556	-18.6	-33.9	35	7.5
350	30	8,537	-25.9	-40.7	34	8.4
300	30	9,666	-34.2	-47.7	34	9.6
250	30	10,885	-44.0		34	11.6
200	30	12,347	-54.8		34	13.9
175	30	13,190	-60.4		34	13.3
150	30	14,138	-65.7		34	13.2
125	30	15,231	-70.7		34	10.8
100	30	16,546	-72.1		36	5.6
80	30	17,870	-68.7		05	5.1
70	30	18,675	-65.4		06	6.4
60	30	19,621	-61.5		08	8.7
50	30	20,760	-58.0		09	8.2
40	30	22,178	-54.6		09	8.9
30	30	24,034	-50.8		09	9.9
25	30	25,227	-48.3		09	9.7
20	28	26,697	-46.1		09	8.6
15	27	28,623	-42.6		08	6.9
10	25	31,388	-38.3		09	9.0
7	8	33,892	-33.0			

* BROWNSVILLE, TEXAS 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	24.5	22.3	13	2.3
1000	30	105	24.8	22.9	14	4.6
950	30	555	21.8	20.3	16	10.1
900	30	1,024	19.5	15.1	16	10.3
850	30	1,516	17.5	10.2	16	8.8
800	30	2,032	15.1	5.4	16	6.4
750	30	2,574	12.8	-.1	14	3.9
700	30	3,155	10.1	-3.3	10	2.8
650	30	3,765	6.6	-6.9	09	2.7
600	30	4,420	2.4	-10.9	06	2.9
550	30	5,113	-1.7	-16.1	05	3.5
500	30	5,871	-6.6	-20.2	04	3.3
450	30	6,680	-12.0	-24.9	03	3.0
400	30	7,579	-17.8	-31.3	36	3.3
350	30	8,564	-24.8	-37.0	35	3.6
300	30	9,666	-33.3	-44.5	34	5.1
250	30	10,921	-43.0		33	7.4
200	30	12,388	-54.5		34	9.4
175	30	13,230	-61.0		33	9.3
150	30	14,171	-67.9		33	7.8
125	30	15,248	-74.2		35	4.7
100	29	16,538	-76.1		05	3.6
80	29	17,840	-71.3		07	6.6
70	29	18,638	-66.7		08	9.3
60	29	19,580	-62.9		10	10.0
50	29	20,712	-59.4		09	11.0
40	29	22,125	-54.7		08	12.6
30	29	23,981	-50.9		09	13.9
25	28	25,173	-48.4		09	13.1
20	28	26,649	-46.2		09	11.9
15	25	28,566	-43.0		09	10.0
10	24	31,328	-38.2		08	10.4
7	19	33,803	-34.0		09	13.1

BUFFALO, N. Y. 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	18.1	12.8	20	2.2
1000	30	148				
950	30	591	18.6	9.9	23	6.0
900	30	1,051	16.4	7.1	24	5.7
850	30	1,535	13.2	4.4	25	5.8
800	30	2,042	9.7	1.1	25	5.7
750	30	2,576	6.2	-2.9	25	6.0
700	30	3,138	3.2	-7.7	26	6.0
650	30	3,736	.3	-13.5	26	6.5
600	30	4,374	-3.0	-19.2	26	6.9
550	30	5,053	-7.1	-23.2	26	7.9
500	30	5,795	-11.6	-27.7	26	8.5
450	30	6,590	-17.0	-32.7	26	9.4
400	30	7,468	-23.4	-39.1	26	9.1
350	30	8,431	-30.5	-45.0	27	11.5
300	30	9,509	-38.5	-51.0	27	13.6
250	30	10,737	-48.0		27	15.3
200	30	12,174	-57.4		28	16.7
175	30	13,011	-60.4		28	17.8
150	30	13,969	-61.2		29	14.5
125	30	15,099	-61.3		28	10.2
100	30	16,485	-60.9		29	9.0
80	30	17,877	-59.5		31	4.6
70	30	18,714	-58.2		33	3.0
60	30	19,688	-56.6		02	2.3
50	29	20,849	-54.8		06	3.2
40	29	22,283	-52.4		08	5.3
30	29	24,157	-49.3		08	7.3
25	29	25,358	-47.4		09	7.8
20	28	26,843	-44.8		09	8.8
15	25	28,782	-41.4		09	9.4
10	19	31,567	-36.3		09	10.9
7	11	34,043	-33.5			

* CANTON IS. PACIFIC AREA 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	30.7	23.9	10	6.0
1000	30	87	28.1	20.9	09	6.5
950	30	535	22.9	17.4	10	7.4
900	30	1,009	20.0	12.8	10	8.0
850	30	1,500	18.2	7.0	10	8.3
800	30	2,018	15.7	2.1	09	8.0
750	30	2,558	13.6	-3.3	10	7.7
700	30	3,142	10.8	-7.7	09	7.2
650	30	3,749	7.3	-9.7	09	7.4
600	30	4,409	3.3	-13.3	09	7.3
550	30	5,102	-.8	-18.4	09	6.5
500	30	5,864	-4.9	-23.3	09	5.8
450	30	6,676	-9.7	-27.7	09	5.7
400	30	7,585	-15.4	-33.2	11	3.9
350	30	8,580	-22.2	-39.2	15	2.4
300	30	9,693	-30.9	-46.3	22	2.2
250	30	10,960	-41.3		25	3.6
200	30	12,435	-53.6		25	5.2
175	30	13,280	-60.5		26	7.2
150	30	14,224	-67.6		27	7.9
125	30	15,302	-74.4		27	7.4
100	29	16,586	-77.3		27	8.3
80	28	17,884	-72.2		27	12.9
70	28	18,677	-67.8		27	16.3
60	28	19,611	-64.0		27	18.3
50	27	20,738	-61.0		27	17.9
40	27	22,134	-58.3		27	14.3
30	27	23,963	-54.0		10	6.0
25	27	25,141	-51.2		09	19.1
20	26	26,603	-47.3		09	24.3
15	24	28,518	-43.6		09	26.6
10	20	31,277	-38.3		09	33.3
7	6	33,784	-28.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1967

* CAPE HATTERAS, N. C. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	19.9	18.2	04	1.8
1000	30	149	20.2	16.7	07	2.5
950	30	592	17.7	13.5	10	2.2
900	30	1,053	14.9	10.5	10	1.6
850	30	1,536	12.7	6.4	13	1.3
800	30	2,044	10.5	2.8	17	1.3
750	30	2,582	8.5	-3.9	21	1.3
700	30	3,148	6.0	-8.3	25	1.3
650	30	3,745	2.9	-10.5	26	1.4
600	30	4,396	-.8	-15.9	26	1.7
550	30	5,079	-4.5	-20.7	27	1.8
500	30	5,831	-9.1	-25.7	26	2.4
450	30	6,631	-14.4	-30.5	27	2.7
400	30	7,522	-20.3	-35.7	28	3.8
350	30	8,498	-27.3	-42.1	28	4.5
300	30	9,589	-35.7	-48.2	28	4.8
250	30	10,831	-45.9		28	5.4
200	30	12,279	-56.8		30	8.0
175	30	13,116	-61.5		30	8.3
150	30	14,065	-64.3		31	8.1
125	30	15,177	-65.2		31	5.7
100	30	16,537	-64.5		34	5.0
80	29	17,901	-63.3		03	4.2
70	29	18,725	-61.3		05	4.2
60	29	19,687	-58.6		07	5.3
50	29	20,840	-55.8		08	6.6
40	28	22,271	-52.6		09	7.3
30	28	24,143	-49.2		09	5.7
25	27	25,343	-47.8		08	6.5
20	27	26,823	-45.5		09	7.8
15	25	28,752	-42.2		09	8.8
10	20	31,539	-36.1		09	11.7
7	9	34,045	-31.7			
5						

* CARIBOU, MAINE 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	13.6	9.3	25	.8
1000	30	148				
950	30	581	14.4	4.0	27	2.3
900	30	1,037	12.6	1.5	28	3.3
850	30	1,515	9.9	-.3	28	4.7
800	30	2,016	6.6	-2.7	27	6.3
750	30	2,539	3.9	-5.6	28	7.6
700	30	3,102	1.0	-9.8	28	8.9
650	30	3,690	-2.0	-14.4	28	10.4
600	30	4,327	-5.5	-19.2	28	11.8
550	30	4,999	-9.4	-23.7	28	12.9
500	30	5,736	-14.0	-28.1	28	14.3
450	30	6,522	-19.4	-33.4	28	16.3
400	30	7,394	-25.6	-38.9	28	17.3
350	30	8,348	-32.6	-45.2	28	18.8
300	30	9,417	-40.4	-49.4	28	21.9
250	30	10,637	-49.0		28	24.0
200	29	12,068	-57.5		28	25.2
175	29	12,907	-59.3		28	23.3
150	29	13,873	-58.0		28	18.9
125	29	15,024	-57.2		28	14.1
100	29	16,436	-57.1		29	9.2
80	29	17,853	-55.4		29	4.9
70	29	18,705	-54.3		31	2.2
60	29	19,697	-52.9		03	1.1
50	29	20,876	-51.6		08	2.8
40	29	22,328	-50.0		09	4.1
30	29	24,215	-48.2		09	6.8
25	28	25,420	-46.4		09	8.2
20	25	26,913	-43.9		09	9.9
15	23	28,862	-40.5		09	12.5
10	19	31,672	-34.4		09	14.7
7	14	34,185	-29.2		09	14.3
5						

CHARLESTON, S. C. 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	13	20.4	18.7	03	2.0
1000	30	143	20.5	19.0	05	2.5
950	30	589	19.3	16.8	08	2.8
900	30	1,052	17.1	13.2	08	2.0
850	30	1,538	14.5	9.8	06	1.7
800	30	2,049	11.7	6.2	05	1.1
750	30	2,589	8.8	1.4	36	.8
700	30	3,156	5.8	-2.8	33	1.3
650	30	3,756	2.6	-7.8	29	1.7
600	30	4,404	-.7	-12.2	29	1.8
550	30	5,089	-4.5	-18.3	26	1.9
500	30	5,840	-8.9	-23.1	27	1.8
450	30	6,644	-13.9	-28.1	30	1.7
400	30	7,535	-20.1	-33.0	30	1.9
350	30	8,511	-27.1	-40.8	30	2.6
300	30	9,603	-35.7	-49.0	31	3.0
250	30	10,845	-45.6		31	4.8
200	30	12,296	-56.0		32	7.2
175	30	13,135	-61.1		33	9.9
150	30	14,084	-64.7		33	9.3
125	30	15,191	-66.8		33	8.0
100	30	16,546	-67.2		35	5.8
80	30	17,885	-65.6		03	4.7
70	30	18,700	-63.2		05	5.2
60	30	19,653	-60.5		07	7.0
50	30	20,796	-57.4		09	8.2
40	30	22,217	-53.9		09	7.4
30	30	24,077	-50.5		09	7.2
25	30	25,270	-48.7		09	7.2
20	30	26,743	-46.7		09	7.5
15	29	28,665	-43.4		08	7.9
10	29	31,424	-38.2		09	9.6
7	8	33,892	-32.2			
5						

CHIHUAHUA, MEXICO 856 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1,428	19.3	10.0	25	1.3
1000	29	65				
950	29	512				
900	29	988				
850	29	1,486	19.4	9.6	25	1.5
800	29	2,007	18.2	6.0	25	2.5
750	29	2,551	14.7	2.9	24	3.2
700	29	3,137	11.1	.2	21	3.2
650	29	3,744	6.9	-2.8	19	2.6
600	29	4,404	1.9	-6.4	19	3.8
550	29	5,093	-2.8	-11.6	22	5.0
500	29	5,850	-7.3	-16.1	23	6.0
450	29	6,658	-12.1	-22.6	23	7.1
400	29	7,557	-18.1	-29.0	24	8.8
350	29	8,539	-25.0	-35.4	24	10.2
300	29	9,642	-33.2	-44.2	24	12.0
250	29	10,895	-42.8		25	13.3
200	28	12,364	-53.7		25	16.4
175	26	13,205	-60.0		25	18.7
150	26	14,152	-66.3		25	17.0
125	26	15,239	-71.4		24	11.2
100	24	16,546	-72.9		25	7.1
80	22	17,868	-68.8		19	.6
70	22	18,673	-64.9		09	3.1
60	21	19,623	-61.2		09	5.8
50	20	20,769	-58.1		09	6.7
40	20	22,184	-54.9		08	7.4
30	20	24,038	-51.1		09	8.8
25	16	25,238	-49.1		09	8.3
20	11	26,714	-46.0			
15	7	28,644	-43.3			
10						
7						
5						

* COLD BAY, ALASKA 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	6.7	4.4	17	4.2
1000	30	103	6.6	4.1	17	5.2
950	30	519	4.9	3.4	17	6.3
900	30	964	3.4	1.1	16	5.3
850	30	1,427	1.5	-2.2	16	5.2
800	30	1,914	-.1	-6.2	17	4.7
750	30	2,426	-2.2	-11.1	18	4.6
700	30	2,975	-5.0	-14.6	17	4.6
650	30	3,550	-8.4	-17.9	17	5.2
600	30	4,172	-11.7	-21.2	19	5.8
550	30	4,827	-15.9	-25.3	19	6.2
500	30	5,545	-20.8	-30.3	19	6.4
450	30	6,309	-26.3	-34.7	19	7.5
400	30	7,158	-32.5	-41.9	19	7.5
350	30	8,086	-39.8	-47.1	20	8.1
300	30	9,123	-47.3		19	8.6
250	30	10,313	-52.9		20	8.5
200	29	11,761	-49.6		20	7.5
175	29	12,638	-48.7		19	7.1
150	28	13,654	-48.9		19	5.3
125	28	14,850	-49.3		18	5.0
100	27	16,317	-49.9		16	4.1
80	27	17,777	-49.7		14	4.2
70	27	18,649	-49.9		13	3.5
60	27	19,656	-50.0		12	4.0
50	26	20,851	-49.7		11	4.2
40	26	22,314	-48.9		10	6.2
30	24	24,209	-47.5		10	7.6
25	24	25,417	-46.2		09	8.2
20	22	26,920	-44.1		09	10.0
15	21	28,872	-40.8		09	11.2
10	20	31,656	-36.4		08	13.8
7	17	34,160	-31.1		08	16.8
5	12	36,566	-26.2			

COLUMBIA, MO. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	238	18.4	16.3	17	1.6
1000	30	121				
950	30	565	19.5	15.3	22	4.5
900	30	1,028	17.0	13.0	24	6.1
850	30	1,515	14.6	8.4	24	7.0
800	30	2,026	12.3	3.8	24	7.4
750	30	2,567	9.8	-.9	24	7.2
700	30	3,136	6.5	-4.8	25	6.1
650	30	3,734	2.7	-8.4	25	6.8
600	30	4,384	-1.0	-13.7	26	7.4
550	30	5,066	-4.8	-19.6	26	7.8
500	30	5,818	-9.1	-25.3	26	9.4
450	30	6,623	-14.5	-31.6	27	11.3
400	30	7,508	-20.7	-36.1	27	11.8
350	30	8,482	-27.7	-41.0	27	13.8
300	30	9,571	-36.2	-47.1	28	17.0
250	30	10,811	-45.7		28	20.6
200	30	12,262	-56.3		28	24.3
175	30	13,100	-61.2		28	24.6
150	30	14,051	-63.4		28	20.8
125	30	15,168	-64.4		28	15.3
100	30	16,530	-65.3		28	8.1
80	30	17,893	-63.3		28	2.8
70	30	18,717	-61.2		04	1.4
60	30	19,678	-59.0		08	3.2
50	29	20,833	-56.3		09	4.1
40	29	22,258	-53.9		09	4.9
30	29	24,119	-50.8		09	6.0
25	27	25,313	-49.0		09	6.1
20	26	26,784	-46.6		08	7.2
15	25	28,705	-43.3		09	8.6
10	21	31,460	-38.4		09	8.8
7	7	33,911	-36.4			
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DAYTON, OHIO 983 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	297	17.9	15.3	12	.8
1000	30	145				
950	30	587	19.6	12.9	21	3.5
900	30	1,051	16.6	10.4	23	3.6
850	30	1,536	13.5	6.4	23	3.3
800	30	2,044	10.4	1.8	23	3.5
750	30	2,577	7.4	-3.0	23	3.8
700	30	3,144	4.4	-7.6	24	4.7
650	30	3,738	1.3	-11.7	25	5.0
600	30	4,384	-2.5	-15.1	25	5.3
550	30	5,061	-6.1	-21.0	26	6.5
500	30	5,811	-10.5	-26.1	25	6.9
450	30	6,605	-15.8	-31.5	26	7.6
400	30	7,491	-22.1	-37.1	27	8.3
350	30	8,459	-29.2	-44.0	28	10.5
300	30	9,543	-37.4	-51.1	28	11.9
250	30	10,777	-46.8		29	14.1
200	30	12,223	-56.7		29	18.3
175	30	13,060	-61.3		29	19.4
150	30	14,013	-62.8		30	14.9
125	30	15,135	-63.2		29	11.8
100	30	16,504	-64.3		28	8.1
80	30	17,876	-62.0		31	3.4
70	30	18,704	-60.5		02	1.9
60	30	19,667	-58.4		06	2.7
50	30	20,822	-55.5		07	4.2
40	30	22,254	-52.9		08	5.9
30	27	24,127	-49.8		09	7.3
25	27	25,325	-47.7		09	8.1
20	24	26,812	-45.1		08	8.9
15	20	28,742	-41.4		08	10.5
10	16	31,506	-37.0		08	11.2
7	7	33,958	-32.7			
5						

DEL RIO, TEXAS 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	314	24.6	18.7	13	5.2
1000	30	96				
950	30	547	23.0	18.2	14	8.3
900	30	1,019	19.9	15.7	16	11.1
850	30	1,512	18.1	12.2	16	11.3
800	30	2,031	16.4	7.1	16	8.0
750	30	2,575	13.8	.9	17	4.8
700	30	3,158	10.9	-4.3	17	1.6
650	30	3,768	6.9	-7.6	30	.5
600	30	4,426	2.3	-11.4	29	1.3
550	30	5,117	-2.5	-16.2	26	2.3
500	30	5,874	-7.4	-20.8	26	3.1
450	30	6,681	-12.4	-28.3	25	3.9
400	30	7,578	-18.4	-34.0	26	6.1
350	30	8,562	-25.2	-39.5	26	7.3
300	30	9,664	-33.4	-46.4	27	9.8
250	30	10,919	-43.1		27	13.1
200	30	12,387	-54.5		28	16.5
175	30	13,231	-60.6		28	16.8
150	30	14,176	-67.0		27	13.3
125	29	15,257	-72.6		26	9.1
100	28	16,560	-73.8		27	4.6
80	28	17,873	-69.6		09	1.7
70	28	18,675	-66.0		09	5.3
60	28	19,617	-62.1		09	7.8
50	28	20,755	-58.3		10	7.2
40	28	22,168	-55.1		09	8.4
30	28	24,020	-51.3		09	9.1
25	28	25,209	-49.1		09	8.7
20	26	26,688	-46.4		09	7.9
15	26	28,611	-43.3		08	6.7
10	18	31,382	-38.4		08	7.6
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DENVER, COLO. 838 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,611	10.4	8.7	23	.9
1000	30	109				
950	30	548				
900	30	1,009				
850	30	1,490				
800	30	1,999	12.2	6.3	26	1.9
750	30	2,534	10.1	2.4	25	3.2
700	30	3,110	7.0	-2.2	24	4.1
650	30	3,710	2.8	-6.9	25	5.3
600	30	4,357	-2.0	-10.8	26	8.0
550	30	5,037	-7.0	-17.4	25	9.1
500	30	5,779	-12.0	-22.9	25	10.3
450	30	6,573	-17.4	-31.4	24	11.1
400	30	7,449	-23.8	-38.0	24	13.7
350	30	8,410	-31.2	-45.1	24	15.9
300	30	9,484	-39.7	-50.9	24	19.3
250	29	10,713	-48.4		24	25.3
200	29	12,158	-55.4		25	29.0
175	29	13,005	-57.7		25	27.8
150	29	13,974	-59.3		25	23.2
125	29	15,111	-61.0		25	17.3
100	29	16,492	-62.2		25	8.6
80	29	17,872	-61.5		22	2.7
70	29	18,702	-59.8		14	.8
60	29	19,670	-57.7		09	3.4
50	29	20,826	-55.3		09	4.0
40	29	22,255	-53.6		08	4.9
30	27	24,119	-50.4		09	6.8
25	26	25,315	-48.5		09	7.4
20	25	26,786	-46.5		09	7.8
15	25	28,712	-42.7		09	8.5
10	24	31,482	-38.0		09	10.3
7	17	33,976	-33.3		10	11.1
5	10	36,318	-29.7			

DODGE CITY, KANS. 923 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	791	17.3	14.2	17	1.6
1000	30	96				
950	30	541				
900	30	1,003	17.6	13.6	19	3.2
850	30	1,493	16.8	10.4	23	6.0
800	30	2,009	14.8	5.7	24	7.9
750	30	2,553	12.1	1.7	25	8.3
700	30	3,127	8.3	-2.4	25	8.7
650	29	3,733	4.2	-7.0	25	9.2
600	29	4,380	-.3	-11.8	25	9.0
550	29	5,068	-5.1	-16.3	25	9.0
500	29	5,813	-10.4	-21.7	25	9.3
450	29	6,617	-15.5	-27.9	25	11.1
400	29	7,497	-21.4	-34.8	24	13.7
350	29	8,468	-28.4	-40.8	24	17.1
300	29	9,554	-36.7	-48.6	25	20.0
250	29	10,791	-46.1		25	24.7
200	29	12,241	-56.0		25	27.6
175	29	13,082	-59.9		26	27.3
150	29	14,038	-62.5		26	24.1
125	29	15,156	-64.7		26	17.6
100	29	16,514	-66.0		26	8.5
80	29	17,873	-63.7		24	2.6
70	29	18,695	-61.2		16	.8
60	29	19,656	-59.2		10	2.7
50	28	20,800	-56.9		09	4.4
40	28	22,222	-54.1		09	4.9
30	28	24,079	-51.0		09	6.8
25	28	25,270	-49.1		09	6.8
20	28	26,740	-46.8		09	6.8
15	28	28,661	-43.4		09	7.3
10	27	31,413	-38.1		09	8.2
7	18	33,870	-35.2			
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EL PASO, TEXAS 880 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,193	20.0	7.9	28	.5
1000	30	72				
950	30	525				
900	30	999				
850	30	1,494	20.7	7.5	28	1.2
800	30	2,015	17.9	4.4	26	3.0
750	30	2,560	14.4	1.2	24	4.8
700	30	3,143	10.3	-2.2	22	5.2
650	30	3,749	5.8	-5.6	22	5.4
600	30	4,405	1.1	-9.2	22	7.5
550	30	5,094	-3.8	-14.2	23	9.2
500	30	5,846	-8.5	-19.8	24	11.4
450	30	6,652	-13.5	-25.7	24	12.3
400	30	7,543	-19.6	-32.9	25	14.6
350	30	8,522	-26.7	-39.0	25	16.7
300	30	9,618	-34.9	-46.1	25	19.0
250	30	10,866	-44.4		25	23.6
200	30	12,327	-55.0		25	27.1
175	30	13,170	-60.5		25	27.6
150	30	14,119	-65.5		25	25.2
125	30	15,216	-69.8		25	18.6
100	30	16,541	-70.5		25	10.3
80	29	17,871	-67.5		18	2.1
70	29	18,683	-63.5		10	4.1
60	29	19,635	-60.7		09	6.3
50	29	20,776	-58.0		10	6.0
40	29	22,192	-54.9		09	7.5
30	29	24,043	-51.4		09	7.5
25	29	25,234	-49.1		09	8.0
20	28	26,704	-47.0		08	6.2
15	27	28,617	-43.9		08	6.4
10	25	31,366	-37.9		08	8.0
7	6	33,882	-32.9			
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ELY, NEV. 808 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,908	5.6	2.8	19	2.8
1000	30	121				
950	30	553				
900	30	1,007				
850	30	1,487				
800	30	1,988	8.0	2.9	19	2.3
750	30	2,521	7.7	-1.0	17	1.2
700	30	3,089	4.2	-4.5	24	1.8
650	30	3,683	-.1	-8.1	25	3.3
600	30	4,324	-4.5	-12.8	23	5.2
550	30	4,997	-9.0	-18.4	23	6.2
500	30	5,736	-13.9	-25.4	23	7.1
450	30	6,531	-19.9	-31.7	23	8.3
400	30	7,392	-26.5	-37.5	24	9.0
350	30	8,343	-33.8	-44.3	24	10.9
300	30	9,405	-42.2	-49.1	24	13.6
250	30	10,616	-50.2		24	15.2
200	30	12,058	-53.7		24	17.8
175	30	12,913	-55.2		25	16.3
150	30	13,893	-56.8		25	13.7
125	28	15,044	-58.8		25	11.6
100	28	16,437	-60.3		25	5.8
80	27	17,825	-60.4		21	2.0
70	27	18,658	-59.4		13	1.2
60	27	19,625	-58.0		10	2.7
50	27	20,778	-56.1		10	3.2
40	26	22,200	-53.8		08	4.8
30	25	24,058	-50.9		08	6.8
25	25	25,249	-49.0		09	7.2
20	24	26,713	-46.6		08	8.3
15	22	28,640	-43.4		09	9.0
10	22	31,401	-37.6		09	11.0
7	19	33,849	-32.6		09	12.5
5	8	36,269	-27.8			

EMPALME, MEXICO 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	12	22.9	15.2	35	.5
1000	29	92	24.3	15.9	01	.6
950	29	539	24.3	11.3	17	.5
900	29	1,016	22.9	7.6	19	2.2
850	29	1,511	20.2	5.8	20	3.6
800	29	2,031	17.3	2.9	20	4.8
750	29	2,577	13.7	.8	20	5.0
700	29	3,157	10.0	-1.9	21	5.3
650	29	3,766	6.0	-4.5	21	5.9
600	29	4,420	1.8	-8.1	22	6.2
550	29	5,113	-2.5	-12.4	22	6.9
500	29	5,867	-7.0	-18.3	23	7.4
450	29	6,676	-12.4	-26.1	24	8.1
400	29	7,570	-18.3	-32.7	24	9.6
350	29	8,553	-25.4	-39.4	24	11.9
300	29	9,652	-34.1	-46.5	24	13.1
250	29	10,903	-43.7		24	16.5
200	28	12,363	-55.0		24	21.0
175	27	13,203	-61.0		24	23.3
150	26	14,145	-67.0		24	20.6
125	23	15,230	-71.7		24	15.9
100	23	16,535	-73.1		24	9.2
80	23	17,851	-69.5		12	1.4
70	23	18,653	-65.6		10	4.1
60	23	19,598	-61.4		10	7.3
50	23	20,737	-58.1		10	8.6
40	22	22,153	-54.9		08	9.3
30	22	24,005	-50.8		09	8.0
25	22	25,198	-48.3		09	9.1
20	22	26,674	-46.0		09	7.9
15	18	28,595	-42.9		08	5.6
10	6	31,319	-40.4			
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* FAIRBANKS, ALASKA 996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	135	12.2	6.2	29	.9
1000	28	97				
950	28	531	12.1	2.9	26	1.9
900	28	979	9.3	.4	25	3.2
850	28	1,450	5.8	-1.7	24	3.9
800	28	1,943	2.1	-3.4	24	5.6
750	28	2,459	-1.8	-6.0	23	6.5
700	28	3,006	-5.7	-10.2	23	7.0
650	28	3,582	-9.2	-15.3	23	7.4
600	28	4,200	-12.9	-20.9	23	7.1
550	28	4,856	-17.3	-25.7	23	7.0
500	28	5,567	-22.1	-32.0	24	6.9
450	28	6,329	-28.0	-37.2	24	7.2
400	28	7,172	-33.6	-43.1	25	8.3
350	28	8,095	-40.7	-46.5	25	10.3
300	28	9,128	-47.7		25	11.4
250	28	10,318	-52.2		25	10.5
200	28	11,766	-49.8		26	7.3
175	28	12,643	-48.4		26	5.9
150	28	13,659	-48.0		25	5.2
125	28	14,859	-48.6		25	3.4
100	28	16,328	-48.3		25	1.9
80	28	17,798	-47.8		23	.3
70	28	18,680	-47.3		10	.8
60	28	19,701	-46.7		09	2.4
50	28	20,912	-46.0		09	4.3
40	28	22,399	-45.1		09	4.6
30	28	24,325	-43.7		08	7.5
25	28	25,554	-42.4		09	9.2
20	27	27,067	-40.5		09	10.0
15	27	29,044	-37.6		09	10.5
10	24	31,870	-32.7		08	11.9
7	16	34,415	-28.1		09	14.6
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FLINT, MICH. 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	234	16.8	13.2	21	1.4
1000	30	136				
950	30	575	18.7	10.3	23	4.2
900	30	1,038	16.1	8.8	26	6.3
850	30	1,522	12.7	6.2	26	6.3
800	30	2,029	9.4	2.0	25	7.0
750	30	2,560	6.3	-1.9	25	7.6
700	30	3,125	3.3	-6.1	24	8.8
650	30	3,721	.1	-11.1	25	8.3
600	30	4,360	-3.2	-15.2	25	8.2
550	30	5,039	-7.0	-21.6	26	8.5
500	30	5,782	-11.8	-26.7	26	9.2
450	30	6,575	-17.0	-32.6	26	9.8
400	30	7,454	-23.1	-37.2	27	11.0
350	30	8,419	-30.0	-43.3	27	12.6
300	30	9,499	-38.0	-49.0	27	14.5
250	30	10,729	-47.5		28	18.2
200	30	12,171	-56.8		29	21.0
175	30	13,010	-59.4		29	20.4
150	30	13,971	-60.2		28	16.4
125	30	15,106	-60.6		28	12.3
100	30	16,494	-60.6		27	8.1
80	30	17,886	-59.4		29	5.1
70	29	18,722	-58.4		32	3.1
60	29	19,695	-56.8		01	2.1
50	29	20,855	-54.6		06	4.2
40	29	22,289	-52.6		08	5.4
30	29	24,160	-49.4		09	7.7
25	29	25,361	-47.1		09	8.3
20	29	26,845	-44.6		09	10.1
15	29	28,786	-41.0		09	10.7
10	22	31,571	-35.6		08	11.8
7	7	34,021	-30.4			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1967

FORT WORTH, TEXAS — 993 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	22.9	19.9	18	2.7
1000	30	118				
950	30	569	22.1	18.1	19	9.3
900	30	1,035	20.5	15.0	20	10.0
850	30	1,529	18.3	10.4	20	6.9
800	30	2,047	15.9	4.6	20	4.6
750	30	2,593	12.8	.1	20	3.2
700	30	3,169	9.0	-3.4	21	2.1
650	30	3,781	4.9	-8.0	19	1.4
600	30	4,427	.6	-12.0	23	2.0
550	30	5,116	-3.5	-16.7	25	3.3
500	30	5,869	-7.9	-21.5	26	4.6
450	30	6,680	-13.2	-26.0	26	6.7
400	30	7,569	-19.0	-32.1	27	8.0
350	30	8,550	-25.9	-37.8	27	10.7
300	30	9,649	-34.0	-44.9	28	13.0
250	30	10,900	-43.8		28	16.5
200	30	12,363	-54.6		28	20.3
175	30	13,207	-59.9		28	20.2
150	30	14,157	-65.7		28	17.7
125	30	15,250	-70.6		28	12.7
100	30	16,570	-70.9		28	5.3
80	30	17,906	-66.9		08	1.2
70	30	18,717	-63.8		09	3.6
60	30	19,670	-60.2		10	5.9
50	30	20,815	-57.0		09	5.6
40	28	22,241	-54.2		09	7.8
30	28	24,103	-50.0		08	7.5
25	26	25,296	-48.5		09	6.6
20	24	26,768	-46.2		09	6.5
15	23	28,694	-43.3		09	6.4
10	19	31,467	-39.3		08	9.2
7	10	33,948	-34.9			
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GLASGOW, MONT. — 933 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	696	10.3	6.3	05	2.1
1000	30	114				
950	30	548				
900	30	999	12.9	5.0	07	1.0
850	30	1,478	10.8	2.4	35	.1
800	30	1,981	7.6	-.4	29	1.0
750	30	2,508	3.9	-2.6	30	2.1
700	30	3,067	.2	-5.7	29	3.1
650	30	3,660	-3.3	-10.1	28	4.2
600	30	4,288	-6.8	-17.1	27	5.8
550	30	4,963	-10.8	-23.5	27	6.7
500	30	5,689	-15.5	-28.7	28	7.6
450	30	6,472	-21.1	-33.0	27	9.0
400	30	7,334	-27.5	-38.4	27	10.3
350	30	8,280	-34.9	-46.0	27	12.7
300	30	9,337	-43.2		27	13.3
250	30	10,540	-52.2		27	14.8
200	30	11,966	-56.3		27	16.5
175	30	12,816	-54.9		27	14.7
150	30	13,803	-53.8		26	13.5
125	30	14,969	-55.3		27	11.5
100	30	16,391	-55.6		27	8.2
80	30	17,813	-55.3		27	4.6
70	30	18,665	-54.7		28	2.1
60	30	19,652	-53.9		05	.5
50	30	20,825	-52.9		09	2.6
40	29	22,270	-51.3		09	4.9
30	29	24,149	-48.7		09	6.8
25	28	25,352	-46.9		08	8.3
20	27	26,840	-44.8		09	9.4
15	27	28,779	-41.2		09	11.8
10	20	31,571	-35.6		09	13.4
7	15	34,096	-30.7		09	16.8
5	10	36,531	-25.9			

* GRAND JUNCTION, COLO. — 850 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,474	14.4	5.9	12	2.6
1000	30	76				
950	30	515				
900	30	985				
850	30	1,475	15.6	6.5	12	2.0
800	30	1,989	14.6	2.0	14	3.3
750	30	2,525	11.3	-1.0	19	3.3
700	30	3,104	7.2	-3.5	21	4.8
650	30	3,703	2.4	-6.8	22	6.6
600	30	4,351	-2.6	-10.1	23	8.4
550	30	5,025	-7.7	-14.5	23	10.0
500	30	5,769	-13.1	-21.6	23	11.2
450	30	6,559	-18.0	-29.8	23	12.5
400	30	7,434	-24.3	-36.7	24	14.2
350	30	8,393	-31.8	-43.1	24	16.3
300	30	9,464	-40.3	-49.1	24	19.0
250	30	10,683	-49.2		24	23.0
200	30	12,124	-54.8		24	26.8
175	30	12,973	-56.8		24	24.4
150	30	13,946	-58.5		24	20.5
125	30	15,087	-60.7		24	15.0
100	30	16,469	-62.0		24	7.0
80	30	17,846	-61.9		24	2.6
70	30	18,676	-59.9		20	.6
60	30	19,642	-58.0		11	1.4
50	30	20,795	-56.0		09	3.8
40	30	22,220	-53.9		08	4.9
30	30	24,079	-50.7		[illegible]	5.8
25	29	25,271	-48.9		09	7.0
20	28	26,746	-46.1		09	8.4
15	26	28,673	-42.6		09	9.9
10	22	31,427	-36.8		09	9.8
7	12	33,901	-30.5		09	11.9
5						

* GREAT FALLS, MONT. — 887 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,123	11.3	5.3	26	1.0
1000	30	110				
950	30	549				
900	30	1,008				
850	30	1,482	10.1	2.9	28	1.5
800	30	1,984	7.3	.3	30	1.5
750	30	2,514	4.2	-1.9	29	2.0
700	30	3,071	.9	-6.1	28	2.7
650	30	3,666	-2.4	-10.9	26	3.6
600	30	4,295	-6.3	-14.2	26	5.0
550	30	4,969	-10.2	-19.8	26	5.6
500	30	5,700	-15.1	-25.1	26	5.8
450	30	6,486	-20.5	-30.7	26	6.7
400	30	7,351	-26.9	-37.2	26	6.6
350	30	8,299	-34.4	-43.8	26	7.8
300	30	9,358	-42.8	-51.5	27	7.2
250	30	10,564	-51.8		26	9.0
200	30	11,990	-55.9		27	11.5
175	30	12,840	-55.1		27	11.2
150	30	13,827	-54.1		27	10.7
125	30	14,994	-55.0		27	9.0
100	30	16,416	-55.8		26	6.6
80	30	17,837	-55.6		28	4.2
70	30	18,687	-55.0		29	1.3
60	30	19,673	-54.2		05	.8
50	30	20,844	-53.2		08	2.3
40	30	22,287	-51.5		08	4.2
30	29	24,162	-49.3		08	7.2
25	29	25,362	-47.6		08	8.5
20	27	26,850	-44.9		08	10.6
15	26	28,794	-40.6		[illegible]	12.9
10	21	31,597	-35.0		09	14.6
7	20	34,101	-30.4		09	15.5
5	5	36,496	-24.8			

GREEN BAY, WIS. — 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	210	14.9	12.5	21	.4
1000	30	125				
950	30	558	17.1	10.8	24	3.2
900	30	1,022	15.0	8.2	24	4.5
850	30	1,504	11.8	5.7	25	5.5
800	30	2,008	8.6	2.6	25	6.5
750	30	2,535	5.7	-2.2	25	8.0
700	30	3,101	2.6	-6.6	25	8.3
650	30	3,690	-.5	-10.6	25	8.4
600	30	4,333	-4.1	-14.7	25	9.5
550	30	5,006	-8.1	-20.4	25	10.2
500	30	5,749	-12.5	-25.5	26	10.6
450	30	6,536	-17.6	-30.6	26	11.9
400	30	7,417	-23.7	-37.2	26	13.9
350	30	8,379	-30.6	-43.8	26	16.4
300	30	9,456	-38.7	-48.9	27	19.6
250	30	10,682	-48.2		27	23.0
200	30	12,121	-56.9		27	25.5
175	30	12,962	-59.2		28	23.2
150	29	13,928	-59.3		27	18.7
125	29	15,071	-59.1		27	14.5
100	29	16,468	-59.6		27	10.9
80	29	17,865	-58.8		28	5.8
70	29	18,703	-58.1		30	3.3
60	29	19,679	-56.6		34	1.2
50	[illegible]	20,839	-55.0		05	2.9
40	28	22,271	-52.7		08	5.3
30	28	24,142	-49.4		09	7.6
25	26	25,341	-47.8		09	8.4
20	24	26,822	-45.2		09	8.8
15	21	28,769	-41.9		09	10.6
10	18	31,569	-35.9		09	13.4
7	6	34,114	-31.1			
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GREENSBORO, N. C. — 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	273	18.6	17.0	08	.6
1000	30	162				
950	30	601	18.0	14.1	10	1.2
900	30	1,065	15.7	9.9	06	1.3
850	30	1,549	13.1	6.9	08	1.7
800	30	2,057	10.4	3.7	08	.7
750	30	2,593	8.3	-2.8	35	.7
700	30	3,161	5.7	-6.8	29	1.2
650	30	3,761	2.8	-11.9	27	1.5
600	30	4,408	-1.0	-16.0	27	2.1
550	30	5,092	-4.9	-20.0	27	2.9
500	30	5,842	-9.2	-25.2	27	2.9
450	30	6,646	-14.6	-30.6	27	3.5
400	30	7,532	-20.8	-36.4	28	4.7
350	30	8,505	-28.1	-42.7	28	5.9
300	30	9,593	-36.6	-49.9	28	6.9
250	30	10,831	-46.3		30	7.8
200	30	12,278	-57.0		31	9.4
175	30	13,115	-61.2		31	10.8
150	30	14,064	-64.3		31	10.7
125	30	15,177	-65.2		32	8.0
100	30	16,532	-65.9		32	5.9
80	30	17,892	-63.8		01	3.1
70	30	18,713	-62.1		05	3.6
60	30	19,671	-59.7		07	4.8
50	29	20,816	-56.7		09	5.9
40	28	22,241	-53.7		09	6.4
30	28	24,102	-50.8		09	7.1
25	26	25,293	-49.0		09	6.8
20	24	26,766	-46.2		09	7.1
15	24	28,691	-43.0		09	8.4
10	21	31,442	-38.8		09	8.1
7	15	33,886	-34.5			
5	5	36,197	-32.0			

GUAM, MARIANA IS. — 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	24.9	23.7	10	2.5
1000	30	90				
950	30	542	23.8	21.4	11	6.2
900	30	1,014	21.1	17.7	11	6.1
850	30	1,509	18.5	14.0	11	5.7
800	30	2,027	15.5	10.9	10	5.8
750	30	2,572	12.7	6.8	10	6.3
700	30	3,151	9.9	2.3	10	7.1
650	30	3,761	6.6	-2.3	09	7.1
600	30	4,417	2.9	-6.0	09	7.3
550	30	5,112	-1.3	-10.3	09	7.2
500	30	5,872	-5.6	-15.5	10	7.8
450	30	6,686	-10.4	-20.2	10	8.0
400	30	7,590	-16.3	-27.3	09	6.9
350	30	8,581	-22.9	-34.1	09	7.2
300	30	9,693	-31.1	-42.5	09	6.3
250	30	10,958	-41.3		08	5.5
200	30	12,432	-53.7		08	7.7
175	30	13,277	-60.7		07	7.9
150	30	14,219	-68.2		07	9.0
125	29	15,293	-75.4		07	10.9
100	25	16,572	-78.1		07	12.6
80	25	17,852	-75.8		08	10.5
70	25	18,631	-71.1		09	10.3
60	23	19,560	-65.2		09	10.2
50	23	20,679	-62.2		08	10.7
40	23	22,070	-58.2		09	13.0
30	23	23,905	-53.0		09	17.3
25	22	25,084	-50.9		09	21.9
20	22	26,543	-48.6		09	27.0
15	21	28,452	-44.6		09	30.8
10	14	31,193	-41.0		09	34.2
7	7	33,596	-38.6			
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HILO, HAWAII — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	21.5	19.3	22	2.4
1000	30	139	22.5	19.1	22	2.1
950	30	589	19.1	16.7	11	2.3
900	30	1,048	15.7	13.9	09	3.4
850	30	1,532	13.1	10.5	08	2.9
800	30	2,041	11.9	2.5	08	3.3
750	30	2,584	9.5	-3.2	08	3.3
700	30	3,150	7.0	-8.3	08	3.3
650	30	3,756	5.0	-13.1	10	2.3
600	30	4,407	1.6	-16.4	09	1.8
550	30	5,101	-2.2	-20.9	02	1.3
500	30	5,855	-6.6	-24.9	30	1.7
450	30	6,668	-12.3	-29.7	29	2.9
400	30	7,559	-18.7	-34.4	28	4.5
350	30	8,540	-26.3	-40.1	27	6.4
300	30	9,636	-35.1	-47.7	27	8.0
250	30	10,881	-45.0		27	10.5
200	30	12,334	-56.6		27	15.1
175	30	13,170	-62.5		27	14.6
150	30	14,109	-67.7		27	12.5
125	30	15,195	-71.6		27	9.0
100	30	16,506	-73.2		27	3.6
80	30	17,822	-69.7		08	3.9
70	30	18,622	-67.0		09	7.4
60	29	19,558	-63.8		09	9.1
50	29	20,687	-60.1		09	11.4
40	29	22,092	-56.2		09	14.0
30	29	23,936	-52.1		09	17.0
25	29	25,122	-49.9		09	18.2
20	28	26,588	-47.3		09	19.9
15	28	28,504	-44.2		09	21.1
10	27	31,242	-40.6		09	23.0
7	13	33,676	-37.5			
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HUNTINGTON W. VA. — 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	17.2	16.0	12	.8
1000	30	152				
950	30	596	19.1	13.3	18	2.4
900	30	1,057	16.9	10.4	21	2.2
850	30	1,543	13.6	7.5	24	2.2
800	30	2,052	10.8	2.6	25	2.2
750	30	2,587	8.1	-1.6	25	3.4
700	30	3,155	5.0	-6.5	25	3.4
650	30	3,754	1.7	-11.0	25	3.4
600	30	4,399	-1.6	-16.5	26	4.1
550	30	5,083	-5.2	-21.6	25	4.7
500	30	5,831	-9.7	-26.5	26	5.6
450	30	6,631	-15.1	-30.3	26	6.2
400	30	7,517	-21.4	-36.7	27	6.9
350	30	8,488	-28.5	-42.5	27	8.4
300	30	9,574	-36.7	-49.3	[illegible]	10.0
250	30	10,812	-46.2		30	11.3
200	30	12,262	-56.0		31	13.4
175	30	13,103	-60.2		30	15.1
150	30	14,057	-63.0		30	13.7
125	29	15,182	-63.8		30	10.3
100	29	16,549	-64.3		30	6.3
80	29	17,919	-62.7		32	2.8
70	29	18,745	-60.7		01	2.1
60	29	19,710	-58.5		07	3.6
50	29	20,864	-55.6		08	5.2
40	29	22,297	-52.7		09	6.0
30	28	24,164	-49.7		08	7.2
25	27	25,364	-47.7		09	7.2
20	27	26,846	-44.9		09	8.3
15	25	28,787	-41.3		09	9.5
10	20	31,567	-36.9		10	11.7
7	9	34,000	-33.3			
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* INTERNATIONAL FALLS, MINN. — 972 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	360	10.9	6.3	20	.2
1000	30	121				
950	30	551	12.5	6.1	21	.7
900	30	1,004	10.9	3.4	24	1.4
850	30	1,479	8.4	1.4	25	2.0
800	30	1,978	5.4	-1.8	26	3.1
750	30	2,500	2.6	-5.7	27	4.2
700	30	3,059	-.1	-9.5	27	5.7
650	30	3,641	-3.2	-14.1	27	6.6
600	30	4,278	-6.6	-18.0	27	8.2
550	30	4,946	-10.5	-22.7	27	9.4
500	30	5,681	-15.2	-28.2	27	10.9
450	30	6,461	-20.3	-34.6	27	12.3
400	30	7,332	-26.6	-41.0	27	15.0
350	30	8,282	-33.7	-46.5	27	18.3
300	30	9,345	-41.7	-49.7	26	21.9
250	30	10,557	-50.4		26	28.5
200	28	11,981	-56.3		26	29.4
175	28	12,829	-55.8		27	22.8
150	28	13,812	-54.9		27	17.6
125	28	14,976	-55.4		27	13.7
100	28	16,395	-56.1		27	10.2
80	27	17,814	-55.8		27	5.5
70	27	18,664	-55.1		29	3.4
60	27	19,651	-54.1		32	1.7
50	27	20,823	-53.0		07	2.7
40	27	22,266	-51.4		08	3.8
30	26	24,145	-48.7		09	7.3
25	26	25,350	-46.6		09	7.9
20	25	26,828	-44.3		09	9.8
15	25	28,769	-40.8		09	10.8
10	23	31,568	-35.1		09	13.7
7	18	34,069	-30.1		09	15.6
5	7	36,506	-25.6			

JACKSON, MISS. — 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	94	21.4	20.0	22	.6
1000	30	132	21.6	20.1	21	.8
950	30	585	21.7	17.2	20	3.7
900	30	1,047	19.0	14.2	19	4.0
850	30	1,537	15.9	11.2	19	3.0
800	30	2,050	13.0	5.5	21	1.9
750	30	2,589	9.9	1.5	24	.9
700	30	3,161	7.0	-5.1	30	1.6
650	30	3,764	3.8	-10.0	32	2.4
600	30	4,413	.2	-15.1	33	2.6
550	30	5,097	-3.7	-19.8	32	3.6
500	30	5,853	-7.8	-25.6	32	4.1
450	30	6,656	-12.9	-30.1	32	5.7
400	30	7,553	-19.1	-34.9	32	7.4
350	30	8,533	-26.0	-41.2	32	9.1
300	30	9,630	-34.5	-48.1	32	10.7
250	30	10,879	-44.2		32	11.7
200	30	12,340	-54.8		32	15.1
175	30	13,183	-60.5		32	16.0
150	30	14,131	-65.1		32	15.8
125	30	15,228	-69.7		32	11.6
100	30	16,551	-70.7		34	4.4
80	30	17,883	-67.2		03	3.2
70	30	18,693	-64.7		07	5.0
60	30	19,640	-61.0		08	7.1
50	30	20,783	-57.1		09	7.0
40	29	22,202	-54.2		10	7.3
30	29	24,059	-50.8		09	7.8
25	29	25,252	-48.3		08	7.8
20	28	26,723	-46.3		08	6.8
15	27	28,639	-43.9		08	7.0
10	24	31,383	-39.3		08	8.1
7	10	33,834	-35.2			

* JACKSONVILLE, FLA. — 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	22.7	21.3	36	.8
1000	30	155	22.4	20.4	03	1.1
950	30	602	20.4	17.1	08	1.5
900	30	1,067	17.8	13.3	11	1.2
850	30	1,555	15.1	9.6	07	.8
800	30	2,066	12.3	6.3	02	.8
750	30	2,603	9.2	1.9	33	.4
700	30	3,175	5.9	-1.6	30	.9
650	30	3,771	2.5	-5.9	29	1.9
600	30	4,422	-1.2	-10.6	29	2.3
550	30	5,101	-4.9	-16.0	29	2.2
500	30	5,856	-9.1	-22.3	31	2.1
450	30	6,656	-14.0	-28.3	33	2.7
400	30	7,549	-20.1	-35.3	32	4.0
350	30	8,525	-27.2	-41.1	32	4.8
300	30	9,617	-35.7	-49.1	33	4.8
250	30	10,859	-45.2		32	6.1
200	30	12,314	-55.6		33	8.6
175	30	13,155	-60.7		34	9.8
150	30	14,103	-65.3		34	10.6
125	29	15,207	-68.2		34	8.5
100	29	16,541	-68.8		01	6.5
80	29	17,882	-66.1		05	5.2
70	28	18,690	-63.7		07	6.2
60	28	19,641	-60.7		07	8.2
50	28	20,785	-56.8		09	9.5
40	27	22,210	-53.5		09	8.7
30	27	24,071	-50.6		09	8.3
25	27	25,262	-49.0		09	8.1
20	27	26,734	-46.6		08	7.9
15	25	28,654	-43.4		08	7.9
10	22	31,411	-38.1		09	10.3
7	13	33,894	-33.8		09	12.7

JOHN F. KENNEDY INT. AP NY — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	17.8	13.8	29	1.3
1000	30	164	17.4	12.5	29	2.2
950	30	608	17.8	10.0	29	2.9
900	30	1,066	15.9	7.7	31	2.3
850	30	1,550	12.9	5.3	31	2.2
800	30	2,057	9.7	1.0	32	2.4
750	30	2,591	6.5	-3.1	33	2.5
700	30	3,155	3.9	-8.4	30	2.7
650	30	3,753	.8	-13.0	29	4.1
600	30	4,394	-2.5	-18.3	28	4.8
550	30	5,075	-6.5	-23.2	27	6.2
500	30	5,819	-11.0	-26.5	27	7.2
450	30	6,618	-16.4	-30.7	27	7.7
400	30	7,497	-22.4	-36.4	28	8.7
350	30	8,464	-29.4	-43.0	28	10.2
300	30	9,546	-38.0	-49.5	28	11.7
250	30	10,775	-47.8		28	12.9
200	30	12,213	-58.1		28	15.6
175	30	13,047	-61.4		28	15.3
150	30	13,999	-62.7		29	12.4
125	30	15,122	-63.0		29	9.9
100	28	16,495	-62.6		30	7.6
80	28	17,876	-61.0		34	4.3
70	27	18,705	-59.4		36	2.5
60	27	19,675	-57.6		05	2.8
50	27	20,832	-55.3		08	4.3
40	27	22,264	-52.6		08	5.1
30	27	24,135	-49.7		09	6.5
25	25	25,326	-47.9		09	7.7
20	25	26,805	-45.5		09	8.4
15	24	28,742	-41.6		09	11.2
10	11	31,497	-36.3			
7						

JOHNSTON IS., PACIFIC AREA — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	26.2	22.4	10	6.2
1000	30	122	25.1	21.9	09	6.9
950	30	571	21.5	19.4	09	8.3
900	30	1,039	18.5	15.5	09	8.6
850	30	1,528	15.7	12.1	09	7.9
800	30	2,042	13.5	6.8	09	7.1
750	30	2,586	11.3	.1	09	6.1
700	30	3,159	8.9	-7.8	08	5.4
650	30	3,769	6.0	-13.4	07	5.6
600	30	4,421	2.3	-16.7	08	5.5
550	30	5,111	-2.0	-20.2	08	4.5
500	30	5,869	-6.9	-24.0	08	4.2
450	30	6,678	-12.3	-28.5	08	4.6
400	30	7,575	-18.3	-34.0	07	3.7
350	30	8,557	-25.7	-40.2	04	2.4
300	30	9,655	-34.2	-48.1	32	1.2
250	30	10,904	-44.3		26	3.4
200	30	12,361	-56.0		26	4.9
175	30	13,198	-61.9		27	4.9
150	30	14,138	-67.9		28	4.1
125	30	15,219	-73.1		29	3.1
100	30	16,516	-75.5		04	2.2
80	28	17,818	-71.6		07	5.0
70	28	18,612	-67.9		08	7.3
60	28	19,545	-64.3		09	9.4
50	27	20,670	-60.5		09	11.5
40	27	22,072	-56.3		09	13.0
30	26	23,917	-52.5		09	16.8
25	26	25,100	-50.2		09	19.6
20	26	26,565	-47.6		09	23.2
15	25	28,473	-44.4		09	27.4
10	21	31,200	-40.5		09	28.7
7	9	33,626	-35.6			

KEY WEST, FLA. — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	3	26.0	22.0	16	2.6
1000	29	132	25.0	21.5	16	2.8
950	29	582	22.0	19.1	16	3.1
900	29	1,051	19.4	14.5	17	2.9
850	29	1,542	16.8	10.9	17	2.7
800	29	2,056	13.8	7.1	18	2.6
750	29	2,596	10.6	3.0	19	2.6
700	29	3,170	7.3	-.4	21	2.0
650	29	3,770	3.8	-3.8	22	2.4
600	29	4,423	.1	-8.0	24	1.9
550	29	5,110	-3.8	-11.9	28	2.3
500	29	5,862	-8.3	-17.0	28	2.5
450	29	6,665	-13.4	-22.5	30	2.4
400	29	7,559	-19.4	-28.8	30	2.8
350	29	8,539	-26.3	-35.7	30	3.5
300	29	9,636	-34.6	-43.6	30	3.9
250	29	10,884	-44.5		30	3.6
200	29	12,342	-55.6		31	6.0
175	29	13,183	-61.1		33	7.4
150	29	14,129	-66.3		34	7.8
125	29	15,224	-69.5		35	7.3
100	29	16,548	-71.2		02	6.3
80	29	17,874	-68.5		05	6.9
70	29	18,679	-65.1		07	7.6
60	29	19,625	-61.8		08	9.3
50	29	20,762	-58.7		09	11.5
40	29	22,179	-54.6		09	13.5
30	29	24,041	-50.1		09	12.8
25	29	25,238	-48.0		09	12.6
20	29	26,718	-45.9		09	12.1
15	29	28,647	-42.7		08	11.3
10	25	31,403	-39.2		[illegible]	11.3
7	10	33,874	-34.1			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1967

KING SALMON, ALASKA — 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	15	7.8	4.7	19	1.4
1000	29	105	8.1	4.9	19	1.9
950	29	526	7.3	4.2	19	3.0
900	29	974	5.3	3.0	17	[illegible]
850	29	1,439	2.8	.9	16	3.3
800	29	1,929	.1	-2.0	16	3.7
750	29	2,443	-2.5	-5.7	16	4.5
700	29	2,990	-5.5	-10.6	16	5.4
650	29	3,566	-8.3	-13.9	17	5.0
600	29	4,187	-11.9	-18.0	18	5.4
550	29	4,840	-16.1	-23.8	17	4.8
500	29	5,561	-20.7	-28.6	18	5.3
450	29	6,327	-26.0	-33.9	18	6.3
400	29	7,175	-32.0	-39.4	18	6.1
350	29	8,105	-39.1	-42.7	19	7.0
300	29	9,145	-46.5		19	7.5
250	29	10,336	-52.8		21	[illegible]
200	29	11,778	-50.6		19	7.5
175	28	12,651	-49.1		20	[illegible]
150	28	13,663	-49.0		20	5.8
125	28	14,858	-49.4		18	4.5
100	28	16,319	-49.7		17	[illegible]
80	28	17,779	-49.9		15	3.1
70	28	18,651	-49.9		14	3.1
60	28	19,660	-49.5		12	3.5
50	28	20,855	-49.0		11	4.8
40	27	22,321	-48.1		10	7.4
30	25	24,229	-46.3		09	[illegible]
25	24	25,443	-45.3		09	8.9
20	24	26,937	-43.8		09	10.7
15	22	28,889	-40.7		09	11.3
10	19	31,683	-36.4		09	14.2
7	15	34,164	-33.3		09	16.2
5	8	36,580	-29.9			

♦ KOROR, CAROLINE IS. — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	28.0	24.5	20	.5
1000	30	85	27.3	23.8	21	[illegible]
950	30	534	23.4	19.7	23	1.1
900	30	1,010	20.8	16.0	23	[illegible]
850	30	1,504	18.2	12.6	24	.7
800	30	2,022	15.4	[illegible]	30	.3
750	30	2,566	12.5	6.0	12	.3
700	30	3,145	9.3	2.3	11	.8
650	30	3,755	6.0	-1.3	10	[illegible]
600	30	4,409	2.3	-5.2	11	2.1
550	30	5,106	-1.5	-10.2	11	2.3
500	30	5,863	-5.7	-15.0	10	3.5
450	30	6,681	-10.3	-20.7	10	4.6
400	30	7,582	-15.9	-27.0	08	5.2
350	29	8,575	-22.7	-33.9	09	5.8
300	29	9,687	-30.9	[illegible]	08	7.1
250	29	10,953	-41.1		07	9.0
200	29	12,429	-53.7		06	10.6
175	29	13,273	-60.8		06	12.2
150	29	14,215	-67.9		06	11.8
125	29	15,292	-74.7		07	12.3
100	28	16,575	-77.7		07	9.1
80	28	17,865	-72.8		07	5.3
70	28	18,654	-69.0		08	3.3
60	28	19,585	-64.4		09	1.4
50	27	20,709	-60.5		08	2.0
40	27	22,108	-57.8		09	5.0
30	27	23,936	-54.1		09	15.7
25	26	25,110	-51.9		09	24.5
20	25	26,568	-48.5		09	29.5
15	25	28,480	-43.7		09	33.3
10	23	31,228	-38.8		09	39.8
7	15	33,696	-34.3		09	46.4
5	6	36,041	-33.6			

KOTZEBUE, ALASKA — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	5.8	3.0	34	2.3
1000	30	116	7.0	1.9	34	2.2
950	30	538	6.5	-1.4	35	1.1
900	30	981	4.2	-3.2	26	.7
850	30	1,444	1.9	-5.5	23	.7
800	30	1,932	-.4	-9.1	18	1.2
750	30	2,441	-3.5	-11.8	17	1.8
700	30	2,989	-6.6	-15.8	17	1.7
650	30	3,559	-9.8	-20.3	18	1.8
600	30	4,178	-13.5	-24.4	19	1.9
550	30	4,830	-17.5	-29.5	19	1.1
500	30	5,542	-22.4	-33.2	20	2.3
450	30	6,301	-27.8	-38.1	21	2.0
400	30	7,145	-33.8	-42.7	22	3.2
350	30	8,068	-40.3	-46.5	24	5.4
300	30	9,105	-46.6		24	5.7
250	30	10,300	-51.7		23	6.7
200	30	11,750	-49.7		22	4.6
175	30	12,628	-47.8		22	3.6
150	30	13,647	-47.5		21	3.1
125	30	14,852	-47.4		20	2.5
100	30	16,328	-47.1		19	1.8
80	30	17,807	-46.6		13	1.6
70	30	18,693	-46.1		11	2.1
60	30	19,719	-45.6		10	3.3
50	29	20,937	-45.1		09	4.5
40	29	22,430	-44.2		09	6.0
30	29	24,364	-43.2		09	7.2
25	29	25,595	-42.1		09	8.3
20	29	27,110	-40.4		09	[illegible]
15	28	29,081	-37.5		09	10.3
10	22	31,887	-33.2		09	12.0
7	12	34,403	-30.3			
5	5	36,844	-26.6			

KWAJALEIN, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	4	27.0	24.0	08	4.1
1000	29	93	26.6	23.8	08	[illegible]
950	29	546	23.6	21.4	09	6.1
900	29	1,020	20.8	17.7	09	7.0
850	29	1,511	18.2	14.7	09	7.5
800	29	2,029	15.5	11.6	09	7.5
750	29	2,574	12.9	8.1	09	8.2
700	29	3,154	9.8	3.8	09	7.6
650	29	3,770	6.3	-.3	09	6.9
600	29	4,421	2.3	-3.2	09	6.3
550	29	5,118	-1.5	-8.6	09	6.4
500	29	5,873	-5.7	-14.2	09	5.6
450	29	6,686	-10.4	-19.5	10	[illegible]
400	29	7,590	-15.9	-27.1	09	4.7
350	29	8,577	-23.2	-32.9	08	3.3
300	29	9,693	-31.6	-41.6	08	.9
250	29	10,955	-42.0		28	.5
200	28	12,425	-54.5		26	4.4
175	28	13,258	-61.4		27	5.3
150	27	14,208	-68.3		28	5.9
125	27	15,280	-75.4		29	3.2
100	24	16,564	-77.6		09	.7
80	21	17,847	-73.8		12	1.2
70	20	18,635	-70.9		07	.4
60	18	19,562	-65.5		01	1.0
50	17	20,681	-62.8		04	3.1
40	17	22,065	-58.9		08	8.1
30	17	23,890	-54.5		09	16.7
25	17	25,063	-52.0		09	22.9
20	16	26,516	-49.2		09	[illegible]
15	14	28,420	-45.3		09	32.3
10	11	31,148	-41.3		09	38.1
7	10	33,591	-35.7		09	36.0
5	5	35,924	-32.1			

LAKE CHARLES, LA. — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	23.0	21.8	08	.5
1000	30	131	24.0	21.5	16	1.7
950	30	581	21.0	18.2	18	4.7
900	30	1,046	18.3	13.9	18	4.7
850	30	1,536	16.0	8.5	17	4.9
800	30	2,049	13.8	2.7	17	3.6
750	30	2,589	11.2	-2.1	16	1.8
700	30	3,164	8.1	-7.2	08	.5
650	30	3,773	4.9	-12.4	04	.9
600	30	4,422	1.4	-18.5	03	1.0
550	30	5,111	-2.6	-23.6	01	2.2
500	30	5,867	-7.0	-27.8	34	3.5
450	30	6,678	-12.3	-32.3	34	4.5
400	30	7,572	-18.4	-37.5	33	5.6
350	30	8,554	-25.3	-42.7	32	6.8
300	30	9,655	-33.6	-49.9	32	9.6
250	30	10,908	-43.0		32	12.8
200	30	12,375	-54.2		32	15.4
175	30	13,220	-60.1		32	14.7
150	30	14,169	-65.6		31	14.4
125	30	15,262	-70.6		32	9.1
100	30	16,576	-72.1		34	[illegible]
80	30	17,901	-67.8		06	3.7
70	30	18,708	-64.9		07	5.9
60	30	19,656	-61.5		09	7.7
50	30	20,796	-57.8		09	7.4
40	30	22,214	-53.9		09	9.1
30	29	24,077	-50.6		09	9.1
25	29	25,271	-48.2		09	8.9
20	29	26,747	-46.0		08	8.3
15	29	28,670	-43.4		08	7.0
10	28	31,429	-38.5		08	8.2
7	19	33,891	-35.1		[illegible]	10.5
5	11	36,277	-30.9			

LANDER, WYO. — 829 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,696	9.3	5.8	26	1.2
1000	30	109				
950	30	544				
900	30	1,003				
850	30	1,485				
800	30	1,991	10.1	3.8	29	1.0
750	30	2,522	7.2	.7	25	.6
700	30	3,091	3.6	-2.6	26	2.1
650	30	3,681	-.1	-7.1	25	[illegible]
600	30	4,326	-4.4	-11.3	25	5.7
550	30	4,996	-9.0	-17.8	25	[illegible]
500	30	5,738	-13.8	-24.6	25	8.2
450	30	6,523	-19.4	-30.8	24	10.3
400	30	7,396	-26.0	-37.7	24	11.8
350	30	8,347	-33.6	-44.6	24	13.1
300	30	9,409	-42.2	-48.8	24	15.3
250	30	10,619	-51.0		24	17.3
200	30	12,048	-56.1		24	[illegible]
175	30	12,898	-55.7		25	18.9
150	30	13,879	-56.4		25	15.7
125	30	15,032	-57.9		25	12.0
100	30	16,436	-58.4		25	7.4
80	30	17,836	-59.2		24	3.2
70	30	18,673	-58.2		12	.9
60	30	19,648	-56.6		08	3.0
50	30	20,809	-54.9		09	3.3
40	30	22,240	-53.0		10	4.6
30	30	24,108	-49.6		08	8.0
25	29	25,308	-47.7		09	8.7
20	29	26,788	-45.2		08	9.9
15	20	28,729	-40.9		08	11.7
10						
7						
5						
4						

* LIHUE KAUAI, HAWAII — 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	23.2	19.0	05	2.0
1000	30	144	23.3	19.3	05	3.5
950	30	586	20.1	17.5	07	5.0
900	30	1,055	16.8	[illegible]	07	5.2
850	30	1,541	14.0	8.1	08	5.0
800	30	2,052	12.4	1.2	08	4.2
750	30	2,587	11.2	-6.4	06	3.4
700	30	3,166	8.8	-9.3	06	3.0
650	30	3,769	5.6	-12.7	06	2.8
600	30	4,426	1.9	-16.1	03	2.3
550	30	5,111	-2.2	-19.7	02	2.7
500	30	5,873	-6.9	-23.2	35	2.5
450	30	6,681	-12.5	-27.4	33	2.6
400	30	7,576	-18.8	-33.9	32	4.0
350	30	8,556	-26.5	-40.2	31	5.0
300	30	9,650	-35.0	-47.8	31	6.1
250	30	10,894	-45.2		32	7.1
200	30	12,344	-56.6		31	7.9
175	29	13,182	-62.2		31	[illegible]
150	29	14,122	-67.2		31	[illegible]
125	29	15,211	-70.5		31	6.2
100	29	16,526	-72.2		32	2.6
80	29	17,848	-69.2		07	2.2
70	28	18,649	-66.6		09	[illegible]
60	27	19,585	-63.1		09	8.6
50	27	20,714	-60.3		09	11.5
40	26	22,116	-56.5		08	13.6
30	24	23,960	-52.0		09	15.7
25	24	25,149	-49.1		09	16.9
20	23	26,619	-46.5		09	16.4
15	23	28,537	-44.3		09	16.7
10	23	31,277	-40.2		09	17.8
7	21	33,729	-35.7		09	19.6
5	16	36,081	-33.0		09	20.6
4	7	37,670	-30.1			

LITTLE ROCK, ARK. — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	21.4	18.4	10	.4
1000	30	131	21.6	18.6	13	.7
950	30	578	21.8	17.4	21	5.7
900	30	1,046	19.0	14.9	22	5.8
850	30	1,536	15.8	11.8	23	[illegible]
800	30	2,050	13.1	[illegible]	24	4.3
750	30	2,585	10.4	.7	26	4.0
700	30	3,163	7.5	-3.9	27	3.1
650	30	3,764	3.8	-7.2	30	3.5
600	30	4,416	-.2	-12.7	29	3.9
550	30	5,100	-4.3	-17.1	29	5.0
500	30	5,853	-8.7	-23.0	28	5.5
450	30	6,655	-13.6	-28.5	29	6.3
400	30	7,549	-19.7	-34.4	29	8.2
350	30	8,527	-26.6	-40.3	30	9.6
300	29	9,623	-34.7	-47.4	30	11.4
250	29	10,872	-44.2		30	13.9
200	29	12,332	-55.3		30	17.4
175	29	13,175	-60.4		30	17.8
150	29	14,125	-65.1		29	17.3
125	29	15,226	-68.2		29	12.9
100	29	16,562	-68.5		29	5.3
80	28	17,906	-65.9		36	.9
70	28	18,720	-63.4		07	2.7
60	28	19,675	-60.4		09	5.1
50	28	20,820	-56.9		09	[illegible]
40	27	22,242	-54.3		09	6.5
30	26	24,101	-50.7		08	6.7
25	26	25,295	-48.5		09	7.2
20	23	26,770	-46.6		09	6.7
15	21	28,697	-43.2		09	6.9
10	20	31,462	-38.2		07	6.4
7	10	33,933	-34.5			

MCGRATH, ALASKA — 1001 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	103	9.6	7.2	24	1.2
1000	30	108			22	1.6
950	30	533	10.5	4.3	23	1.6
900	30	984	7.6	2.0	21	2.0
850	30	1,453	4.2	.3	19	[illegible]
800	30	1,944	1.0	-2.6	18	3.4
750	30	2,460	-2.3	-5.6	19	4.7
700	30	3,006	-5.5	-10.9	18	5.1
650	30	3,579	-8.8	-15.4	18	5.1
600	30	4,200	-12.6	-19.0	18	4.8
550	30	4,854	-16.7	-23.8	19	5.4
500	30	5,569	-21.3	-29.3	20	5.7
450	30	6,331	-26.5	-34.2	21	6.5
400	30	7,180	-32.7	-39.8	21	7.1
350	30	8,107	-39.7	-44.5	21	7.5
300	30	9,143	-47.1		21	7.8
250	30	10,334	-52.7		22	6.5
200	30	11,775	-50.7		21	5.5
175	30	12,649	-48.7		22	4.7
150	30	13,663	-48.3		21	3.8
125	30	14,863	-48.6		20	[illegible]
100	30	16,329	-48.8		17	2.0
80	30	17,796	-48.5		12	2.5
70	30	18,674	-48.1		11	2.9
60	30	19,692	-47.5		10	3.6
50	30	20,898	-46.8		10	5.6
40	28	22,381	-45.8		10	6.5
30	28	24,301	-44.4		09	8.2
25	25	25,532	-43.1		09	8.8
20	21	27,056	-41.0		09	10.8
15	17	29,042	-38.4		09	10.8
10	13	31,883	-33.3		09	11.6
7	5	34,408	-29.3			

♦ MAJURO, MARSHALL IS. — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	28.7	24.9	09	3.5
1000	30	96	27.4	22.8	09	4.2
950	30	544	23.5	18.9	09	[illegible]
900	30	1,021	20.8	15.5	10	7.3
850	30	1,514	18.1	12.2	10	7.4
800	30	2,033	15.5	[illegible]	10	7.2
750	30	[illegible]	13.0	5.6	10	7.4
700	30	3,157	9.9	1.7	10	7.7
650	30	3,770	6.5	-2.2	09	7.0
600	30	4,423	2.6	-5.7	09	6.9
550	30	5,115	-1.0	-10.5	09	[illegible]
500	30	5,879	-5.1	-15.2	09	5.4
450	30	6,696	-9.8	-21.2	09	4.6
400	30	7,603	-15.1	-27.1	09	4.3
350	30	8,600	-21.7	-33.8	09	3.2
300	30	9,718	-30.0	-41.8	08	.9
250	30	10,991	-40.0	-50.0	24	2.5
200	30	12,475	-52.6		27	5.8
175	30	13,324	-59.5		28	6.1
150	30	14,273	-66.6		27	6.3
125	30	15,357	-73.6		29	5.6
100	30	16,646	-76.6		29	1.9
80	30	17,945	-71.3		36	1.0
70	30	18,738	-68.6		32	.1
60	29	19,675	-63.5		34	[illegible]
50	29	20,805	-60.2		12	1.7
40	29	22,206	-57.3		10	3.8
30	28	24,043	-52.8		09	14.5
25	28	25,226	-50.2		09	22.1
20	28	26,695	-46.4		09	28.5
15	28	28,621	-42.5		09	[illegible]
10	23	31,371	-38.5		09	40.7
7	5	33,816	-34.4			

♦ MARCUS IS., N. PACIFIC — 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	9	28.6	24.5	19	2.9
1000	30	105	26.7	22.1	19	3.4
950	30	555	22.6	17.5	21	4.6
900	30	1,026	20.2	13.1	22	4.8
850	30	1,519	18.0	8.7	22	4.5
800	30	2,037	15.7	4.5	23	4.4
750	30	2,583	12.8	.0	23	4.1
700	30	3,159	9.7	-4.7	23	4.4
650	30	3,768	6.1	-8.0	23	4.4
600	30	4,423	2.2	-11.3	24	3.1
550	30	5,119	-1.5	-15.5	25	3.0
500	30	5,876	-5.8	-20.2	26	3.1
450	30	6,694	-10.5	-24.7	27	3.1
400	30	7,594	-16.0	-30.6	30	3.2
350	30	8,586	-22.9	-37.4	31	3.4
300	30	9,697	-31.2	-44.9	34	4.1
250	30	10,961	-41.4	-52.4	34	4.5
200	30	12,436	-53.5		36	7.1
175	30	13,281	-60.3		36	9.3
150	30	14,227	-66.7		36	8.3
125	30	15,313	-72.3		01	5.6
100	30	16,613	-75.0		04	4.0
80	30	17,912	-72.3		07	5.8
70	30	18,705	-67.8		07	6.9
60	30	19,642	-62.8		08	9.1
50	30	20,777	-58.8		09	10.7
40	30	22,191	-54.6		09	12.9
30	30	24,053	-49.6		10	14.1
25	30	25,253	-47.4		10	14.1
20	29	26,735	-45.4		10	14.1
15	27	28,676	-41.6		09	13.4
10	23	31,435	-38.1		08	13.5
7	11	33,892	-35.3			
5						

* MEDFORD, OREG. — 968 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	12.3	7.9	28	.4
1000	30	126				
950	30	563	13.7	8.1	28	1.0
900	30	1,015	13.0	6.7	30	1.0
850	30	1,494	10.6	4.6	02	.7
800	30	1,998	8.6	-.6	03	1.3
750	30	2,526	6.1	-6.1	36	[illegible]
700	30	3,091	2.4	-9.7	33	1.1
650	30	3,679	-1.2	-14.9	31	2.1
600	30	4,320	-4.6	-20.9	33	3.5
550	30	4,996	-8.8	-25.9	33	5.3
500	30	5,731	-14.0	-29.6	32	6.8
450	30	6,514	-19.8	-35.1	32	7.7
400	30	7,385	-26.2	-40.2	32	[illegible]
350	30	8,337	-33.1	-45.9	33	10.7
300	30	9,403	-41.1	-50.8	33	12.2
250	30	10,618	-49.6		33	14.0
200	30	12,055	-56.2		33	13.7
175	30	12,901	-57.1		32	12.0
150	29	13,883	-57.4		31	9.5
125	29	15,031	-59.1		30	6.8
100	29	16,426	-59.9		30	4.6
80	29	17,823	-59.0		32	1.8
70	29	18,660	-58.5		04	.9
60	29	19,632	-57.1		07	2.1
50	29	20,790	-55.7		07	3.3
40	29	22,216	-53.8		08	4.7
30	27	24,075	-51.0		09	7.0
25	27	25,266	-49.1		09	8.4
20	27	26,740	-46.5		09	9.1
15	26	28,671	-42.3		09	11.5
10	25	31,442	-36.5		09	13.2
7	25	33,941	-31.4		09	14.9
5	19	36,377	-25.2		08	16.7

MERIDA, MEXICO — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	22.6	22.1	09	2.7
1000	30	123	24.0	23.3	11	5.2
950	30	576	22.7	20.3	13	8.4
900	30	1,045	20.6	15.4	12	7.6
850	30	1,538	18.4	9.7	12	6.0
800	30	2,056	15.3	5.9	12	4.7
750	30	2,598	12.0	1.8	12	4.0
700	30	3,176	8.6	-1.5	13	[illegible]
650	30	3,779	5.1	-6.3	12	2.1
600	30	4,435	1.5	-13.6	07	2.2
550	30	5,119	-2.3	-19.0	04	3.4
500	30	5,882	-6.6	-23.0	03	4.4
450	30	6,691	-11.4	-28.6	03	4.9
400	30	7,594	-17.2	-34.9	01	5.5
350	30	8,581	-24.4	-41.2	36	5.8
300	30	9,686	-32.8	-48.7	35	6.3
250	30	10,943	-42.8		34	6.7
200	30	12,409	-54.4		33	8.7
175	30	13,252	-60.5		34	[illegible]
150	30	14,197	-66.6		36	8.7
125	30	15,283	-72.1		01	8.9
100	30	16,584	-74.7		03	8.1
80	30	17,897	-69.3		07	8.2
70	30	18,699	-66.5		08	8.4
60	30	19,640	-62.8		08	9.5
50	30	20,776	-58.0		08	11.8
40	30	22,195	-54.3		08	14.3
30	30	24,058	-49.7		09	16.6
25	30	25,256	-47.3		08	17.2
20	29	26,739	-45.2		08	18.0
15	24	28,676	-41.7		08	19.3
10	14	31,442	-37.3			

* MIAMI, FLA. — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	23.6	22.2	01	.1
1000	30	129	24.2	22.2	17	1.1
950	30	583	21.9	18.9	19	3.8
900	30	1,047	19.2	14.9	19	3.8
850	30	1,538	16.3	11.4	19	3.2
800	30	2,052	13.3	7.8	20	2.7
750	30	2,592	10.2	3.6	21	2.1
700	30	3,165	6.8	-.6	22	2.5
650	30	3,766	3.2	-4.5	23	2.6
600	30	4,416	-.4	-10.6	25	3.0
550	30	5,100	-4.3	-16.4	25	3.2
500	30	5,853	-8.5	-22.8	27	2.8
450	30	6,659	-13.5	-28.1	29	3.2
400	30	7,550	-19.4	-34.5	29	3.6
350	30	8,529	-26.5	-40.7	28	3.4
300	30	9,625	-34.9	-48.4	30	3.9
250	30	10,871	-45.0		29	4.8
200	30	12,326	-55.9		30	6.0
175	30	13,165	-61.5		32	7.2
150	30	14,109	-66.3		34	7.6
125	30	15,203	-69.6		35	7.4
100	30	16,528	-70.8		02	6.6
80	28	17,859	-68.3		05	6.2
70	28	18,665	-65.0		07	8.0
60	28	19,613	-61.5		08	10.4
50	27	20,754	-58.2		09	12.6
40	27	22,170	-54.7		10	13.6
30	27	24,028	-50.2		09	12.2
25	26	25,225	-48.2		09	12.1
20	25	26,701	-46.3		09	12.5
15	25	28,624	-42.9		09	10.8
10	17	31,386	-38.5		08	10.3
7	10	33,848	-35.6			

* MIDLAND, TEXAS — 913 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	874	21.0	15.2	13	3.1
1000	30	79				
950	30	530				
900	30	1,001	21.1	14.6	15	5.5
850	30	1,496	19.7	12.2	18	10.9
800	30	2,018	17.7	6.9	19	7.7
750	30	[illegible]	14.6	2.7	20	5.6
700	30	3,148	10.8	-1.4	21	3.8
650	30	3,759	6.4	-5.4	23	3.2
600	30	4,413	1.5	-9.0	24	3.3
550	30	5,097	-3.1	-14.6	24	4.1
500	30	5,857	-7.8	-20.3	24	5.9
450	30	6,665	-12.9	-25.6	25	7.9
400	30	7,557	-18.9	-31.7	25	10.1
350	30	8,538	-26.1	-37.0	25	12.1
300	30	9,635	-34.5	-45.4	26	15.0
250	30	10,885	-44.1		26	19.8
200	30	12,348	-54.8		26	24.8
175	30	13,191	-60.6		26	24.6
150	30	14,139	-65.8		26	20.2
125	30	15,232	-70.4		26	15.0
100	30	16,550	-71.8		26	6.9
80	30	17,877	-68.1		13	.9
70	30	18,685	-64.7		09	3.5
60	30	19,636	-61.3		09	6.3
50	30	20,776	-58.3		10	7.0
40	30	22,189	-55.4		09	7.5
30	28	24,040	-51.4		09	7.3
25	28	25,229	-49.1		09	7.2
20	24	26,699	-47.0		08	6.3
15	24	28,619	-43.9		09	7.2
10	22	31,379	-38.2		08	9.7
7	20	33,869	-32.8		09	10.2
5	8	36,253	-27.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MONTGOMERY, ALA. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	20.8	19.2	08	1.3
1000	30	142	21.1	19.0	11	1.2
950	30	591	21.4	17.0	18	1.9
900	30	1,056	19.0	14.2	21	1.5
850	30	1,546	15.7	11.1	25	.9
800	30	2,059	12.5	6.9	30	1.4
750	30	2,597	9.7	.8	30	1.6
700	30	3,169	6.6	-5.0	28	1.6
650	30	3,774	3.2	-10.3	29	2.0
600	30	4,420	-.1	-14.6	31	2.7
550	30	5,108	-3.7	-20.6	32	3.7
500	30	5,859	-7.8	-24.1	32	4.1
450	30	6,669	-13.0	-29.1	32	5.7
400	30	7,560	-18.9	-36.1	33	7.3
350	30	8,540	-26.2	-41.5	32	8.2
300	30	9,635	-34.7	-48.9	33	9.6
250	30	10,882	-44.4		33	11.6
200	30	12,340	-55.0		32	13.1
175	29	13,185	-59.9		32	15.2
150	29	14,138	-64.2		32	13.8
125	28	15,241	-68.7		32	11.3
100	28	16,574	-69.1		33	5.1
80	28	17,915	-66.6		04	3.9
70	27	18,727	-64.5		06	5.0
60	27	19,678	-60.9		07	7.2
50	27	20,823	-56.8		09	7.7
40	27	22,248	-53.2		09	7.4
30	27	24,115	-50.2		09	7.5
25	25	25,312	-47.9		09	7.5
20	25	26,793	-45.0		09	7.6
15	22	28,734	-42.1		08	7.8
10	20	31,514	-36.4		09	10.6
7	9	34,059	-30.7			
5						

* NANTUCKET, MASS. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	14	14.3	12.9	19	1.5
1000	30	170	16.1	10.0	22	3.7
950	30	607	16.8	7.4	24	3.4
900	30	1,068	14.7	4.6	25	2.2
850	30	1,549	12.3	1.0	27	2.0
800	30	2,056	9.5	-2.2	27	2.0
750	30	2,586	6.9	-7.2	28	3.3
700	30	3,153	3.8	-11.5	28	4.1
650	30	3,748	.6	-14.6	27	4.4
600	30	4,390	-3.0	-19.1	27	5.2
550	29	5,069	-6.8	-24.0	27	6.3
500	29	5,812	-11.3	-28.1	27	6.9
450	29	6,609	-16.6	-32.5	27	8.1
400	29	7,488	-22.7	-37.3	28	8.7
350	29	8,454	-29.9	-43.7	28	9.6
300	29	9,534	-38.4	-50.0	28	10.9
250	29	10,763	-47.7		28	12.5
200	29	12,203	-57.5		29	14.4
175	29	13,039	-61.1		29	14.4
150	29	13,992	-62.5		29	11.8
125	29	15,120	-62.1		29	10.1
100	29	16,502	-61.0		30	7.7
80	29	17,893	-59.1		33	3.4
70	29	18,733	-57.6		36	1.5
60	29	19,710	-55.9		05	2.3
50	28	20,876	-53.8		07	2.9
40	27	22,318	-51.4		08	4.5
30	27	24,197	-48.8		09	6.6
25	27	25,400	-46.8		09	7.7
20	27	26,887	-44.2		09	9.2
15	25	28,841	-40.3		09	11.0
10	24	31,646	-34.4		09	13.7
7	20	34,163	-28.8		10	14.5
5						

* NASHVILLE, TENN. 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	19.2	17.9	14	.7
1000	30	146				
950	30	593	20.1	14.6	20	3.9
900	30	1,055	17.7	11.8	23	4.6
850	30	1,541	14.7	8.6	24	4.0
800	30	2,052	11.7	3.7	25	4.0
750	30	2,589	8.6	-.8	26	4.2
700	30	3,157	5.2	-5.4	26	3.5
650	30	3,759	2.3	-10.8	27	2.9
600	30	4,403	-.9	-16.6	29	3.2
550	30	5,087	-4.5	-20.6	29	4.3
500	30	5,838	-8.9	-25.2	29	5.2
450	30	6,642	-14.2	-29.4	30	6.4
400	30	7,530	-20.5	-35.8	30	8.1
350	30	8,504	-27.3	-41.4	30	9.0
300	30	9,596	-35.5	-48.6	30	12.0
250	30	10,839	-44.9		31	14.8
200	30	12,296	-55.4		31	17.6
175	30	13,138	-60.2		30	17.6
150	30	14,091	-63.1		31	15.1
125	29	15,204	-65.6		30	11.6
100	28	16,555	-66.1		31	5.5
80	28	17,914	-63.8		35	2.6
70	28	18,737	-61.2		05	3.3
60	28	19,698	-58.4		07	4.7
50	28	20,852	-55.5		08	5.1
40	28	22,281	-53.2		09	5.4
30	27	24,146	-49.8		09	6.4
25	26	25,342	-47.8		09	6.9
20	26	26,821	-45.4		09	7.2
15	24	28,760	-41.5		09	9.1
10	24	31,542	-36.2		09	11.5
7	20	34,044	-30.4		09	13.1
5	9	36,447	-25.8			

NOME, ALASKA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	6.1	2.2	34	2.1
1000	30	110	7.5	1.6	36	2.4
950	30	533	6.6	-.2	05	1.8
900	30	974	4.2	-2.0	10	1.1
850	30	1,437	1.8	-5.0	15	1.2
800	30	1,924	-.3	-9.2	14	1.9
750	30	2,434	-2.8	-13.0	14	1.6
700	30	2,983	-5.8	-15.6	14	1.6
650	30	3,554	-9.0	-19.2	14	1.2
600	30	4,176	-12.8	-22.7	14	1.1
550	30	4,829	-17.1	-27.7	14	1.1
500	30	5,544	-21.8	-30.8	15	.9
450	30	6,305	-27.2	-35.3	13	.8
400	30	7,150	-33.0	-40.6	04	.1
350	30	8,076	-39.9	-45.4	21	.7
300	30	9,112	-47.2		23	.7
250	30	10,303	-52.6		16	1.5
200	30	11,747	-50.2		18	1.6
175	30	12,622	-48.7		18	1.8
150	30	13,637	-48.1		17	2.2
125	30	14,839	-48.0		15	1.9
100	30	16,311	-47.9		13	1.6
80	30	17,783	-47.8		11	2.9
70	30	18,664	-47.3		11	3.7
60	30	19,685	-46.8		10	4.2
50	30	20,895	-46.2		09	5.7
40	30	22,380	-45.6		09	6.9
30	30	24,302	-44.2		09	7.6
25	30	25,528	-43.0		09	9.7
20	20	27,038	-41.3		09	10.9
15	16	29,000	-39.0		08	12.0
10	5	31,845	-33.9			
7						
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* NORTH PLATTE, NEBR. 916 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	848	12.7	11.7	08	1.0
1000	30	105				
950	30	541				
900	30	999	14.2	11.5	14	1.4
850	30	1,483	13.5	8.0	18	1.4
800	30	1,993	11.6	4.5	26	2.5
750	30	2,529	8.7	.5	27	4.5
700	30	3,099	5.7	-4.3	26	7.1
650	30	3,699	2.3	-9.6	26	8.2
600	30	4,344	-2.1	-13.1	26	10.3
550	30	5,027	-6.8	-19.0	26	11.6
500	30	5,768	-11.6	-26.6	26	11.9
450	30	6,564	-17.1	-32.2	26	12.7
400	30	7,442	-23.1	-36.5	25	15.5
350	30	8,407	-30.1	-43.1	25	17.8
300	30	9,485	-38.7	-50.8	25	20.0
250	30	10,711	-48.1		25	23.8
200	30	12,153	-56.2		25	27.5
175	30	12,997	-57.9		25	26.5
150	30	13,964	-59.8		25	22.2
125	30	15,098	-61.0		26	17.2
100	30	16,480	-62.1		26	8.8
80	30	17,861	-61.0		26	3.5
70	30	18,693	-59.0		19	.2
60	30	19,665	-57.3		09	2.0
50	30	20,823	-55.5		10	3.4
40	30	22,254	-52.9		09	5.1
30	30	24,123	-49.9		[illegible]	6.7
25	29	25,316	-48.6		09	7.7
20	29	26,793	-45.9		09	8.8
15	27	28,726	-42.0		09	10.5
10	24	31,509	-35.7		09	12.2
7	13	33,997	-30.4		09	12.5
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* OAKLAND, CALIF. 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	12.4	10.6	25	1.6
1000	30	111	11.6	10.0	24	2.2
950	30	544	11.5	8.3	24	2.9
900	30	996	15.1	2.4	31	2.9
850	30	1,479	14.1	-2.0	34	2.6
800	30	1,988	11.2	-5.7	36	1.9
750	30	2,519	8.1	-9.5	34	1.4
700	30	3,090	4.5	-12.7	33	2.1
650	30	3,683	1.1	-15.7	32	3.1
600	30	4,329	-2.8	-20.5	32	3.5
550	30	5,004	-7.1	-24.5	31	5.1
500	30	5,751	-11.9	-29.4	31	6.5
450	30	6,541	-17.9	-34.2	32	9.0
400	30	7,419	-24.6	-39.0	32	10.8
350	30	8,377	-32.1	-45.5	31	11.9
300	30	9,447	-40.5	-50.9	31	13.1
250	30	10,667	-48.5		31	15.1
200	30	12,110	-55.4		31	15.1
175	30	12,958	-57.3		30	13.1
150	30	13,931	-58.2		29	11.7
125	30	15,071	-60.4		28	9.3
100	30	16,458	-61.6		28	6.1
80	30	17,842	-60.8		32	1.6
70	30	18,673	-59.9		07	1.1
60	30	19,637	-58.8		08	2.9
50	30	20,786	-57.2		09	3.9
40	30	22,204	-55.1		09	5.1
30	30	24,053	-51.9		08	6.4
25	30	25,240	-50.0		08	6.8
20	30	26,707	-47.4		09	7.5
15	30	28,625	-43.7		09	8.8
10	29	31,385	-37.6		09	10.4
7	24	33,858	-32.1		08	12.3
5	14	36,256	-27.4		09	13.4

OKLAHOMA CITY, OKLA. 967 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	392	20.6	16.9	14	2.3
1000	30	102				
950	30	545	20.7	16.9	17	5.1
900	30	1,016	20.0	14.9	21	9.9
850	30	1,509	18.2	11.1	22	9.2
800	30	2,026	15.4	7.3	23	8.1
750	30	2,566	12.6	1.5	24	6.9
700	30	3,147	8.7	-2.2	25	5.9
650	30	3,749	4.3	-5.0	25	6.0
600	30	4,403	-.2	-10.7	25	6.1
550	30	5,087	-4.7	-15.1	26	7.0
500	30	5,838	-9.2	-21.3	25	8.0
450	29	6,639	-14.3	-26.7	25	9.4
400	29	7,528	-20.2	-33.3	25	11.0
350	29	8,504	-27.1	-39.7	26	13.1
300	29	9,598	-35.1	-47.8	27	15.0
250	29	10,842	-45.0		27	18.1
200	29	12,297	-55.8		27	23.2
175	29	13,138	-60.1		27	23.6
150	29	14,090	-64.4		27	21.5
125	29	15,195	-67.4		27	16.0
100	29	16,535	-68.7		[illegible]	5.8
80	29	17,879	-65.2		08	.2
70	29	18,697	-62.6		09	1.9
60	29	19,653	-59.9		09	4.0
50	29	20,799	-57.0		09	4.5
40	29	22,220	-54.0		09	5.6
30	29	24,081	-51.0		09	7.0
25	29	25,272	-49.1		09	7.0
20	29	26,744	-46.5		09	6.9
15	27	28,662	-43.6		08	7.2
10	23	31,417	-39.1		10	7.1
7	15	33,879	-35.4			
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OMAHA, NEBR. 966 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	403	16.1	14.4	10	2.1
1000	30	108				
950	30	546	16.9	13.7	13	2.4
900	30	1,008	16.1	10.8	21	1.6
850	30	1,493	14.2	6.9	24	3.4
800	30	2,003	11.6	2.6	26	4.5
750	30	2,537	8.8	-1.7	27	6.5
700	30	3,109	5.3	-5.4	27	7.5
650	30	3,707	1.9	-8.9	27	9.5
600	30	4,354	-1.6	-14.4	26	11.5
550	30	5,033	-5.6	-21.1	26	12.0
500	30	5,784	-10.4	-24.9	26	12.8
450	30	6,581	-15.7	-28.3	26	13.7
400	30	7,468	-21.8	-34.2	26	16.3
350	30	8,437	-28.9	-40.4	26	17.6
300	30	9,522	-37.2	-47.2	26	20.4
250	30	10,755	-47.0		25	24.1
200	30	12,198	-56.7		25	27.1
175	29	13,040	-60.0		26	27.2
150	29	13,998	-61.1		27	25.6
125	29	15,130	-62.0		27	15.9
100	28	16,505	-62.8		27	9.1
80	28	17,883	-61.2		27	3.6
70	28	18,715	-59.4		27	1.2
60	28	19,682	-57.4		07	.9
50	28	20,840	-55.3		09	3.0
40	28	22,271	-52.9		09	4.1
30	28	24,138	-50.0		09	6.2
25	28	25,333	-48.0		09	7.0
20	26	26,812	-45.5		09	7.9
15	26	28,741	-42.7		09	8.6
10	24	31,503	-37.8		09	9.6
7	11	33,938	-34.8			
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PAGO PAGO, AMERICAN SAMOA • 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	27.7	23.7	11	5.1
1000	30	117	26.1	21.7	11	5.7
950	30	573	22.1	18.5	10	6.9
900	30	1,037	18.9	14.9	09	6.7
850	30	1,527	16.5	10.2	09	6.4
800	30	2,043	14.5	6.4	09	5.4
750	30	2,588	11.8	2.3	08	3.2
700	30	3,161	8.9	-3.5	08	2.3
650	30	3,772	5.7	-8.6	09	1.6
600	30	4,423	2.0	-13.2	12	1.3
550	30	5,116	-1.9	-17.4	21	.4
500	30	5,874	-6.2	-21.7	23	.9
450	30	6,689	-11.6	-27.5	23	2.6
400	30	7,584	-17.4	-33.6	22	4.5
350	30	8,572	-24.3	-39.9	22	6.6
300	30	9,676	-32.7	-47.8	23	8.2
250	30	10,933	-42.6		23	11.8
200	30	12,402	-54.3		23	13.5
175	30	13,245	-60.7		24	14.2
150	29	14,191	-67.3		25	13.5
125	29	15,273	-73.3		25	11.7
100	29	16,567	-76.6		26	9.2
80	29	17,857	-73.3		27	7.6
70	29	18,646	-68.8		27	6.1
60	29	19,583	-63.2		27	5.8
50	29	20,716	-58.9		29	3.7
40	28	22,131	-54.4		27	1.2
30	27	23,990	-50.6		08	4.0
25	26	25,186	-48.6		08	8.0
20	26	26,662	-45.4		09	12.3
15	23	28,589	-42.4		09	15.6
10	23	31,352	-38.3		09	15.3
7	9	33,791	-35.7			
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* PEORIA, ILL. 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	200	17.7	15.0	16	1.1
1000	30	130				
950	30	570	18.3	12.6	21	4.5
900	30	1,033	16.2	10.9	23	6.0
850	30	1,518	13.2	7.7	24	6.1
800	30	2,026	10.6	2.5	24	6.0
750	30	2,562	7.8	-2.5	24	5.7
700	30	3,128	4.9	-6.7	24	6.7
650	30	3,727	1.8	-10.6	25	7.5
600	30	4,371	-2.2	-14.6	25	7.5
550	30	5,050	-6.1	-20.9	26	8.4
500	30	5,798	-10.4	-26.5	26	9.7
450	30	6,598	-15.8	-31.8	27	10.9
400	30	7,480	-21.7	-36.7	27	12.5
350	30	8,451	-28.8	-42.6	28	13.8
300	30	9,536	-36.9	-48.5	29	16.3
250	30	10,773	-46.6		29	22.0
200	30	12,218	-57.0		28	25.7
175	30	13,055	-61.2		28	22.4
150	30	14,010	-61.9		28	18.5
125	30	15,137	-62.7		28	13.7
100	30	16,508	-64.0		27	9.1
80	30	17,879	-62.1		29	3.5
70	30	18,707	-60.1		36	1.0
60	30	19,675	-57.8		07	2.4
50	30	20,831	-55.4		08	4.0
40	30	22,263	-52.7		09	5.5
30	30	24,131	-50.0		09	5.9
25	30	25,328	-48.0		09	7.1
20	30	26,807	-45.6		09	8.3
15	30	28,740	-42.0		09	9.8
10	30	31,522	-35.5		09	13.1
7	28	34,030	-30.5		09	14.1
5	8	36,520	-25.1			

* PITTSBURGH, PA. 976 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	17.8	13.4	18	1.1
1000	30	150				
950	30	593	19.1	11.4	22	3.1
900	30	1,054	16.5	8.9	25	4.0
850	30	1,539	13.3	6.2	26	3.2
800	30	2,046	9.9	3.1	25	3.3
750	30	2,576	6.7	-1.2	25	3.4
700	30	3,144	4.1	-7.1	26	3.9
650	30	3,738	.8	-12.2	25	4.1
600	30	4,382	-2.5	-18.3	25	4.6
550	30	5,060	-6.2	-24.3	26	5.4
500	30	5,808	-10.6	-29.3	26	6.6
450	30	6,604	-15.9	-33.1	26	8.1
400	30	7,487	-22.1	-38.2	27	8.5
350	30	8,455	-29.3	-43.2	27	10.5
300	30	9,538	-37.6	-50.5	28	11.3
250	30	10,771	-46.9		28	13.0
200	30	12,216	-56.7		29	15.6
175	30	13,054	-60.6		29	15.2
150	30	14,010	-62.0		30	13.9
125	30	15,136	-62.3		30	9.4
100	29	16,515	-62.7		29	6.8
80	29	17,895	-60.9		31	2.4
70	29	18,727	-59.3		02	1.3
60	29	19,696	-57.2		06	2.1
50	29	20,856	-54.9		07	3.0
40	29	22,291	-52.3		08	3.9
30	28	24,166	-49.6		09	5.7
25	28	25,366	-47.4		09	6.8
20	[illegible]	26,849	-45.0		09	7.2
15	28	28,787	-41.1		09	9.6
10	27	31,582	-35.3		09	12.3
7	20	34,077	-31.3		09	15.3
5	9	36,485	-26.9			

PONAPE, CAROLINE IS. • 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	26	39	28.5	24.4	08	2.3
1000	26	81	27.9	23.5	09	2.7
950	26	528	23.8	18.9	10	4.9
900	26	1,006	20.8	16.1	10	6.5
850	26	1,500	18.0	12.7	10	7.0
800	26	2,018	15.5	9.0	10	6.6
750	26	2,563	12.8	5.1	09	5.9
700	26	3,141	9.6	1.0	10	5.7
650	26	3,751	6.3	-3.0	10	6.4
600	26	4,407	2.7	-7.2	10	6.3
550	26	5,102	-1.1	-11.3	09	5.3
500	26	5,862	-5.4	-16.4	10	3.9
450	26	6,683	-9.9	-22.6	09	4.8
400	26	7,585	-15.3	-28.6	09	4.9
350	26	8,580	-22.1	-35.7	08	4.7
300	26	9,696	-30.5	-44.5	09	3.5
250	26	10,966	-40.6	-52.0	10	3.5
200	26	12,445	-53.0		06	1.9
175	26	13,293	-59.8		04	2.4
150	25	14,241	-67.0		02	1.4
125	25	15,322	-74.1		34	.8
100	25	16,609	-77.2		01	1.0
80	24	17,902	-71.6		33	1.0
70	24	18,698	-67.8		34	.6
60	23	19,632	-63.7		27	.5
50	23	20,759	-60.5		15	2.0
40	23	22,157	-58.1		10	4.9
30	23	23,986	-53.6		09	14.6
25	22	25,164	-50.6		09	23.9
20	22	26,626	-47.9		09	28.5
15	21	28,543	-44.0		09	32.9
10	21	31,291	-39.3		09	38.9
7	13	33,728	-36.4			
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* PORTLAND, MAINE 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	20	15.0	11.9	25	.6
1000	30	158	15.6	10.3	29	.8
950	30	595	16.5	8.0	31	1.9
900	30	1,054	15.1	6.0	30	2.2
850	30	1,537	12.2	4.4	29	3.1
800	30	2,042	9.1	.9	29	4.2
750	30	2,571	6.3	-4.6	29	4.9
700	30	3,137	2.7	-8.6	28	6.1
650	30	3,727	-1.0	-13.2	[illegible]	7.5
600	30	4,369	-4.3	-17.4	28	8.7
550	30	5,042	-8.1	-22.3	28	8.6
500	30	5,785	-12.7	-27.1	28	9.6
450	30	6,573	-17.8	-32.3	28	10.1
400	30	7,453	-24.0	-38.3	27	10.3
350	30	8,415	-30.8	-43.4	27	11.9
300	30	9,491	-39.1	-49.6	27	13.8
250	30	10,716	-48.8		27	15.2
200	30	12,151	-58.0		28	17.3
175	30	12,986	-60.9		28	17.2
150	29	13,939	-61.5		28	14.2
125	27	15,082	-61.2		28	12.1
100	27	16,470	-60.5		29	8.6
80	27	17,865	-58.8		31	4.0
70	27	18,704	-57.5		35	1.7
60	27	19,683	-55.8		04	2.0
50	27	20,848	-53.9		07	2.4
40	27	22,287	-51.9		09	3.8
30	27	24,161	-49.5		08	5.8
25	27	25,359	-47.7		09	7.5
20	26	26,840	-44.9		09	10.0
15	25	28,785	-41.0		09	12.2
10	19	31,553	-35.9		09	13.9
7	11	34,086	-30.0			
5	5	36,488	-26.8			

* QUILLAYUTE, WASH. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	58	10.3	9.6	11	.1
1000	30	135	10.4	9.3	01	.5
950	30	564	11.2	5.6	36	1.8
900	30	1,014	10.9	1.5	36	1.5
850	30	1,490	9.6	-1.4	35	1.6
800	30	1,991	7.2	-5.4	34	1.6
750	30	2,521	4.4	-9.1	32	1.9
700	30	3,078	1.5	-12.7	32	2.4
650	30	3,669	-1.7	-15.3	32	3.6
600	30	4,305	-5.5	-20.4	32	4.4
550	30	4,975	-9.9	-24.0	31	4.9
500	30	5,710	-14.9	-26.8	31	6.1
450	30	6,492	-20.5	-31.9	31	6.8
400	30	7,361	-26.9	-37.1	31	8.0
350	29	8,308	-34.1	-43.2	31	9.3
300	29	9,368	-42.3	-47.6	31	10.5
250	29	10,577	-51.2		32	12.7
200	28	12,004	-57.7		30	13.7
175	26	12,847	-57.4		29	11.2
150	26	13,823	-56.6		30	9.4
125	26	14,978	-57.3		29	7.7
100	26	16,386	-57.8		31	4.9
80	26	17,797	-56.9		31	2.8
70	25	18,639	-56.2		34	1.7
60	25	19,619	-55.4		02	1.8
50	24	20,784	-54.0		05	2.8
40	23	22,221	-52.1		08	4.8
30	22	24,089	-49.7		08	7.1
25	21	25,282	-47.9		08	8.8
20	21	26,762	-45.4		08	8.6
15	19	28,702	-41.7		08	10.8
10	18	31,490	-35.3		09	13.8
7	10	33,997	-30.6			
5						

RAPID CITY, S. DAK. 904 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	11.1	9.2	32	1.5
1000	30	111				
950	30	547				
900	30	1,003			31	1.6
850	30	1,482	12.2	6.4	26	1.5
800	30	1,989	9.8	3.7	26	2.4
750	30	2,519	7.0	-.4	27	3.3
700	30	3,088	3.3	-4.5	27	4.6
650	30	3,677	-.4	-9.1	27	5.4
600	30	4,322	-4.2	-13.8	27	6.1
550	30	4,990	-8.3	-19.1	27	7.7
500	30	5,737	-13.1	-24.3	26	9.0
450	30	6,523	-18.7	-29.8	26	11.1
400	30	7,400	-25.0	-36.8	26	12.6
350	30	8,356	-32.5	-43.6	26	14.7
300	30	9,424	-41.1	-48.7	25	18.0
250	30	10,637	-50.5		24	20.3
200	30	12,067	-57.1		24	23.2
175	30	12,912	-56.9		25	21.8
150	30	13,890	-57.0		25	19.1
125	30	15,041	-57.8		26	13.4
100	30	16,446	-59.0		26	7.6
80	30	17,842	-59.4		26	3.3
70	30	18,680	-58.0		26	1.0
60	30	19,656	-56.2		06	1.3
50	30	20,820	-54.4		08	2.8
40	30	22,255	-52.6		09	4.3
30	30	24,123	-50.2		09	6.9
25	29	25,322	-47.8		09	8.2
20	29	26,803	-45.4		09	9.0
15	27	28,728	-42.2		09	10.5
10	25	31,500	-37.7		09	11.4
7	18	33,954	-34.1		09	12.6
5	[illegible]	36,202	-33.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST CLOUD, MINN. 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	316	13.1	11.3	16	1.5
1000	30	113				
950	30	550	15.0	9.9	19	1.8
900	30	1,005	13.7	7.2	21	2.1
850	30	1,485	11.0	4.8	24	3.2
800	30	1,989	8.1	1.4	24	4.3
750	30	2,516	5.4	-2.8	25	4.9
700	30	3,081	2.4	-5.6	26	5.7
650	30	3,672	-1.0	-10.7	26	6.2
600	30	4,311	-4.5	-16.3	26	6.7
550	30	4,984	-8.3	-21.5	26	8.7
500	30	5,726	-12.9	-26.5	26	9.8
450	30	6,510	-18.3	-30.9	27	10.4
400	30	7,390	-24.3	-35.7	27	12.3
350	30	8,350	-31.3	-42.0	26	16.7
300	30	9,424	-39.5	-47.9	25	19.8
250	30	10,645	-49.1		25	23.9
200	30	12,079	-57.7		25	27.7
175	30	12,919	-58.3		26	26.0
150	30	13,891	-57.4		27	20.9
125	30	15,042	-58.0		27	14.0
100	30	16,446	-58.6		27	10.5
80	30	17,847	-58.1		28	5.1
70	30	18,688	-57.2		29	2.5
60	30	19,666	-55.8		32	.7
50	30	20,831	-53.8		07	2.3
40	30	22,269	-51.9		08	4.3
30	29	24,140	-49.3		09	6.2
25	29	25,340	-47.4		09	7.5
20	27	26,819	-44.9		09	8.3
15	25	28,757	-41.8		09	10.5
10	23	31,526	-36.9		09	12.6
7	14	33,987	-34.1		09	10.0
5	7	36,282	-31.7			

ST PAUL IS., ALASKA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	5.8	4.7	11	1.4
1000	30	87	5.8	4.4	10	1.9
950	30	511	5.0	2.6	14	3.4
900	30	947	3.2	.5	14	3.5
850	30	1,409	1.3	-1.8	13	4.6
800	30	1,896	-.6	-5.3	13	4.1
750	30	2,410	-3.2	-9.5	13	3.6
700	30	2,954	-6.1	-13.3	14	4.0
650	30	3,528	-9.4	-16.7	13	4.7
600	30	4,146	-12.9	-22.8	13	4.5
550	30	4,802	-17.3	-27.3	14	3.4
500	30	5,513	-22.3	-32.9	14	4.1
450	30	6,273	-27.9	-38.4	13	5.6
400	30	7,115	-34.0	-44.0	13	6.1
350	30	8,038	-40.8	-44.1	13	7.2
300	30	9,073	-47.2		14	6.8
250	30	10,267	-50.7		13	4.1
200	30	11,726	-48.4		13	2.4
175	30	12,607	-47.6		13	2.3
150	30	13,624	-48.1		13	2.4
125	30	14,825	-48.6		12	2.6
100	30	16,291	-48.8		12	2.7
80	30	17,756	-48.9		11	3.4
70	30	18,632	-49.0		11	4.2
60	29	19,641	-49.0		10	4.4
50	29	20,838	-48.8		10	5.3
40	29	22,305	-48.3		10	6.7
30	29	24,206	-46.6		10	8.6
25	29	25,418	-45.6		10	9.2
20	29	26,911	-43.6		09	11.1
15	28	28,855	-40.6		09	12.2
10	21	31,644	-35.8		09	14.4
7	14	34,118	-31.4			
5						

SALEM, OREG. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	11.3	8.7	24	.2
1000	30	131	12.1	9.2	33	.4
950	30	564	12.7	8.3	35	2.5
900	30	1,016	11.9	6.0	35	2.3
850	30	1,493	9.9	2.1	34	1.1
800	30	1,995	7.4	-4.1	32	1.6
750	30	2,521	4.9	-7.9	32	2.6
700	30	3,084	1.4	-10.9	32	3.1
650	30	3,671	-1.7	-16.2	32	3.2
600	30	4,310	-5.2	-19.5	33	4.0
550	30	4,979	-9.7	-23.6	34	4.9
500	30	5,717	-14.6	-27.5	33	6.2
450	30	6,498	-20.2	-31.9	33	7.0
400	30	7,368	-26.5	-38.1	33	7.9
350	30	8,318	-33.8	-44.0	33	9.0
300	30	9,380	-41.9	-48.7	33	10.5
250	30	10,591	-50.6		33	12.3
200	30	12,021	-56.8		32	13.2
175	30	12,867	-57.0		31	11.2
150	30	13,843	-56.8		31	9.4
125	30	14,995	-57.9		30	7.3
100	30	16,399	-58.6		31	4.9
80	30	17,801	-58.2		31	2.2
70	30	18,643	-57.2		32	1.3
60	30	19,619	-56.1		03	.9
50	30	20,782	-54.5		07	3.1
40	29	22,214	-53.1		08	5.0
30	29	24,081	-50.2		08	7.4
25	28	25,277	-48.4		09	8.9
20	26	26,758	-45.5		09	11.0
15	24	28,680	-41.9		09	12.4
10	22	31,476	-36.2		08	14.4
7	6	33,958	-31.3			
5						

SALT LAKE CITY, UTAH 869 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,288	12.2	7.7	16	2.1
1000	30	96				
950	30	532				
900	30	994				
850	30	1,478	14.5	6.3	16	3.4
800	30	1,989	12.1	2.2	17	3.1
750	30	2,526	8.3	-.8	19	2.6
700	30	3,093	4.1	-3.6	22	2.8
650	30	3,690	-.1	-7.0	23	4.3
600	30	4,328	-4.4	-11.0	23	6.6
550	30	5,002	-9.1	-16.9	23	7.9
500	30	5,738	-13.9	-23.4	23	8.6
450	30	6,526	-19.5	-29.8	23	9.2
400	30	7,395	-26.0	-36.4	23	10.6
350	30	8,346	-33.5	-43.0	23	11.8
300	30	9,409	-42.0	-49.5	23	14.5
250	30	10,619	-50.8		23	17.8
200	30	12,052	-55.4		24	20.7
175	29	12,911	-55.5		24	19.1
150	29	13,892	-56.7		25	16.2
125	29	15,041	-58.8		24	11.6
100	28	16,440	-59.9		25	6.9
80	28	17,830	-60.6		25	1.6
70	27	18,661	-59.3		13	1.0
60	27	19,631	-57.7		10	2.3
50	26	20,788	-55.8		08	3.2
40	26	22,215	-53.7		09	5.0
30	25	24,081	-51.0		08	7.4
25	25	25,273	-48.7		09	7.9
20	24	26,752	-45.9		09	9.0
15	24	28,680	-42.5		08	10.4
10	22	31,443	-36.9		09	12.8
7	16	33,935	-31.9		09	14.4
5	7	36,330	-26.7			

SAN DIEGO, CALIF. 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	13.7	12.1	24	.6
1000	30	104				
950	30	538	12.3	9.0	24	.6
900	30	991	14.0	3.2	28	1.1
850	30	1,473	14.0	-2.5	30	2.9
800	30	1,984	13.2	-5.5	28	3.5
750	30	2,522	10.6	-8.2	26	3.1
700	30	3,095	7.3	-12.4	25	3.5
650	30	3,700	3.9	-16.3	26	4.5
600	30	4,348	.0	-19.8	26	6.6
550	30	5,035	-4.2	-23.3	26	9.1
500	30	5,785	-9.1	-27.3	26	11.3
450	30	6,585	-15.0	-31.5	25	13.6
400	30	7,472	-21.7	-37.1	25	15.4
350	30	8,441	-29.0	-43.0	25	18.5
300	30	9,526	-37.3	-50.2	25	21.9
250	30	10,762	-46.0		25	24.7
200	30	12,217	-54.9		24	27.0
175	30	13,063	-58.5		25	26.3
150	30	14,025	-61.9		25	23.1
125	30	15,145	-64.6		25	17.9
100	29	16,497	-65.9		26	9.8
80	29	17,854	-64.5		23	2.0
70	29	18,673	-62.6		11	2.0
60	29	19,628	-60.0		10	3.9
50	29	20,772	-57.7		09	4.9
40	29	22,189	-54.5		09	6.1
30	29	24,044	-51.2		09	7.0
25	29	25,234	-49.2		09	5.6
20	28	26,706	-46.9		09	6.7
15	28	28,623	-44.1		08	6.6
10	27	31,371	-38.5		08	8.3
7	21	33,830	-33.4		09	6.3
5	10	36,194	-29.6			

* SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	25.5	22.4	15	1.8
1000	30	144	24.8	21.2	12	4.1
950	30	591	21.9	17.6	11	6.7
900	30	1,062	19.2	13.8	11	7.3
850	30	1,552	16.5	9.7	11	6.6
800	29	2,067	13.9	4.4	11	5.6
750	29	2,602	11.2	-.3	11	4.5
700	29	3,182	7.8	-4.7	11	3.4
650	29	3,780	4.3	-8.8	10	2.9
600	29	4,437	.5	-11.9	08	2.2
550	29	5,120	-3.2	-17.2	09	.9
500	29	5,879	-7.6	-21.9	30	.8
450	29	6,686	-12.7	-27.6	29	1.5
400	29	7,580	-18.7	-32.7	31	2.9
350	29	8,561	-25.9	-40.3	31	4.6
300	29	9,658	-34.3	-47.7	30	6.0
250	29	10,907	-44.2		30	8.0
200	29	12,365	-55.9		30	10.4
175	29	13,201	-62.2		29	11.6
150	29	14,138	-68.6		30	12.2
125	29	15,215	-73.1		29	10.4
100	29	16,529	-70.4		27	7.9
80	29	17,857	-69.1		31	1.7
70	29	18,660	-65.7		06	4.3
60	29	19,603	-62.5		08	8.0
50	27	20,738	-59.1		09	10.0
40	27	22,147	-56.1		09	12.5
30	27	23,991	-51.9		09	16.3
25	27	25,179	-49.3		09	17.4
20	27	26,652	-46.0		09	20.2
15	26	28,584	-41.7		09	22.4
10	24	31,353	-37.9		09	25.5
7	19	33,835	-32.8		09	24.3
5	8	36,227	-29.6			
4						

SAN NICOLAS, CALIF. 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	174	11.2	10.4	30	4.9
1000	30	105				
950	30	537	13.3	5.5	31	4.7
900	30	994	15.8	1.2	32	4.4
850	30	1,478	15.0	-1.6	31	4.2
800	30	1,989	13.0	-5.5	30	3.3
750	30	2,529	9.9	-7.4	29	2.8
700	30	3,099	7.0	-11.5	29	3.9
650	30	3,704	3.5	-15.3	28	5.3
600	30	4,348	-.4	-19.3	28	6.4
550	30	5,038	-5.0	-22.4	28	7.9
500	30	5,780	-10.1	-26.8	27	9.4
450	30	6,583	-16.1	-31.7	27	11.4
400	30	7,458	-22.8	-37.6	27	13.6
350	30	8,422	-30.6	-44.7	27	15.6
300	30	9,499	-38.6	-52.5	26	18.2
250	30	10,730	-46.8	-59.4	26	22.4
200	30	12,181	-55.2	-66.6	25	24.6
175	30	13,027	-58.1	-68.9	25	23.0
150	30	13,992	-61.2	-71.2	25	20.3
125	30	15,114	-64.5		26	16.9
100	29	16,471	-65.0		26	9.0
80	29	17,832	-64.4		24	1.4
70	29	18,653	-62.1		10	2.1
60	28	19,613	-60.0		10	4.3
50	28	20,756	-58.0		09	4.9
40	28	22,172	-54.7		09	7.3
30	28	24,026	-51.5		09	6.6
25	28	25,215	-49.6		09	6.8
20	28	26,683	-47.1		09	7.0
15	26	28,601	-44.2		08	7.0
10	24	31,345	-38.5		09	8.5
7	20	33,785	-33.8		10	10.4
5	12	36,176	-28.7		09	8.4
4	7	37,723	-28.2			

* SAULT STE MARIE, MICH. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	12.1	9.3	09	1.0
1000	30	136				
950	30	565	14.5	9.0	15	1.2
900	30	1,025	13.2	7.4	22	2.8
850	30	1,504	10.6	4.9	24	4.6
800	30	2,007	7.7	1.6	24	6.7
750	30	2,534	4.8	-3.4	25	8.4
700	30	3,097	1.7	-7.5	25	9.5
650	30	3,684	-1.9	-11.2	25	10.1
600	30	4,324	-5.1	-15.2	26	11.0
550	30	4,996	-8.7	-20.6	26	11.1
500	30	5,736	-13.0	-24.9	26	12.4
450	30	6,524	-18.5	-31.1	26	13.4
400	30	7,398	-24.8	-37.1	26	15.3
350	30	8,356	-32.0	-44.3	26	16.6
300	30	9,426	-40.0	-49.0	27	19.2
250	30	10,646	-49.1		27	21.8
200	30	12,082	-56.6		27	25.9
175	30	12,924	-58.5		28	24.6
150	30	13,895	-57.3		27	17.7
125	30	15,046	-57.6		27	13.8
100	30	16,454	-57.6		28	9.9
80	30	17,864	-56.8		28	5.9
70	30	18,710	-56.1		29	3.8
60	30	19,693	-55.0		31	2.1
50	30	20,862	-53.2		05	1.8
40	30	22,307	-50.9		08	4.5
30	28	24,185	-48.4		08	6.8
25	27	25,389	-46.6		09	8.3
20	27	26,877	-44.0		09	9.6
15	27	28,822	-40.4		09	11.8
10	25	31,607	-34.6		09	14.1
7	21	34,133	-28.2		09	16.1
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SHEMYA, ALASKA 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	38	4.8	4.1	01	2.1
1000	30	113	4.5	3.6	01	2.9
950	30	533	3.6	1.0	36	3.0
900	30	970	3.2	-.4	36	2.7
850	30	1,433	2.2	-5.0	01	3.7
800	30	1,921	.5	-7.2	36	4.4
750	30	2,437	-1.8	-12.4	36	4.1
700	30	2,984	-4.6	-15.3	34	5.3
650	30	3,564	-7.7	-18.8	34	5.6
600	30	4,184	-11.3	-21.6	34	6.0
550	30	4,845	-15.6	-27.2	34	6.9
500	30	5,560	-20.2	-31.7	34	7.3
450	30	6,330	-25.6	-37.7	34	8.2
400	30	7,178	-31.7	-42.9	34	9.7
350	30	8,108	-38.8	-46.3	33	10.6
300	30	9,149	-46.5		32	10.7
250	30	10,343	-52.0		31	11.2
200	29	11,791	-52.1		30	9.9
175	29	12,657	-51.3		30	8.8
150	29	13,660	-50.6		31	7.4
125	29	14,847	-51.1		30	5.7
100	29	16,295	-51.7		32	3.0
80	29	17,744	-51.1		01	1.2
70	29	18,612	-50.9		07	1.8
60	29	19,617	-50.4		09	2.9
50	29	20,806	-50.0		08	4.3
40	29	22,266	-49.5		09	6.0
30	28	24,153	-48.1		09	7.8
25	27	25,361	-46.8		09	9.3
20	27	26,846	-44.9		09	10.2
15	27	28,782	-41.9		09	12.0
10	27	31,556	-37.4		09	13.2
7	21	34,012	-34.3		08	14.7
5	9	36,355	-31.1			
4						

* SHREVEPORT, LA. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	22.0	20.4	17	1.3
1000	30	124	22.2	20.1	18	2.1
950	30	576	21.7	17.7	20	6.5
900	30	1,041	19.3	13.4	19	5.7
850	30	1,531	16.4	9.8	19	5.2
800	30	2,045	13.7	4.1	20	3.4
750	30	2,588	11.0	-1.4	21	2.0
700	30	3,159	7.9	-6.4	14	.1
650	30	3,766	4.3	-9.8	02	.9
600	30	4,413	.1	-13.3	32	.8
550	30	5,102	-4.0	-19.1	30	2.3
500	30	5,852	-8.1	-26.0	30	4.3
450	30	6,661	-13.3	-31.2	30	5.9
400	30	7,550	-19.4	-35.9	30	7.1
350	30	8,529	-26.1	-42.3	30	9.1
300	30	9,626	-34.4	-48.7	30	10.7
250	30	10,875	-44.0		30	14.1
200	30	12,337	-55.0		30	16.8
175	30	13,179	-60.8		30	17.1
150	30	14,124	-65.9		30	16.2
125	29	15,223	-70.5		30	11.1
100	29	16,540	-71.4		30	4.0
80	29	17,871	-67.4		05	2.3
70	29	18,680	-64.3		08	4.5
60	29	19,632	-60.2		09	6.4
50	29	20,777	-57.3		09	6.1
40	28	22,199	-54.1		08	6.7
30	28	24,058	-50.6		08	6.7
25	28	25,250	-49.0		08	7.2
20	27	26,722	-47.0		08	7.3
15	26	28,642	-43.0		08	7.5
10	25	31,395	-37.7		08	10.6
7	20	33,893	-31.7		09	12.8
5	8	36,278	-27.7			
4						

SPOKANE, WASH. 930 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	717	11.9	7.9	15	1.4
1000	30	105				
950	30	540				
900	30	996	14.4	5.2	13	.6
850	30	1,478	12.6	1.4	26	.3
800	30	1,984	9.3	-1.3	29	1.0
750	30	2,513	5.2	-2.8	28	1.7
700	30	3,075	1.0	-6.2	29	1.8
650	30	3,665	-2.9	-11.0	31	2.3
600	30	4,298	-6.6	-17.6	30	2.7
550	30	4,969	-10.4	-24.7	29	4.0
500	30	5,701	-15.4	-29.2	29	4.6
450	30	6,482	-20.9	-32.7	30	5.5
400	30	7,349	-27.1	-38.9	30	6.4
350	30	8,297	-34.4	-44.5	30	6.9
300	30	9,356	-42.8	-47.0	31	8.0
250	30	10,562	-51.4		32	10.4
200	30	11,991	-55.6		30	10.1
175	30	12,843	-54.9		30	9.1
150	30	13,829	-54.9		29	8.7
125	30	14,992	-55.7		29	6.9
100	30	16,410	-56.5		29	5.5
80	30	17,828	-55.6		29	2.8
70	30	18,679	-54.9		30	1.9
60	30	19,666	-53.8		02	1.3
50	30	20,839	-52.9		07	3.4
40	30	22,284	-51.1		08	4.3
30	30	24,163	-48.9		08	7.2
25	30	25,365	-47.0		08	8.0
20	27	26,852	-44.2		08	10.9
15	24	28,789	-41.1		08	11.7
10	21	31,584	-34.1		09	14.3
7	13	34,062	-30.1			

SWAN ISLAND, W. I. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.3	23.4	11	4.5
1000	30	104	25.5	22.8	11	5.2
950	30	558	22.2	20.4	12	8.3
900	30	1,024	19.5	16.4	12	8.9
850	30	1,516	17.1	12.6	12	8.1
800	30	2,032	14.6	7.6	12	7.3
750	30	2,577	11.6	1.9	12	6.6
700	30	3,150	8.4	-.8	12	5.9
650	30	3,758	5.1	-4.5	12	5.3
600	30	4,410	1.4	-9.1	11	4.6
550	30	5,102	-2.4	-14.2	13	3.1
500	30	5,857	-6.8	-18.3	15	2.3
450	30	6,669	-12.0	-24.1	20	.5
400	30	7,565	-18.0	-28.8	29	2.1
350	30	8,550	-24.9	-34.7	31	3.6
300	30	9,653	-33.1	-42.8	29	5.1
250	30	10,909	-43.2		29	6.5
200	30	12,373	-55.2		28	8.5
175	29	13,212	-62.1		29	9.0
150	28	14,148	-68.7		30	9.1
125	24	15,222	-73.0		33	8.0
100	24	16,526	-73.1		02	4.7
80	24	17,838	-70.8		06	4.8
70	24	18,633	-68.2		07	6.0
60	23	19,572	-64.5		08	8.9
50	22	20,695	-61.0		09	12.5
40	21	22,100	-56.4		09	15.8
30	19	23,942	-52.1		10	18.3
25	19	25,130	-49.0		10	19.1
20	19	26,602	-46.4		09	20.7
15	19	28,521	-43.8		09	23.8
10	19	31,267	-39.5		09	28.6
7	9	33,706	-36.8			

TAMPA, FLA. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	23.3	21.6	08	1.7
1000	30	132	22.8	20.5	09	1.5
950	30	582	21.3	16.5	20	.8
900	30	1,047	19.0	12.6	24	1.7
850	30	1,537	16.2	9.5	24	1.6
800	30	2,051	13.1	6.2	24	1.2
750	30	2,591	10.1	1.6	24	1.4
700	30	3,163	6.8	-2.0	24	1.6
650	30	3,763	3.2	-5.5	24	1.4
600	30	4,413	-.4	-9.4	27	1.5
550	30	5,101	-4.1	-15.1	31	1.9
500	30	5,851	-8.4	-21.4	33	2.5
450	30	6,661	-13.5	-27.3	34	3.6
400	30	7,548	-19.6	-33.1	33	4.8
350	30	8,526	-26.7	-40.4	33	5.1
300	30	9,620	-35.0	-48.0	33	6.7
250	30	10,867	-44.3		33	6.7
200	30	12,326	-55.2		34	8.6
175	30	13,167	-60.7		35	9.3
150	30	14,114	-65.7		35	10.4
125	30	15,212	-69.3		36	9.2
100	30	16,538	-70.0		02	6.1
80	30	17,868	-68.2		05	6.3
70	30	18,674	-65.3		06	7.4
60	30	19,620	-61.5		08	9.4
50	30	20,761	-57.8		09	10.3
40	30	22,181	-54.1		09	9.6
30	29	24,040	-50.5		09	10.1
25	28	25,235	-48.1		09	10.3
20	26	26,718	-45.9		09	10.6
15	25	28,644	-43.1		08	8.7
10	18	31,402	-38.9		09	8.9
7						

TOPEKA, KANS. 982 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	269	18.4	16.0	16	1.4
1000	30	112				
950	30	551	18.9	15.2	18	4.7
900	30	1,018	17.7	12.5	21	6.0
850	30	1,506	15.7	8.8	23	8.1
800	30	2,020	13.6	4.9	24	9.4
750	30	2,558	10.6	1.6	25	8.9
700	30	3,133	7.0	-2.1	26	9.4
650	30	3,732	3.3	-6.7	26	9.3
600	30	4,384	-1.0	-10.7	26	8.9
550	30	5,067	-5.3	-16.6	26	10.0
500	30	5,816	-9.7	-23.1	26	11.3
450	30	6,615	-14.9	-28.2	26	12.4
400	30	7,505	-21.0	-33.5	26	12.6
350	30	8,478	-27.8	-39.4	26	15.6
300	30	9,568	-36.0	-47.0	26	18.4
250	30	10,610	-45.6		26	21.9
200	30	12,263	-56.3		26	23.0
175	30	13,101	-61.1		26	23.6
150	30	14,051	-63.6		27	23.3
125	30	15,169	-64.0		27	15.6
100	30	16,532	-64.8		26	8.2
80	30	17,896	-62.9		27	2.7
70	30	18,722	-60.8		07	.6
60	30	19,686	-58.4		08	2.3
50	30	20,839	-56.2		09	3.2
40	30	22,266	-53.4		09	4.4
30	30	24,130	-50.4		09	5.6
25	29	25,324	-48.7		09	6.2
20	29	26,799	-46.0		09	6.4
15	23	28,724	-42.5		09	7.8
10	16	31,505	-37.9		09	9.7
7	5	33,917	-33.7			

+ TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.1	24.5	08	1.0
1000	30	90	27.4	23.3	09	1.2
950	30	541	23.9	19.2	10	2.5
900	30	1,015	21.1	16.0	11	3.8
850	29	1,510	18.5	12.8	10	4.3
800	29	2,028	15.8	9.4	10	4.7
750	29	2,574	13.0	5.5	10	5.0
700	29	3,152	9.9	2.1	11	5.4
650	29	3,765	6.3	-1.8	11	5.8
600	29	4,418	2.4	-5.3	11	6.2
550	29	5,112	-1.2	-10.2	10	6.2
500	29	5,872	-5.2	-16.9	10	6.0
450	29	6,689	-10.0	-22.2	10	6.0
400	29	7,593	-15.5	-28.5	10	6.5
350	29	8,588	-22.2	-35.3	09	5.6
300	29	9,703	-30.5	-44.1	09	5.3
250	29	10,973	-40.7	-52.7	08	4.5
200	29	12,452	-53.3		05	4.8
175	29	13,298	-60.4		05	7.0
150	29	14,242	-67.9		06	5.8
125	29	15,319	-74.6		07	3.6
100	29	16,602	-77.4		07	3.9
80	29	17,894	-72.1		08	3.0
70	29	18,687	-68.0		08	2.3
60	29	19,626	-63.5		09	.6
50	29	20,756	-59.7		10	2.7
40	29	22,159	-57.4		09	5.4
30	29	23,992	-53.6		09	14.9
25	29	25,173	-50.5		09	22.3
20	29	26,638	-47.1		09	28.3
15	29	28,561	-42.6		09	33.4
10	24	31,332	-37.8		09	40.9
7	7	33,778	-34.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Columns for each station: Standard pressure surface (mb.); No. of observations; Dynamic height; Temperature; Dew Point; Resultant Wind: Direction, Speed (M.p.s.)

Standard pressure surface (mb.)	* TUCSON, ARIZ. 921 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	789	20.3	7.1	16	2.9
1000	30	68				
950	30	513				
900	30	990	23.0	6.1	19	2.8
850	30	1,485	20.4	3.2	22	2.4
800	30	2,005	16.7	.8	22	2.6
750	30	2,544	12.6	-2.1	21	5.3
700	30	3,126	8.6	-4.4	21	7.1
650	30	3,729	4.8	-8.7	22	8.5
600	30	4,383	.5	-12.2	22	9.5
550	30	5,067	-3.8	-17.4	23	11.5
500	30	5,823	-8.2	-23.3	23	12.2
450	30	6,627	-13.7	-29.4	24	14.1
400	30	7,518	-20.3	-35.5	24	15.3
350	30	8,493	-27.4	-42.0	24	17.8
300	30	9,585	-35.4	-48.5	24	21.9
250	30	10,829	-44.8		24	24.9
200	30	12,285	-55.1		24	29.2
175	30	13,129	-59.9		24	30.0
150	30	14,081	-64.3		24	24.7
125	30	15,184	-68.2		25	19.0
100	30	16,518	-69.0		24	9.9
80	30	17,859	-66.8		22	2.3
70	29	18,670	-63.5		09	2.3
60	28	19,623	-59.8		10	5.3
50	28	20,768	-57.4		09	5.4
40	28	22,187	-54.4		09	7.7
30	28	24,043	-51.1		10	7.5
25	27	25,235	-49.0		09	7.0
20	27	26,710	-46.3		09	7.2
15	27	28,635	-43.0		07	7.3
10	24	31,398	-37.7		08	8.7
7	16	33,870	-32.4		09	11.3
5	6	36,245	-27.5			
4						

Standard pressure surface (mb.)	* VANDENBERG AFB, CALIF. 1002 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	100	10.7	10.1	32	1.0
1000	30	113			33	1.4
950	30	541	10.8	6.7	35	3.7
900	30	995	13.9	.7	36	4.0
850	30	1,477	13.8	-4.0	36	4.0
800	30	1,985	11.3	-7.3	36	3.6
750	30	2,517	8.9	-10.9	33	3.0
700	30	3,089	6.0	-13.7	31	3.8
650	30	3,689	2.5	-16.3	30	5.0
600	30	4,335	-1.4	-20.1	29	6.3
550	30	5,015	-6.0	-23.9	29	7.2
500	30	5,761	-11.1	-28.4	29	8.8
450	30	6,555	-17.0	-33.3	29	9.9
400	30	7,434	-23.8	-39.8	29	10.8
350	30	8,395	-31.4	-45.7	29	12.9
300	30	9,468	-39.6	-52.4	29	14.4
250	30	10,692	-47.6		28	16.4
200	30	12,143	-54.6		27	19.8
175	30	12,992	-57.4		26	19.5
150	30	13,959	-60.3		26	17.3
125	30	15,088	-62.8		26	13.9
100	30	16,457	-64.3		27	7.[illegible]
80	30	17,825	-63.0		31	1.0
70	30	18,649	-61.5		08	2.0
60	30	19,608	-59.4		10	4.3
50	30	20,751	-58.1		09	4.5
40	30	22,165	-55.2		09	6.1
30	30	24,012	-52.2		08	5.5
25	30	25,197	-50.0		09	6.7
20	30	26,662	-48.0		09	7.0
15	30	28,572	-44.3		[illegible]	8.0
10	28	31,316	-38.4		09	8.7
7	22	33,787	-32.9		09	9.2
5	8	36,179	-27.3			
4						

Standard pressure surface (mb.)	VICTORIA, TEXAS 1009 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	33	23.4	21.6	13	1.8
1000	30	115	23.7	22.0	15	3.6
950	30	560	21.6	19.5	17	8.5
900	30	1,033	19.4	14.7	17	8.7
850	30	1,524	17.2	8.7	17	7.7
800	30	2,040	15.1	2.9	16	6.2
750	30	2,578	12.6	-2.9	15	3.7
700	30	3,160	9.5	-6.5	12	1.6
650	30	3,762	5.9	-11.3	08	1.3
600	30	4,422	2.0	-15.7	06	1.4
550	30	5,108	-2.0	-20.5	02	1.5
500	30	5,870	-6.5	-24.8	35	1.8
450	30	6,677	-11.9	-29.1	32	2.1
400	30	7,578	-17.8	-34.8	32	3.4
350	30	8,563	-24.9	-40.8	31	6.0
300	30	9,666	-33.2	-47.5	31	8.3
250	30	10,922	-42.8		30	11.5
200	30	12,390	-54.2		30	12.7
175	30	13,234	-60.4		30	13.3
150	30	14,180	-66.9		30	11.2
125	29	15,263	-72.7		30	6.9
100	29	16,566	-73.4		34	2.2
80	29	17,882	-69.1		08	3.9
70	29	18,686	-65.8		08	5.8
60	29	19,629	-62.1		09	7.5
50	29	20,767	-58.0		09	7.8
40	29	22,185	-54.3		09	10.0
30	29	24,043	-50.6		09	9.4
25	29	25,237	-48.3		09	9.4
20	29	26,714	-45.9		08	9.4
15	29	28,639	-43.0		08	7.1
10	26	31,394	-39.2		06	8.6
7	17	33,837	-36.1		07	7.5
5	5	36,149	-31.9			
4						

Standard pressure surface (mb.)	* WAKE IS., PACIFIC AREA 1014 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	5	27.6	24.6	09	3.8
1000	30	123	26.5	24.0	09	4.7
950	30	574	22.9	21.5	09	5.8
900	30	1,047	20.1	17.2	10	5.7
850	30	1,540	17.6	13.7	09	6.2
800	30	2,057	15.2	8.8	09	5.9
750	30	2,598	12.6	3.6	09	5.9
700	30	3,180	9.6	-1.3	10	5.8
650	30	3,786	5.9	-5.9	10	5.[illegible]
600	30	4,443	2.2	-11.5	10	5.6
550	30	5,137	-2.0	-17.2	11	5.2
500	30	5,892	-6.7	-20.8	11	5.1
450	30	6,704	-11.3	-25.4	10	4.7
400	30	7,603	-17.1	-29.9	09	4.8
350	30	8,591	-24.2	-36.0	10	4.5
300	30	9,696	-32.9	-43.6	10	3.7
250	30	10,952	-43.1		08	2.6
200	30	12,417	-55.1		05	2.0
175	30	13,257	-61.7		04	2.5
150	30	14,198	-67.9		06	3.[illegible]
125	28	15,282	-72.9		06	5.4
100	28	16,579	-75.9		07	6.8
80	27	17,877	-72.5		07	8.0
70	26	18,667	-68.9		08	8.9
60	26	19,599	-64.5		09	10.5
50	26	20,724	-60.5		09	11.6
40	26	22,124	-57.2		09	14.1
30	26	23,962	-52.5		09	16.4
25	26	25,146	-50.2		09	17.6
20	26	26,612	-47.4		08	19.5
15	26	28,525	-44.3		09	22.5
10	22	31,269	-40.0		09	22.9
7	19	33,734	-36.9		09	25.4
5	14	36,093	-34.6		09	29.4
4	8	37,658	-34.8			

Standard pressure surface (mb.)	* WALLOPS IS., VA. NASA 1020 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	28	3	16.4	15.8	34	.0
1000	28	169	18.2	13.5	22	.7
950	28	608	17.3	[illegible].8	26	1.2
900	28	1,070	15.2	6.0	04	.6
850	28	1,552	12.3	3.5	06	1.2
800	28	2,059	9.8	-2.1	10	1.0
750	28	2,590	7.5	-6.7	09	.3
700	28	3,159	4.7	-10.8	25	1.2
650	28	3,756	1.9	-15.2	24	2.0
600	28	4,402	-1.5	-19.6	26	2.3
550	28	5,084	-5.4	-23.4	26	2.9
500	28	5,832	-10.3	-27.3	26	4.4
450	28	6,633	-15.9	-30.8	26	4.7
400	28	7,513	-22.0	-35.4	27	4.8
350	28	8,482	-29.0	-42.3	27	5.5
300	28	9,566	-37.4	-48.7	27	6.9
250	28	10,799	-47.1		28	8.7
200	28	12,241	-57.9		28	10.7
175	28	13,074	-62.0		29	11.7
150	28	14,021	-64.0		30	9.9
125	27	15,138	-64.5		30	7.4
100	27	16,501	-64.4		31	5.3
80	27	17,871	-62.8		36	2.9
70	27	18,696	-61.2		04	3.2
60	27	19,658	-58.8		06	3.8
50	27	20,810	-56.1		08	4.9
40	27	22,237	-53.4		08	5.1
30	25	24,106	-49.9		08	6.3
25	25	25,302	-48.4		09	6.8
20	24	26,783	-45.8		09	8.6
15	23	28,710	-42.2		09	9.8
10	19	31,486	-36.9		09	11.6
7	14	33,965	-31.6		09	13.2
5						
4						

Standard pressure surface (mb.)	WASHINGTON DULLES INT. AP 1009 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	29	85	16.6	14.9	21	.3
1000	29	165	17.4	14.2	23	.5
950	29	611	18.2	10.5	24	1.7
900	29	1,067	16.2	7.4	25	.5
850	29	1,551	12.9	4.2	10	.7
800	29	2,058	9.8	.0	16	.9
750	29	2,593	6.7	-4.5	14	.[illegible]
700	29	3,155	4.3	-9.6	27	1.0
650	29	3,756	1.8	-15.2	26	2.1
600	29	4,397	-1.6	-19.6	26	3.9
550	29	5,081	-5.6	-23.0	26	5.0
500	29	5,825	-10.6	-27.2	26	5.5
450	29	6,627	-16.0	-32.4	26	5.6
400	29	7,506	-22.1	-36.4	27	6.1
350	29	8,474	-29.0	-42.2	27	7.2
300	29	9,558	-37.5	-49.3	26	7.6
250	29	10,791	-47.3		28	9.5
200	29	12,232	-57.6		29	11.1
175	29	13,067	-61.4		29	12.2
150	29	14,017	-63.4		29	10.7
125	28	15,135	-63.8		30	8.[illegible]
100	28	16,502	-63.8		30	5.6
80	28	17,874	-62.4		35	2.2
70	28	18,701	-60.5		04	2.5
60	28	19,666	-58.4		06	2.7
50	28	20,821	-55.4		08	4.5
40	27	22,251	-52.6		08	5.4
30	27	24,121	-49.7		08	6.1
25	26	25,316	-48.1		09	7.2
20	26	26,795	-45.5		09	8.6
15	24	28,730	-42.1		09	9.8
10	23	31,502	-36.8		09	10.8
7	17	34,002	-32.9		08	11.9
5	9	36,364	-30.9			

Standard pressure surface (mb.)	WINNEMUCCA, NEV. 867 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	1,310	9.5	4.9	14	.4
1000	30	103				
950	30	541				
900	30	1,002				
850	30	1,477	12.6	4.7	07	1.2
800	30	1,985	11.2	1.3	05	1.7
750	30	2,513	7.6	-1.6	02	1.3
700	30	3,085	3.5	-4.5	33	.7
650	30	3,676	-.9	-8.9	27	1.6
600	30	4,316	-5.2	-13.2	27	2.2
550	30	4,987	-9.9	-17.7	26	3.[illegible]
500	30	5,722	-14.9	-24.1	26	4.0
450	30	6,504	-20.5	-30.2	27	4.2
400	30	7,371	-27.2	-36.9	29	4.5
350	30	8,319	-34.4	-43.7	29	3.7
300	30	9,379	-42.3	-48.4	29	4.6
250	30	10,590	-49.8		[illegible]	[illegible].2
200	30	12,031	-54.0		28	8.3
175	30	12,887	-54.8		27	9.4
150	30	13,868	-56.3		27	9.2
125	30	15,021	-58.0		27	8.0
100	30	16,421	-59.3		26	4.5
80	30	17,819	-59.2		24	1.8
70	30	18,656	-58.6		14	.4
60	30	19,626	-57.6		08	2.2
50	30	20,780	-56.1		09	3.5
40	28	22,206	-54.0		09	5.2
30	28	24,064	-51.1		09	7.1
25	27	25,251	-49.0		09	7.5
20	26	26,727	-46.2		09	8.6
15	23	28,643	-42.5		09	10.3
10	18	31,419	-37.5		09	11.3
7						
5						

Standard pressure surface (mb.)	WINSLOW, ARIZ. 849 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	1,492	13.7	-1.2	20	1.1
1000	30	86				
950	30	531				
900	30	995				
850	30	1,484			21	.7
800	30	1,999	16.0	1.7	23	3.4
750	30	2,545	12.0	-.7	23	[illegible].3
700	30	3,117	7.6	-3.7	22	7.3
650	30	3,720	3.0	-6.9	21	[illegible].0
600	30	4,366	-1.7	-11.5	21	10.[illegible]
550	30	5,049	-5.8	-18.9	22	11.5
500	30	5,795	-10.1	-25.5	23	12.5
450	30	6,596	-15.7	-30.4	24	13.8
400	30	7,477	-22.1	-35.6	25	17.3
350	30	8,445	-29.1	-41.1	24	21.[illegible]
300	30	9,528	-37.4	-48.3	24	24.9
250	30	10,763	-46.5		24	29.8
200	30	12,213	-55.5		24	33.6
175	30	13,056	-59.1		25	32.2
150	30	14,016	-61.8		25	26.[illegible]
125	30	15,135	-64.9		25	19.1
100	30	16,492	-65.7		24	8.8
80	30	17,849	-64.7		19	2.1
70	30	18,665	-63.2		11	1.8
60	30	19,620	-60.2		09	3.1
50	29	20,764	-57.9		09	5.1
40	29	22,179	-55.4		09	6.4
30	29	24,028	-51.9		09	7.5
25	29	25,214	-50.0		09	7.7
20	28	26,686	-47.1		09	7.9
15	25	28,600	-44.1		09	7.7
10	14	31,359	-37.6			
7						
5						

Standard pressure surface (mb.)	YAKUTAT, ALASKA 1016 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	12	8.4	7.6	15	.4
1000	30	144	8.6	7.4	19	.5
950	30	566	7.0	4.9	18	1.1
900	30	1,011	5.5	1.7	20	1.3
850	30	1,478	4.0	-2.7	20	1.6
800	30	1,969	1.8	-5.9	18	1.6
750	30	2,490	-.9	-10.1	19	2.0
700	30	3,036	-3.5	-12.5	22	2.0
650	30	3,615	-6.7	-17.4	23	3.0
600	30	4,239	-10.6	-22.6	23	3.9
550	30	4,900	-14.7	-27.9	25	4.4
500	30	5,619	-19.6	-32.1	25	5.0
450	30	6,389	-25.2	-36.2	25	5.8
400	30	7,239	-31.3	-41.9	25	7.6
350	30	8,171	-38.5	-47.8	25	7.9
300	30	9,214	-46.3		26	10.3
250	30	10,405	-53.0		26	12.7
200	30	11,840	-52.8		26	10.6
175	30	12,705	-50.8		26	9.3
150	30	13,710	-50.5		26	7.2
125	30	14,899	-50.6		26	5.4
100	30	16,352	-51.1		27	3.0
80	30	17,803	-50.6		30	.8
70	30	18,674	-50.0		06	1.2
60	30	19,682	-49.5		07	2.2
50	30	20,878	-48.6		09	3.4
40	29	22,349	-47.4		08	5.1
30	29	24,258	-45.6		08	7.9
25	28	25,481	-44.1		09	8.8
20	26	26,984	-42.0		09	10.1
15	23	28,953	-39.1		09	11.1
10	10	31,747	-35.0			
7						
5						

Standard pressure surface (mb.)	* YAP, CAROLINE IS. 1007 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	30	17	28.1	24.8	14	.5
1000	30	82	27.3	23.8	16	.4
950	30	529	23.5	19.9	09	.3
900	30	1,008	20.7	16.2	14	1.0
850	30	1,501	18.0	12.8	11	1.6
800	30	2,019	15.3	9.4	11	1.6
750	30	2,558	12.4	5.8	11	2.2
700	30	3,141	9.4	2.4	11	[illegible].1
650	30	3,749	6.1	-1.2	10	3.9
600	30	4,406	2.5	-5.0	10	4.5
550	30	5,098	-1.2	-10.2	11	5.3
500	30	5,860	-5.2	-16.0	10	5.0
450	30	6,677	-10.0	-20.9	10	5.5
400	30	7,581	-15.8	-26.8	09	6.0
350	30	8,576	-22.4	-35.0	09	6.[illegible]
300	30	9,690	-30.7	-43.5	[illegible]	7.5
250	30	10,958	-40.9	-48.4	08	6.9
200	30	12,437	-53.3		08	9.[illegible]
175	30	13,283	-60.4		08	10.0
150	30	14,227	-67.8		07	11.9
125	30	15,303	-75.1		07	13.9
100	30	16,582	-78.2		07	12.4
80	30	17,870	-73.6		08	[illegible].9
70	30	18,659	-68.5		08	7.4
60	30	19,593	-64.5		09	5.5
50	30	20,716	-60.9		09	6.0
40	28	22,116	-57.3		09	8.7
30	28	23,948	-53.8		09	18.6
25	27	25,127	-50.7		09	26.4
20	27	26,591	-47.3		09	33.4
15	25	28,515	-43.3		09	38.8
10	21	31,275	-38.6		09	48.6
7	12	33,749	-35.0			
5						

Standard pressure surface (mb.)	YUCCA FLAT, NEV. 878 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed M.p.s.
SURFACE	28	1,196	12.1	-1.9	31	1.6
1000	28	79				
950	28	518				
900	28	984				
850	28	1,467	16.7	-.1	32	2.5
800	28	1,980	13.5	-2.4	26	1.0
750	28	2,516	9.5	-5.1	20	1.6
700	28	3,088	5.1	-7.7	20	2.4
650	28	3,686	.3	-10.9	19	3.6
600	28	4,324	-4.4	-15.4	20	4.2
550	28	5,001	-8.8	-21.1	23	6.1
500	28	5,735	-13.6	-26.7	24	8.1
450	28	6,520	-19.4	-33.5	24	10.2
400	28	7,392	-25.9	-39.6	24	11.7
350	28	8,345	-33.2	-45.8	24	15.1
300	28	9,409	-41.4	-51.0	24	18.7
250	28	10,627	-48.4		25	21.0
200	28	12,075	-53.4		25	23.4
175	28	12,931	-54.9		25	23.6
150	28	13,911	-57.3		26	19.4
125	28	15,056	-60.0		25	15.4
100	28	16,443	-61.6		25	8.8
80	28	17,828	-61.1		22	1.9
70	28	18,658	-59.7		12	2.2
60	26	19,620	-58.2		10	3.1
50	26	20,771	-56.8		08	3.9
40	26	22,192	-54.5		08	5.2
30	26	24,044	-51.5		09	7.5
25	24	25,235	-49.4		09	6.9
20	24	26,704	-47.1		08	6.9
15	19	28,618	-44.1		08	7.8
10	5	31,308	-39.6			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G. C. T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. **JUNE 1967**

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Jun. 1	0.84	----	----	1.24	----	----	----	0.98	0.91
4	----	----	----	----	----	----	----	.86	.76
5	.87	0.96	1.10	1.18	1.41				
6	----	----	.97	----	1.40	----	1.06	.95	.91
7	.86	.97	1.13	1.28	1.52	1.32	1.17	1.06	.98
8	.97	1.05	----	1.30	1.49	1.25	----	----	----
9	.97	1.04	1.14	1.30	1.49	1.25	1.07	.92	.84
10	.91	.99	1.13	----	1.46	----	----	----	----
11	.74	.84	1.00	1.19	----	----	----	----	----
12	.66	.74	.93	1.13	1.41	----	----	----	----
13	----	----	----	1.26	1.42	----	----	----	----
14	.88	.96	1.08	1.23	1.43	----	----	----	----
15	----	.89	1.02	1.22	1.46	1.22	1.04	.92	----
16	.86	.94	1.02	1.20	----	----	----	----	----
17	.57	.67	.84	----	----	----	----	----	----
18	----	----	.96	1.14	1.34	----	----	----	----
20	----	.74	----	1.10	1.34	----	----	----	----
24				New Motor installation					
25	.70	.85	.98	1.15	1.41	1.20	1.04	.88	.81
26	.71	.80	.94	1.12	1.41	----	----	----	----
27	.79	.87	1.01	1.17	1.38	----	----	----	----
28	----	----	----	----	1.38	----	----	----	----
29	----	----	----	1.06	----	----	.98	.86	.78
30	.88	.97	1.08	1.24	1.42	1.22	1.06	.92	.83
Averages	0.81	0.89	1.01	1.20	1.42	1.24	1.06	0.93	0.85

OMAHA, NEBR.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Jun. 2	HS0.58	HS0.70	HS0.83	HS1.02	HS1.27	HS1.01	HS0.83	HS0.71	HS0.57
4	----	----	----	HI .78	----	----	----	----	----
8	HM .68	----	----	----	----	----	----	----	----
22	.72	.80	.93	1.12	----	----	----	----	----
25	.84	.93	----	1.16	----	----	----	----	----
26	HM .70	HM .79	HM .94	HM1.06	----	----	----	----	----
30	.68	.78	.89	1.07	1.24	HS .99	HM .78	.68	HM .56
Averages	0.70	0.80	0.90	1.04	1.26	1.00	0.81	0.70	0.57

MAUNA LOA OBS., HAWAII

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jun. 1	1.09	1.17	1.27	1.39					
2	1.07	1.15	1.26	1.37					
4				1.32					
5	1.03	1.11	1.19	1.30					
6				1.29	1.48	1.28	1.16	1.06	0.98
7	1.00	1.09	1.19	1.32					
8	1.05	1.13	1.24	1.36				1.12	1.00
9	1.13	1.22	1.30	1.41					
10	1.02	1.14	1.24	1.36	1.54	1.35	1.20	1.12	1.05
14	1.05	1.14	1.24	1.35	1.52				
15	1.05	1.14	1.23	1.34					
16	1.08	1.15	1.24	1.35					
17	1.10	1.19	1.28	1.40	1.57				
19	1.12	1.20	1.30	1.42	1.56	1.37	1.21	1.12	1.04
20	1.11	1.20	1.29	1.41	1.55	1.37	1.24	1.13	1.04
21	1.10	1.17	1.27	1.38					
22	1.08	1.18	1.26	1.37	1.51				
23					1.53	1.38	1.27	1.19	1.11
24	1.11	1.20	1.30	1.41					
27	1.05	1.15	1.26	1.37	1.50				
Averages	1.07	1.16	1.26	1.36	1.53	1.35	1.22	1.12	1.04

MADISON, WIS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jun. 2	M 0.61	M 0.72	M 0.83	M 1.03	S 1.28	----	----	----	----
3	M .58	M .69	M .82	M 1.02	----	----	----	----	----
18	----	----	S .89	----	M 1.33	----	----	----	----
20	S .76	S .89	S .99	S 1.16	----	----	----	----	----
22	----	----	----	S 1.09	S 1.29	----	----	----	----
25	S .85	S .91	S .99	S 1.15	----	----	----	----	----
Averages	0.70	0.80	0.90	1.09	1.30	----	----	----	----

BLUE HILL OBS., MASS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Jun. 1	0.82	0.91	1.04	1.18	1.34	----	----	----	----
2	.58	.65	.79	.99	1.23	----	----	----	----
3	.49	.59	.71	.86	1.21	0.98	0.77	0.55	0.48
26	.75	.87	.99	1.18	1.35	1.04	.82	.67	.55
27	.62	.72	.84	.98	----	----	----	----	----
28	.50	.60	.75	.99	1.25	----	----	----	----
Averages	0.63	0.72	0.85	1.03	1.28	1.01	0.79	0.61	0.52

TUCSON, ARIZ.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jun. 1	0.78	0.87	0.98	1.14	1.33	1.10	0.97	0.84	0.76
4	----	----	----	----	----	1.10	.98	.87	.76
6	.88	1.02	1.12	1.27	1.49	1.24	1.12	1.02	.92
7	.84	.93	1.07	1.22	1.42	1.11	.88	----	----
8	----	----	----	1.21	1.42	----	1.06	.90	.78
9	1.20	1.24	1.29	----	1.44	1.23	1.09	.97	.87
10	.94	1.02	1.12	1.20	1.39	1.10	.93	.81	.69
11	.74	.86	.97	1.12	1.37	----	---	.86	----
12	.79	.88	.90	1.14	1.33	1.12	.98	.76	.60
13	.80	.91	1.01	1.12	----	1.11	.99	.89	.80
14	.77	.88	.99	1.16	----	----	----	----	----
15	.72	.82	.93	1.10	1.32	1.12	.98	.83	.76
16	.70	.82	.94	1.11	1.30	1.17	1.03	1.01	.82
17	.79	.90	1.01	1.18	1.33	.97	.84	----	----
18	----	----	----	----	1.18	----	----	----	----
20	.53	.70	.82	----	----	----	----	----	----
21	.80	.90	.98	1.10	1.30	1.10	.97	.85	.76
22	.82	.90	1.00	1.12	1.28	1.08	.97	.86	.76
25	----	----	----	----	1.16	----	----	----	----
26	----	----	----	----	----	.93	.80	----	----
27	.47	.58	.68	.87	----	.99	.84	.68	.61
28	----	----	----	----	1.24	----	.79	.69	.58
29	.61	.72	.83	1.00	1.23	1.01	.84	.73	.62
30	.54	.70	.78	.96	1.19	----	----	.60	.50
Averages	0.76	0.86	0.91	1.11	1.31	1.10	0.95	0.83	0.76

GUAM, M. I.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Jun. 9	----	----	S 0.95	S 1.10	----	----	----	----	S 0.74

HS Slight haze
HM Moderate haze
HI Intense haze
S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. JUNE 1967

Station	Day of month																														Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ALBUQUERQUE N.M.	---	---	624	---	---	816	892	888	888	812	837	862	---	---	---	908	---	777	---	722	906	728	632	262	856	837	802	832	629	856		779
AMES IOWA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	334	719	707	725		---
ANNETTE ALASKA	551	724	743	701	542	687	427	724	716	238	512	701	466	138	439	766	739	368	380	413	294	570	645	542	510	289	152	222	369	682		508
APALACHICOLA FLORIDA	582	536	518	459	495	549	631	701	707	644	670	605	---	691	425	563	705	607	595	391	437	314	517	590	209	265	453	573	657	474		537
ARGONNE NAT. LAB.	626	729	681	565	355	310	236	684	442	345	555	467	522	547	609	367	197	668	656	716	159	640	638	312	677	616	540	462	556	728		520
ASTORIA OREGON	649	302	242	851	851	233	406	358	517	346	320	743	362	701	605	566	657	727	455	330	127	204	727	626	331	381	539	716	778	786		514
ATLANTA GEORGIA	140	128	81	292	257	667	650	507	675	485	410	569	555	549	609	548	599	486	632	503	401	458	484	478	643	689	270	313	550	709		478
BARROW ALASKA	307	426	545	680	465	432	495	487	699	640	714	701	532	670	493	723	724	780	763	642	418	372	252	418	357	271	322	637	441	726		538
BETHEL ALASKA	176	233	339	434	347	420	404	210	383	218	507	372	425	471	332	203	192	490	648	562	377	588	601	337	332	621	590	496	444	671		414
BISMARCK N.DAK.	775	767	739	636	307	559	389	458	327	434	161	172	225	---	424	736	782	378	809	738	767	313	639	550	741	770	750	455	756	771*		563*
BLUE HILL MASS.	---	660	709	---	---	---	---	---	---	---	---	---	---	498	618	641	708	---	---	---	151	400	144	720	520	705	705	704	671	162		---
BOISE IDAHO	458	644	726	613	150	230	607	678	707	739	654	693	662	727	718	705	644	705	527	515	399	547	731	719	716	661	273	741	731	716		611
BOSTON MASSACHUSETTS	694	663	684	689	684	544	677	60	566	612	633	520	446	445	556	557	602	147	85	61	142	400	177	692	477	682	677	696	650	92		487
BROWNSVILLE TEXAS	662	189	696	715	712	691	---	798	695	692	535	509	632	755	725	686	564	653	694	681	---	567	679	770	777	820	750	745	667	672		669
CANTON ISLAND P.I.	203	518	567	583	607	600	581	---	---	426	578*	---	605	605	594	595	570	566	561	573	500	559	586	495	216	435	527	551	532	522		528*
CAPE HATTERAS N.C.	84	243	580	530	587	692	582	546	684	722	690	723	496	539	426	698	533	473	308	537	657	632	505	455	576	314	329	354	446	278		507
CARIBOU MAINE	410	598	723	659	645	509	351	725	139	578	646	202	713	539	157	444	316	742	759	670	166	166	149	464	229	757	778	734	736	714		514
CHARLESTON S.C.	132	352	475	508	292	569	740	637	662	623	540	318	480	571	553	477	474	437	689	538	613	518	592	784	724	491	172	664	523	543		523
CLEVELAND OHIO	722	633	690	677	541	552	377	470	609	551	686	626	594	560	587	456	428	400	682	517	374	564	646	561	322	686	701	286	479	530		550
COLUMBIA MISSOURI	188	714	734	737	394	598	466	672	680	326	531	615	---	704	677	378	563	572	506	530	309	704	710	229	521	756	190	504	322	726		536
DAVIS CALIFORNIA	183	189	706	598	270	370	667	731	656	706	631	673	678	730	726	714	712	650	719	730	726	725	747	718	734	732	708	726	699	709		642
DODGE CITY KANSAS	132	195	625	679	691	492	716	750	755	445	612	715	629	704	649	508	659	692	643	379	701	745	701	518	750	448	779	707	687	770		616
E. LANSING MICHIGAN	717	691	657	673	540	357	214	450	341	506	374	652	482	670	635	542	123	690	710	636	122	400	671	394	461	489	609	115	367	712		500
EL CENTRO CALIF. NPF	604	608	575	603	608	592	593	605	602	588	562	570	606	581	579	563	574	582	590	565	565	581	593	579	571	563	555	579	545	545		581
EL PASO TEXAS	824	506	390	551	657	666	852	855	848	861	858	835	828	842	837	820	774	772	418	781	815	805	739	280	256	688	759	711	767*	791		713*
ELY NEVADA	---	767	855	713	759	501	444	715	424	743	541	297	---	---	633	414	808	574	409	633	623	790	878	756	810	844	837	868	853	840		679
EPPLEY NEWPORT R.I.	709	622	674	698	664	634	703	429	646	636	608	555	309	656	571	605	616	352	91	105	125	---	---	666	340	709	---	657	---	118		519
FAIRBANKS ALASKA	618	351	697	478	426	663	655	701	601	804	757	772	758	681	738	763	744	723	575	518	372	599	791	720	703	551	682	519	297	565		627
FORT WORTH TEXAS	575	444	612	715	740	734	599	791	749	605	159	182	709	762	787	765	649	729	733	696	776	569	776	---	581	663	289	721	725	308		626
FRESNO CALIFORNIA	539	744	677	632	314	520	743	735	759	730	690	715	586	735	729	679	742	716	673	731	746	756	754	733	725	716	710	722	703	696		688
GLASGOW MONTANA	486	651	618	515	696	611	258	267	566	560	304	128	227	462	736	751	708	159	756	744	746	317	431	760	566	671	571	701	725	743		548
GRAND JUNCTION COLO.	564	679	340	616	538	816	755	557	708	653	697	300	341	666	512	750	656	701	414	412	802	710	756	817	796	755	807	460	793	808		639
GREAT FALLS MONTANA	325	751	511	125	516	220	141	637	728	207	443	125	127	346	808	767	609	444	784	773	655	151	543	770	776	766	641	792	779	788		535
GREENSBORO N.C.	---	---	---	---	---	---	---	---	---	---	---	---	662	636	514	603	542	428	534	392	525	368	585	600	416	620	492	675	---	---		---
INDIANAPOLIS INDIANA	422	698	319	585	677	467	653	---	641	550	654	690	612	679	632	637	612	527	647	541	194	513	671	513	507	600	666	514	512	612		571
LAKE CHARLES LA.	191	655	700	697	643	642	502	473	588	582	656	628	579	643	607	557	623	611	586	596	684	669	708	691	660	650	703	676	---	657		616
LAKELAND FLORIDA	537	589	467	601	429	548	643	528	653	605	633	628	536	549	697	549	414	123	430	---	526	332	---	455	526	629	---	---	659	423		527
LANDER WYOMING	513	632	712	627	555	565	698	518	543	432	326	490	408	442	201	684	598	734	713	264	472	466	86	745	744	538	386	389	767	720		532
LARAMIE WYOMING	811	653	603	390	593	529	640	552	599	526	282	627	610	322	531	680	560	718	673	562	658	638	662	809	709	650	636	349	851	824		608
LAS VEGAS NEVADA	816	803	783	692	813	699	785	790	770	691	677	735	564	789	779	757	768	789	460	771	772	778	781	780	792	794	804	762	788	776		752
LITTLE ROCK ARKANSAS	---	382	749	702	745	707	661	647	731	689	554	669	720	577	509	692	597	603	645	518	704	458	551	730	500	---	---	532	613	514		618
LOS ANGELES, CALIF.	794	806	798	824	797	760	637	475	524	708	274	433	---	537	635	281	196	614	758	654	650	548	611	590	672	764	791	810	717	685		632
LOS ANGELES CALIF.U	743	---	---	---	---	---	---	187	256	424	140	182	529	397	662	222	136	587	721	693	569	613	596	642	600	713	762	---	716	715		513
MADISON WISCONSIN	731	736	711	628	345	186	117	713	474	345	348	552	622	577	649	545	261	769	352	765	299	761	337	131	718	654	468	301	529	747		512
MANHATTAN KANSAS	102	653	546	566	366	439	375	520	332	395	178	383	574	543	591	210	479	317	576	283	400	661	601	235	639	520	616	611	449	644		460
MATANUSKA ALASKA	370	489	373	354	305	626	270	340	377	355	582	505	284	272	449	658	711	129	588	399	250	716	652	266	320	443	295	401	123	244		405
MEDFORD OREGON	320	769	761*	736	764	453	729*	656*	707*	688*	689	620	767	761*	749*	738	716	737	648	572	661	530	775*	738	734*	734*	755*	756*	732*	725*		691*
MIAMI FLORIDA	---	---	---	---	---	---	---	522*	376	602	389	153	224	260	353	334	280	599	353	558	493	552	302	628	611	700	718	529	502	525		459*
MIDLAND TEXAS	441	577	557	588	503	582	680	658	686	700	715	670	635	516	629	549	551	594	---	706	631	506	705	623	332	475	386	709	418	234		571
NASHVILLE TENNESSEE	474	93	120	589	728	737	666	610	699	716	666	694	672	626	687	714	443	562	612	579	594	311	682	546	380	693	715	168	272	447		550
NEW YORK N.Y. U	727	633	630	643	638	587	680	629	631	537	573	616	415	406	475	496	604	270	67	158	697	472	245	588	431	746	606	619	578	70		515
NORTH OMAHA NEBRASKA	259	776	716	658	474	479	225	531	374	638	424	676	354	---	521	398	538	529	788	695	586	807	490	345	821	740	531	577	715	787		567
OAK RIDGE TENNESSEE	330	165	107	567	676	664	668	644	630	688	681	633	608	670	646	681	599	408	547	509	502	355	597	553	308	725	629	356	333	346		527
OKLAHOMA CITY OKLA.	303	463	650	661	637	458	577	655	642	377	498	283	466	738	718	545	599	601	706	657	402	737	417	504	117	331	648	516	663	412		533
PALMER AAES ALASKA	343	402	278	225	301	481	240	312	271	313	566	463	260	247	527	640	557	84	322	393	376	567	547	224	294	359	326	273	145	265		353

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	760	749	472	633	754	764	763	767	767	764	729	761	674	741	749	753	753	99	551	715	---	---	---	---	---	---	707	713	721	713		691
PORTLAND MAINE	610	596	681	649	700	497	644	142	446	510	561	531	654	299	379	570	426	251	473	73	157	199	170	624	438	695	693	689	601	180		471
RAPID CITY S.DAK.	126	508	598	463	611	353	354	380	230	407	93	531	490	438	72	540	647	628	670	327	704	384	104	514	539	689	617	434	682	662		460
RENO NEVADA	359	409	694	445	156	543	679	570	632	461	600	327	809	657	686	635	685	562	535	662	718	714	717	702	566	665	700	696	690	677		598
RICHLAND 25 NW WASH.	561	430	140	695	703	657	682	681	644	506	490	526	713	---	695	635	661	672	682	643	320	502	629	617	694	566	644	701	709	730		604
RIVERSIDE CALIFORNIA	804	807	776	803	654	750	760	442	416	334	305	247	534	608	729	483	249	583	739	731	736	724	704	687	601	700	691	687	640	649		619
RUSTON LOUISIANA	39	---	---	---	---	---	582	---	558	---	---	525	573	576	584	438	509	526	562	473	585	505	631	646	659	436	271	329	605	556		508
SAINT CLOUD MINN.	734	716	653	485*	259	431	73	354	557	130	155	488	604	548	285	631	739	691	363	656	656	534	623	800	744	325	607	698	719	642		530*
SALT LAKE CITY	414	645	814	531	633	513	488	477	588	641	545	377	290	228	516	---	---	804	554	491	732	669	542	814	691	713	749	803	803	793		602
SAN ANTONIO TEXAS	591	446	602	627	592	654	669	589	572	480	333	431	534	663	593	632	617	632	634	653	575	654	647	635	645	695	710	696	680	626		604
SANTA MARIA CALIF.	330	553	748	501	518	739	653	543	286	710	276	495	666	559	556	448	155	99	596	564	657	716	659	518	607	587	704	729	684	661		550
SAULT STE MARIE MICH	758	748	734	694	340	363	585	110	416	417	266	358	387	281	393	205	694	790	723	473	---	786	518	454	754	721	710	566	441	427		521
SEATTLE TACOMA WASH.	666	127*	323	770	760	451*	---	---	583	567	690	610	458	597	759	712	756	755	714	238	56	542	581	747	742	432	723	709	758	782		593*
SPOKANE WASHINGTON	647	474	210	452	771	641	735	626	447	453	636	498	710	761	752	729	615	598	761	739	136	628	717	761	668	648	634	757	773	786		625
STATE COLLEGE PENN.	750	826	835	848	714	650	717	674	469	537	638	616	560	348	581	537	578	320	116	750	485	278	515	600	474	675	572	532	100	574		562
STERLING VIRGINA	551	705	737	734	---	639	---	---	672	---	---	---	663	341	491	662	649	292	349	745	635	355	546	626	551	773	614	597	406	517		577
SWAN ISLAND W.I.	658	603	603	571	431	579	368	400	139	285	620	660	677	658	604	678	---	284	501	551	587	586	644	516	473	611	671	611	652	567		544
TAMPA FLORIDA	630	622	546	731	524	534	575	403	629	678	535	599	566	621	634	433	558	223	632	147	456	545	205	623	730	699	710	679	722	671		562
TUCSON ARIZONA	722	592	460	618	509	747	740	707	753	743	733	721	701	624	539	719	665	557	503	654	713	731	406	475	478	577	692	696	703	643		637
WAKE ISLAND,PACIFIC	651	659	628	660	591	545	202	647	608	580	309	496	514	520	600	640	609	530	597	631	557	625	666	641	---	130	559	682	700	548		563

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska JUNE 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	162	203	143	108	147	241	124	161	161	170	264	212	130	125	275	274	24	6	152	206	175	262	267	105	136	191	167	153	85	165		166

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λsΩΩΩ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded ΩΩΩ) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λs designates the type of measurement made.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature – Monthly extremes								Precipitation – Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date		Station	Greatest	Station	Least
		°F			°F				In.		In.
December 1966											
Alaska	2 Stations	54	13+	Northway FAA AP	-60	10		Little Port Walter	27.80	2 Stations	T
Hawaii	Kahuku 912, Oahu	89	5	Mauna Loa Slope Obs., Hawaii	24	28		Puohokamoa 2 343, Maui	25.40	Honuaula 71, Hawaii	0.00
April 1967											
Alaska	Annette WBAP	71	30	2 Stations	-34	19+		Rampart No. 2	5.77	Chitina	T
Hawaii	Waikiki 717.2, Oahu	89	23	Mauna Loa Slope Obs., Hawaii	25	10		Mountain View 91, Hawaii	31.97	Kekaha 944, Kauai	0.29

See reference notes with current data

STORM SUMMARY

STATE	TORNADOES Number	TORNADOES Days	TORNADOES Deaths	TORNADOES Injuries	TORNADOES †Damage	HAILSTORMS Deaths	HAILSTORMS Injuries	HAILSTORMS †Damage Property	HAILSTORMS †Damage Crops	WINDSTORMS Deaths	WINDSTORMS Injuries	WINDSTORMS †Damage Property	WINDSTORMS †Damage Crops	LIGHTNING Deaths	LIGHTNING Injuries	LIGHTNING †Damage Property	LIGHTNING †Damage Crops	@ HEAVY SNOWSTORMS AND BLIZZARDS Deaths	@ HEAVY SNOWSTORMS AND BLIZZARDS Injuries	@ HEAVY SNOWSTORMS AND BLIZZARDS †Damage Property	@ HEAVY SNOWSTORMS AND BLIZZARDS †Damage Crops	# ICE STORMS Deaths	# ICE STORMS Injuries	# ICE STORMS †Damage Property	# ICE STORMS †Damage Crops	ø ALL OTHER Deaths	ø ALL OTHER Injuries	ø ALL OTHER †Damage Property	ø ALL OTHER †Damage Crops
January 1967																													
Oklahoma	4	2	0	6	5																								
April 1967																													
Oklahoma	12	6	0	3	5																								

See reference notes with current data

C O R R E C T I O N S

	Month:	November 1966
page 535: Arizona		Delete Saint Joseph; data appears in order with Missouri - the date for the highest temperature is 22+.
	Month:	Annual 1966
page 11: Topeka, Ka.		Data for June 13 should be for June 12.
page 129-131: Ozone Data		See the 1966 Annual issue of Climatological Data National Summary for data occurring during 1966.
	Month:	January 1967
page 24: Rawinsonde Data		Winds at 950 mb. should be deleted for Boise, Dodge City, Glasgow, Midland, North Platte, Rapid City, Spokane, and Tucson.
page 32: Barrow, Alaska		Average daily langleys should be 1.
page 39: Chart IV		See page 306 this issue for additional data.
	Month	February 1967
page 75: Rawinsonde Data		Same as above for January 1967.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. DELAYED DATA

MAUNA LOA OBS., HAWAII

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jan. 1967									
25----	1.22	1.30	1.39	1.49	1.61			1.20	1.13
26----	1.15	1.24	1.35	1.47	1.58	1.47	1.34	1.23	1.13
27----	1.17	1.25	1.35	1.47	1.58				
28----	1.15	1.23	1.33	1.46	1.47				
Averages	1.17	1.26	1.36	1.47	1.56	1.47	1.34	1.22	1.13

MAUNA LOA OBS., HAWAII

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Feb. 1967									
3-----	1.16	1.24	1.34	1.46					
4-----	1.19	1.26	1.37	1.48					
5-----	1.14	1.22	1.33	1.46					
6-----	1.13				1.56				
7-----	1.13	1.21	1.32	1.44	1.57	1.44	1.32	1.20	1.13
8-----	1.18	1.27	1.37	1.50	1.60				
12----	1.09	1.18	1.28	1.41	1.57				
17----					1.58				
18----	1.14	1.24	1.35	1.48	1.60				
20----	1.13	1.22	1.32	1.46	1.60	1.46	1.33	1.24	1.15
21----	1.13	1.22	1.33	1.47	1.60	1.46	1.34	1.24	1.15
22----	1.14	1.22	1.34	1.46	1.61	1.43	1.32	1.22	1.15
23----	1.14	1.24	1.34	1.46	1.61	1.44	1.32	1.20	1.11
24----	1.16	1.25	1.34	1.46	1.60	1.41	1.29	1.19	1.11
25----	1.15	1.24	1.34	1.46	1.59				
26----	1.16	1.26	1.34	1.48					
Averages	1.14	1.23	1.34	1.46	1.59	1.44	1.32	1.22	1.13

See reference notes with current data

MAUNA LOA OBS., HAWAII

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Mar. 1967									
3-----	1.17	1.23	1.31	1.42					
4-----	1.09	1.18	1.28	1.41					
5-----	1.15	1.23	1.33	1.45					
6-----	1.16	1.24	1.33	1.45	1.58				
7-----	1.16	1.24	1.33	1.44					
8-----	1.12	1.21	1.32	1.44					
12----	1.11	1.20	1.30	1.42					
13----	1.10	1.18	1.28	1.41					
14----	1.16	1.23	1.31	1.45					
16----	1.07	1.16	1.30	1.42					
30----	1.04	1.13	1.24	1.36					
Averages	1.12	1.20	1.30	1.42	1.58				

MAUNA LOA OBS, HAWAII

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Apr. 1967									
9-----				1.38					
10----	1.06	1.15	1.26	1.38					
11----	1.03	1.12	1.24	1.37					
12----	1.03	1.12	1.24	1.28					
16----	1.01	1.09	1.17	1.30					
17----					1.59				
18----	1.03	1.13	1.24	1.38	1.57				
19----	1.09	1.17	1.28	1.42					
20----	1.12	1.21	1.32				1.23	1.13	1.04
21----	1.07	1.16	1.27	1.41					
23----	1.05	1.13	1.24	1.37					
26----	1.05	1.15	1.26	1.38					
29----	1.08	1.22	1.27	1.39					
30----	1.09	1.23	1.27	1.39					
Averages	1.06	1.16	1.26	1.37	1.58		1.23	1.13	1.04

RAWINSONDE DATA

Average monthly values

DELAYED DATA

Standard pressure surface (mb.)	3/ CHIHUAHUA, MEXICO 856 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	1/ CHIHUAHUA, MEXICO 858 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	1,428	14.8	-2.3	23	2.4	31	1,428	1.2	-7.6	23	.4
1000	30	85					31	170				
950	30	525					31	590				
900	30	997					31	1,036				
850	30	1,483	15.4	-2.4	23	2.5	31	1,499	3.5	-6.9	26	.5
800	30	1,997	14.6	-3.2	24	5.3	31	1,997	6.7	-7.7	26	2.8
750	30	2,532	11.3	-5.5	24	7.7	31	2,523	4.2	-10.0	26	4.6
700	30	3,110	8.0	-8.1	24	10.9	31	3,084	2.3	-13.0	27	7.8
650	30	3,711	3.9	-11.4	24	11.8	30	3,672	-.6	-16.5	27	10.2
600	30	4,362	-.6	-15.8	24	12.7	30	4,312	-4.3	-19.7	27	11.1
550	30	5,042	-5.5	-19.0	24	15.1	30	4,985	-8.6	-24.2	28	12.8
500	30	5,791	-10.8	-23.1	24	17.2	29	5,728	-13.5	-28.7	28	14.9
450	30	6,581	-16.4	-27.8	24	19.1	29	6,508	-19.3	-33.3	28	15.9
400	30	7,468	-22.9	-33.4	24	21.5	29	7,384	-26.1	-40.1	27	18.8
350	30	8,432	-30.3	-39.5	24	22.8	29	8,337	-33.1	-45.4	28	19.5
300	30	9,507	-38.9	-46.6	24	24.6	28	9,404	-41.1	-48.1	28	21.1
250	30	10,731	-48.5		25	23.7	28	10,622	-49.1		28	26.0
200	29	12,165	-58.4		25	26.1	28	12,057	-57.2		28	27.2
175	28	12,998	-61.7		25	26.3	28	12,895	-60.5		28	27.8
150	28	13,948	-63.5		25	25.8	26	13,845	-63.3		28	24.2
125	27	15,063	-65.1		24	23.5	25	14,954	-67.0		28	23.2
100	27	16,416	-67.3		23	15.1	23	16,292	-68.7		28	17.8
80	26	17,753	-69.7		23	11.2	20	17,625	-69.2		28	14.0
70	26	18,549	-68.8		22	6.3	20	18,424	-68.1		28	11.1
60	26	19,479	-66.0		20	3.9	20	19,357	-66.0		28	9.5
50	24	20,594	-61.8		16	1.5	20	20,470	-63.3		28	7.8
40	22	21,983	-58.2		10	2.6	19	21,855	-60.3		28	6.9
30	22	23,808	-54.8		10	2.1	17	23,670	-56.4		27	9.7
25	21	24,978	-52.9		13	.7	17	24,834	-54.4		27	12.8
20	20	26,421	-50.9		02	.4	17	26,269	-52.8		27	16.2
15	16	28,300	-48.0		24	2.9	14	28,126	-51.8		27	18.5
10	11	30,991	-44.3									
7												

Standard pressure surface (mb.)	3/ EMPALME, MEXICO 1013 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	2/ FT. HUACHUCA, ARIZ. 857 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	12	15.8	2.7	31	1.3	26	1,439	21.0	12.8	23	.6
1000	30	121	18.8	2.5	33	2.2	26	81				
950	30	558	19.3	-.4	33	4.0	26	533				
900	30	1,025	17.3	-3.0	30	2.8	26	1,008				
850	30	1,510	15.0	-5.2	24	4.6	26	1,511	21.8	11.8	25	.6
800	30	2,021	12.7	-8.6	23	7.0	26	2,037	20.1	8.5	33	1.4
750	30	2,560	9.7	-10.3	24	8.5	26	2,584	16.6	6.0	04	2.3
700	30	3,129	6.2	-12.7	24	11.9	26	3,176	12.4	3.5	09	2.4
650	30	3,729	2.5	-15.1	23	13.9	26	3,785	7.7	1.1	12	2.4
600	30	4,375	-1.7	-17.8	24	15.9	26	4,449	2.9	-2.4	13	3.9
550	30	5,055	-6.2	-21.4	24	17.6	26	5,141	-1.6	-8.2	14	4.5
500	30	5,801	-11.4	-24.3	24	19.4	26	5,902	-6.3	-13.3	14	4.4
450	30	6,596	-17.1	-28.8	24	22.2	26	6,711	-11.2	-20.2	13	4.0
400	30	7,473	-23.7	-33.5	24	23.2	26	7,613	-16.9	-27.6	15	3.9
350	30	8,435	-30.9	-41.3	24	27.2	26	8,602	-23.4	-32.7	15	5.3
300	29	9,509	-39.4	-47.1	24	32.7	26	9,710	-31.8	-41.2	16	5.4
250	28	10,732	-49.1		25	34.4	26	10,972	-41.9		16	6.3
200	28	12,160	-59.0		25	35.5	24	12,439	-53.9		17	6.4
175	28	12,991	-61.6		25	31.7	23	13,282	-60.0		17	7.1
150	28	13,943	-62.6		25	30.5	21	14,231	-66.3		16	7.2
125	28	15,061	-65.0		24	25.0	16	15,321	-71.7		15	8.9
100	27	16,411	-67.4		24	19.3	10	16,644	-71.8		13	7.5
80	27	17,751	-68.5		23	12.7	7	17,975	-66.6			
70	27	18,550	-68.1		23	7.4	6	18,787	-63.2			
60	26	19,484	-65.5		23	3.8	6	19,744	-59.6			
50	25	20,605	-61.5		14	1.5	5	20,877	-57.1			
40	24	21,998	-58.2		12	1.7	5	22,295	-54.8			
30	23	23,826	-54.6		09	2.8						
25	22	24,997	-53.2		11	2.4						
20	22	26,444	-50.2		26	2.3						
15	22	28,335	-47.1		26	6.5						
10	17	31,047	-41.9		26	17.6						
7	9	33,490	-37.3									

Standard pressure surface (mb.)	2/ JACKSON, MISS. 1004 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	94	23.4	22.0	22	.9
1000	31	132	23.7	21.8	22	1.1
950	31	584	24.0	19.0	24	3.7
900	31	1,056	21.7	15.9	23	2.6
850	31	1,550	18.5	12.8	22	1.8
800	31	2,068	15.1	9.2	19	1.1
750	31	2,607	11.9	4.2	22	.4
700	31	3,187	8.4	.0	33	.1
650	31	3,794	4.9	-4.3	02	.6
600	31	4,446	1.4	-10.8	02	1.0
550	31	5,135	-2.2	-16.5	03	1.6
500	31	5,894	-6.3	-21.3	04	2.9
450	31	6,706	-11.2	-25.9R	04	3.8
400	31	7,606	-16.8	-31.8R	03	4.7
350	31	8,594	-23.9	-38.3R	03	5.8
300	31	9,702	-31.8	-45.2R	02	6.0
250	31	10,963	-41.7	-53.0R	02	7.4
200	31	12,437	-53.3		03	9.1
175	31	13,286	-59.0		03	8.9
150	31	14,238	-64.9		03	9.5
125	31	15,335	-70.1		04	9.8
100	31	16,654	-70.8		06	8.6
80	31	17,993	-65.4		07	8.4
70	31	18,811	-62.1		08	9.0
60	31	19,770	-59.2		08	10.7
50	31	20,918	-56.9		09	13.0
40	31	22,340	-53.5		09	14.9
30	31	24,204	-50.2		09	15.2
25	31	25,400	-48.2		09	16.4
20	30	26,874	-46.4		09	18.7
15	27	28,801	-42.8		08	21.0
10	9	31,587	-38.6			
7						

Standard pressure surface (mb.)	4/ KWAJALEIN, MARSHALL IS. 1010 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed	4/ SAN NICOLAS, CALIF. 995 MB No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	4	27.0	24.4	08	4.2	30	174	11.5	8.1	30	4.5
1000	31	91	26.5	24.0	08	4.5	30	128				
950	31	543	23.3	21.5	09	5.4	30	561	15.5	1.8	32	5.0
900	31	1,015	20.6	18.4	09	5.7	30	1,020	15.1	-.7	32	4.5
850	31	1,509	18.1	15.6	09	5.8	30	1,502	13.2	-4.8	32	4.5
800	31	2,027	15.8	12.1	09	5.5	30	2,009	10.3	-8.2	31	4.3
750	31	2,573	13.2	8.5	09	5.3	30	2,543	7.3	-9.7	31	4.5
700	31	3,154	10.2	4.7	09	5.1	30	3,107	3.9	-12.3	30	5.2
650	31	3,765	6.6	1.6	09	4.5	30	3,704	.1	-16.6	29	5.8
600	31	4,418	2.7	-3.5	09	3.6	30	4,340	-4.3	-20.9	29	7.0
550	31	5,117	-1.8	-7.4	10	3.2	30	5,020	-9.1	-25.2	28	7.7
500	31	5,875	-5.5	-12.2	12	2.5	30	5,750	-14.3	-29.9	28	8.9
450	31	6,690	-10.3	-18.0	14	1.8	30	6,540	-20.3	-35.5	28	9.8
400	31	7,594	-15.8	-24.2	20	1.8	30	7,401	-26.9	-40.3	28	11.0
350	31	8,581	-22.7	-33.1	25	2.5	30	8,350	-34.1	-47.7	27	14.0
300	31	9,700	-31.1	-41.3	26	4.4	30	9,411	-42.3	-54.7	26	17.0
250	31	10,964	-41.5		26	6.7	30	10,620	-51.1	-62.6	26	21.0
200	31	12,437	-53.9		26	8.9	30	12,044	-58.9	-69.5	26	23.8
175	31	13,275	-60.8		27	10.2	30	12,878	-60.9	-71.3	26	23.3
150	31	14,222	-68.5		28	10.2	30	13,838	-60.2	-71.3	26	22.3
125	30	15,289	-75.7		27	9.5	30	14,970	-61.8		26	20.2
100	26	16,569	-80.6		28	5.5	30	16,348	-63.1		26	15.3
80	22	17,833	-77.3		26	3.6	29	17,718	-62.9		26	9.7
70	21	18,606	-72.3		27	7.3	29	18,542	-62.2		25	5.7
60	20	19,519	-68.1		28	5.8	29	19,497	-60.9		26	2.0
50	20	20,632	-63.8		27	2.9	29	20,636	-58.7		07	.7
40	20	22,009	-59.3		08	1.6	29	22,046	-56.4		04	1.6
30	20	23,835	-55.2		08	7.4	29	23,884	-53.5		03	1.3
25	20	25,003	-53.5		09	14.5	29	25,061	-52.2		03	1.5
20	19	26,459	-49.5		09	21.5	28	26,512	-49.6		27	.5
15	17	28,358	-45.2		09	27.1	27	28,408	-46.7		28	6.9
10	17	31,099	-39.8		09	32.3	27	31,129	-41.1		28	6.6
7	14	33,576	-35.4		09	35.7	23	33,575	-35.0		27	9.6
5	8	35,934	-30.5				10	35,953	-29.2			

1/ December 1966
2/ July 1966
3/ April 1967
4/ May 1967

R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

Also see reference notes with current data.

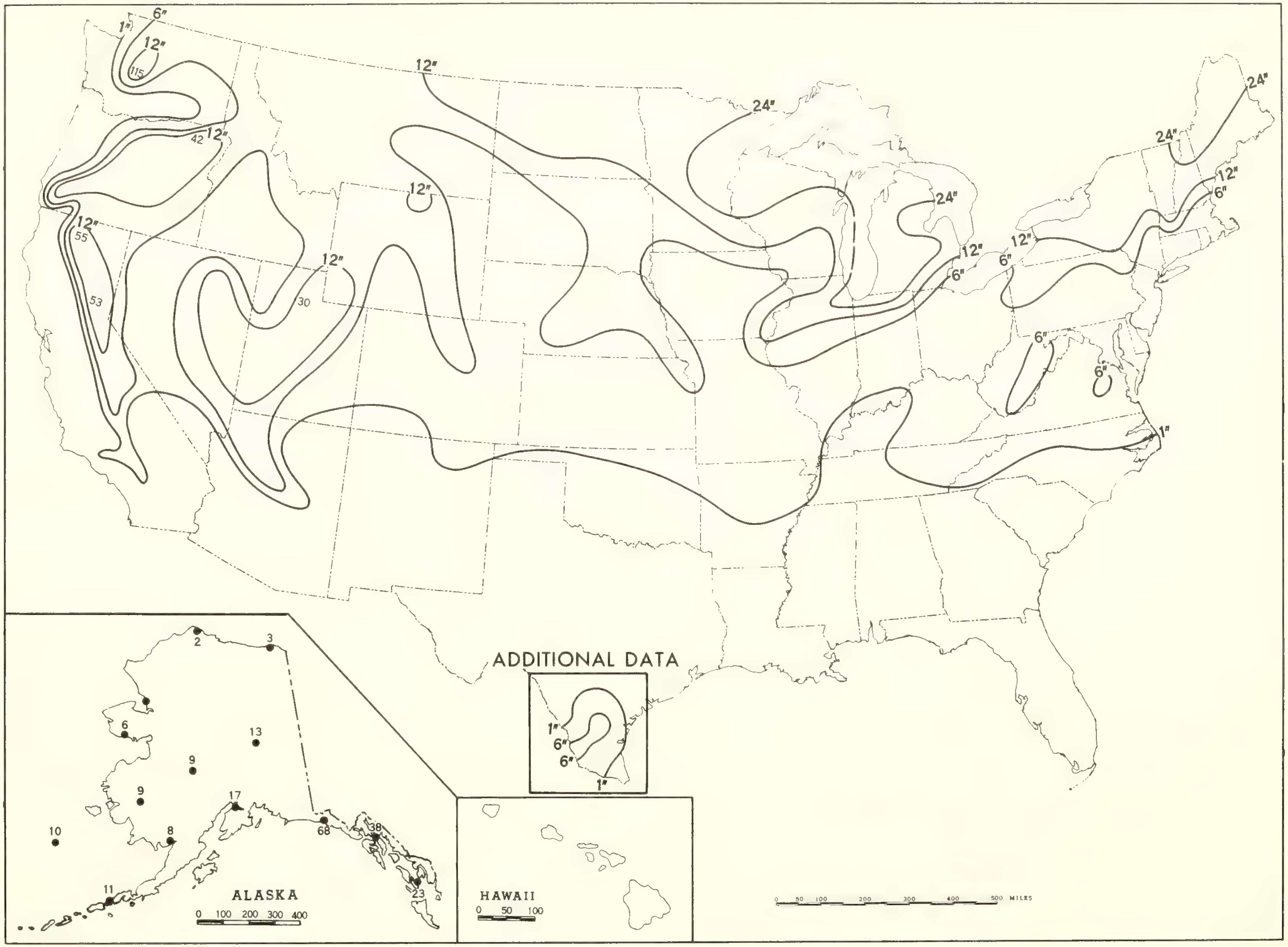
SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OCTOBER 1966																																
PULLMAN WASHINGTON	222	98	397	384	369	357	265	343	361	365	58	252	107	307	318	217	277	301	242	108	149	39	35	274	256	189	128	153	162	173	250	231
NOVEMBER 1966																																
PULLMAN WASHINGTON	244	237	218	231	92	120	111	268	59	223	100	156	53	76	36	87	253	193	118	145	115	206	163	163	26	156	83	33	85	83		138
DECEMBER 1966																																
PULLMAN WASHINGTON	31	74	122	---	30	104	67	117	97	68	51	64	21	108	98	89	116	86	61	27	176	152	89	81	148	25	52	22	79	35	60	78
JANUARY 1967																																
PULLMAN WASHINGTON #	88	86	95	34	67	95	108	119	109	62	58	47	26	52	65	113	56	99	26	95	68	---	215	144	69	52	51	132	101	212	94	88
FEBRUARY 1967																																
INYOKERN CALIFORNIA	313	348	347	345	346	362	367	365	367	362	380	380	275	401	389	403	399	406	397	423	437	416	324	230	315	---	421	433				369
PULLMAN WASHINGTON	85	77	67	124	249	208	285	185	109	213	90	126	121	256	146	199	115	199	342	334	321	193	246	236	119	323	311	135				193
MARCH 1967																																
LOS ANGELES CALIF.U	504	471	138	441	542	533	509	473	148	199	226	185	216	425	402	407	571	385	428	519	553	525	419	525	450	329	493	430	695	629	609	432
PALMER AAES ALASKA	145	58	45	36	181	83	110	182	213	235	224	229	224	248	241	247	261	220	281	272	107	305	321	319	302	219	258	281	336	207	62	208
PULLMAN WASHINGTON	262	80	124	353	390	306	217	161	147	140	189	358	233	328	270	85	330	215	422	332	228	78	244	391	280	348	315	227	288	485	392	265
APRIL 1967																																
GAINESVILLE FLORIDA	475	489	667	626	586	552	735	585	624	660	540	474	372	720	596	556	568	544	662	695	711	581	532	496	652	576	615	712	720	683		600
LOS ANGELES CALIF.U	258	627	663	267	605	640	553	585	632	310	602	675	294	480	681	649	668	215	343	486	317	692	704	772	745	764	767	649	784	793		574
RUSTON LOUISIANA	477	538	501	487	472	470	354	499	194	139	153	266	133	452	486	348	207	303	467	---	181	465	246	577	243	386	467	151	362	157		351
MAY 1967																																
SEATTLE WASHINGTON	280	175	211	494	373	255	433	109	333	130	177	276	410	344	558	592	586	506	637	624	481	182	348	435	671	509	471	304	461	263	498	391

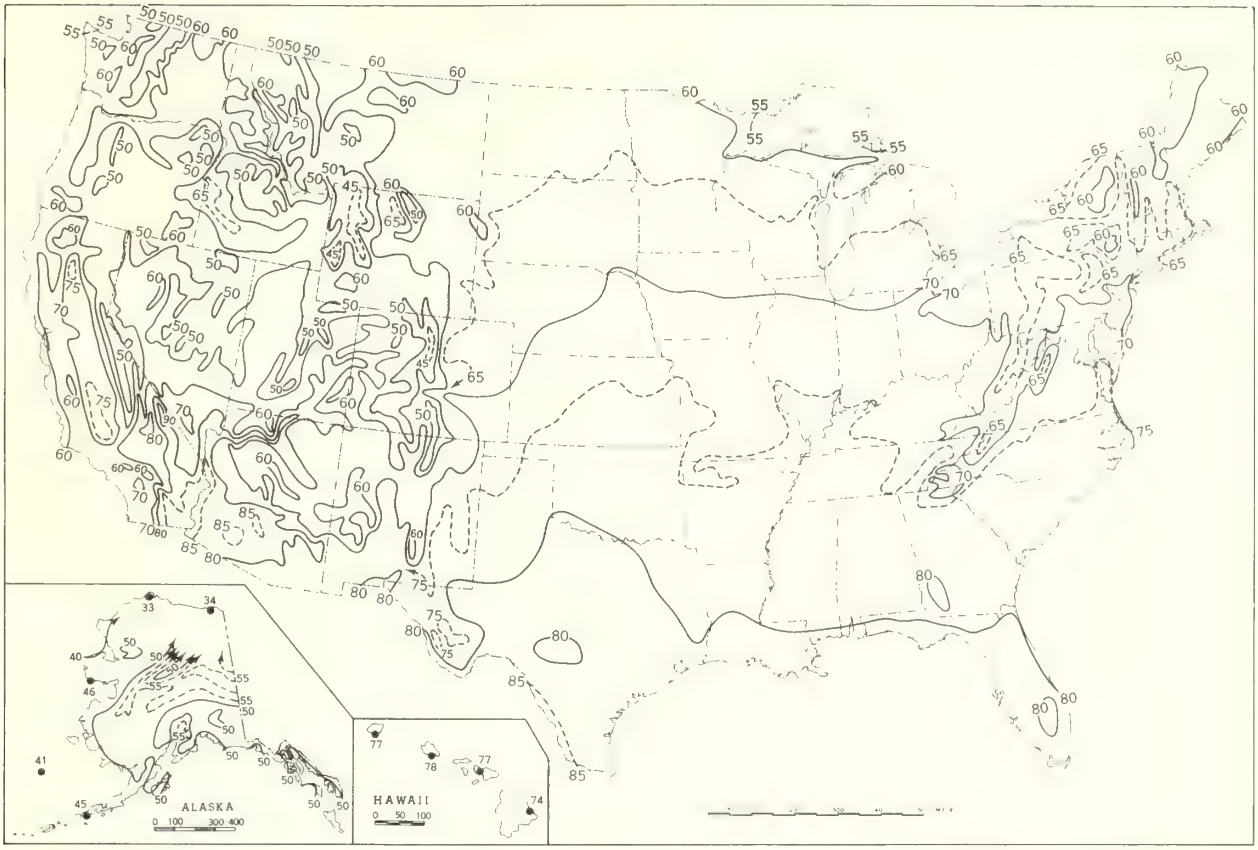
\# these are corrected data
also see reference notes with current data

Chart IV. Total Snowfall (Inches), January 1967.



This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), June.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), June 1967.

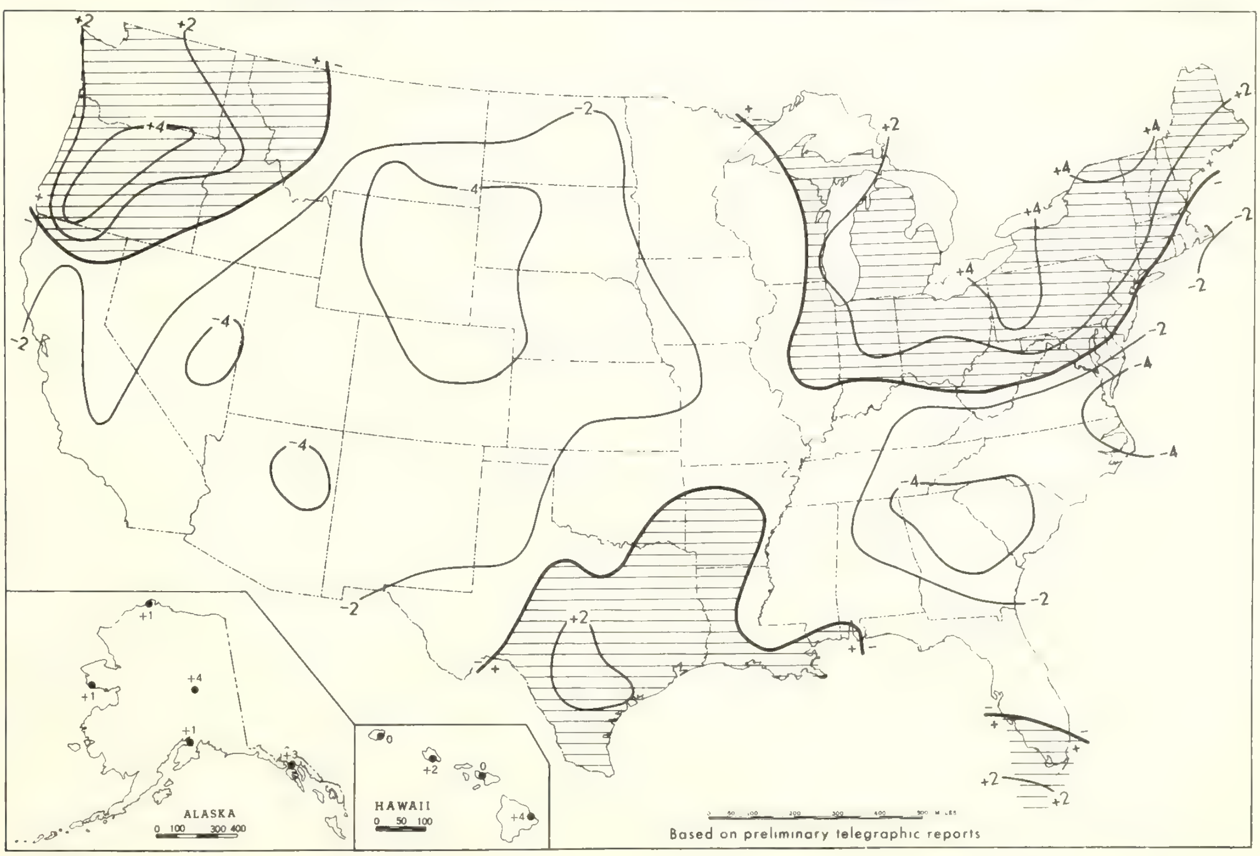


Chart II. Total Precipitation (Inches), June 1967.

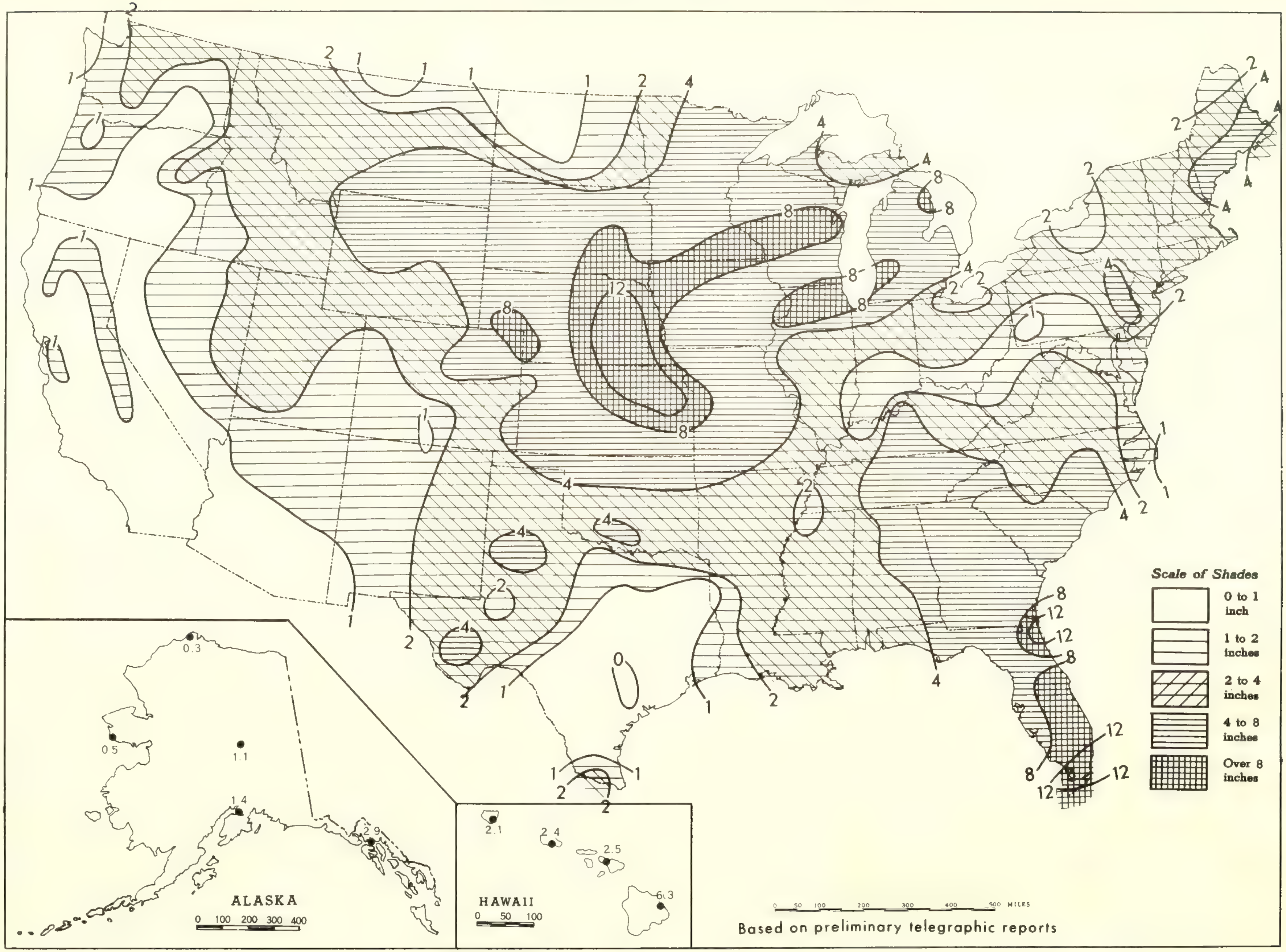
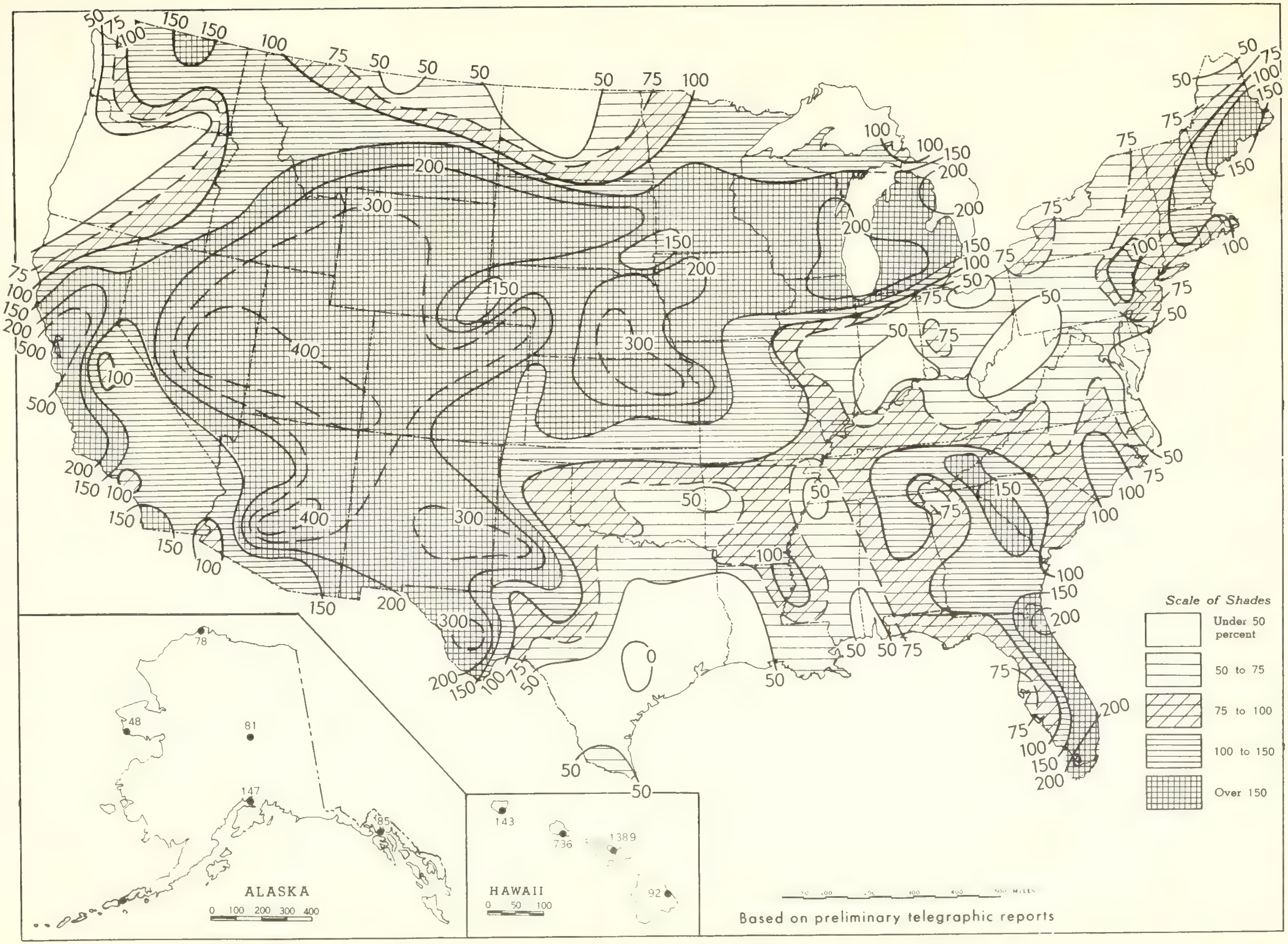
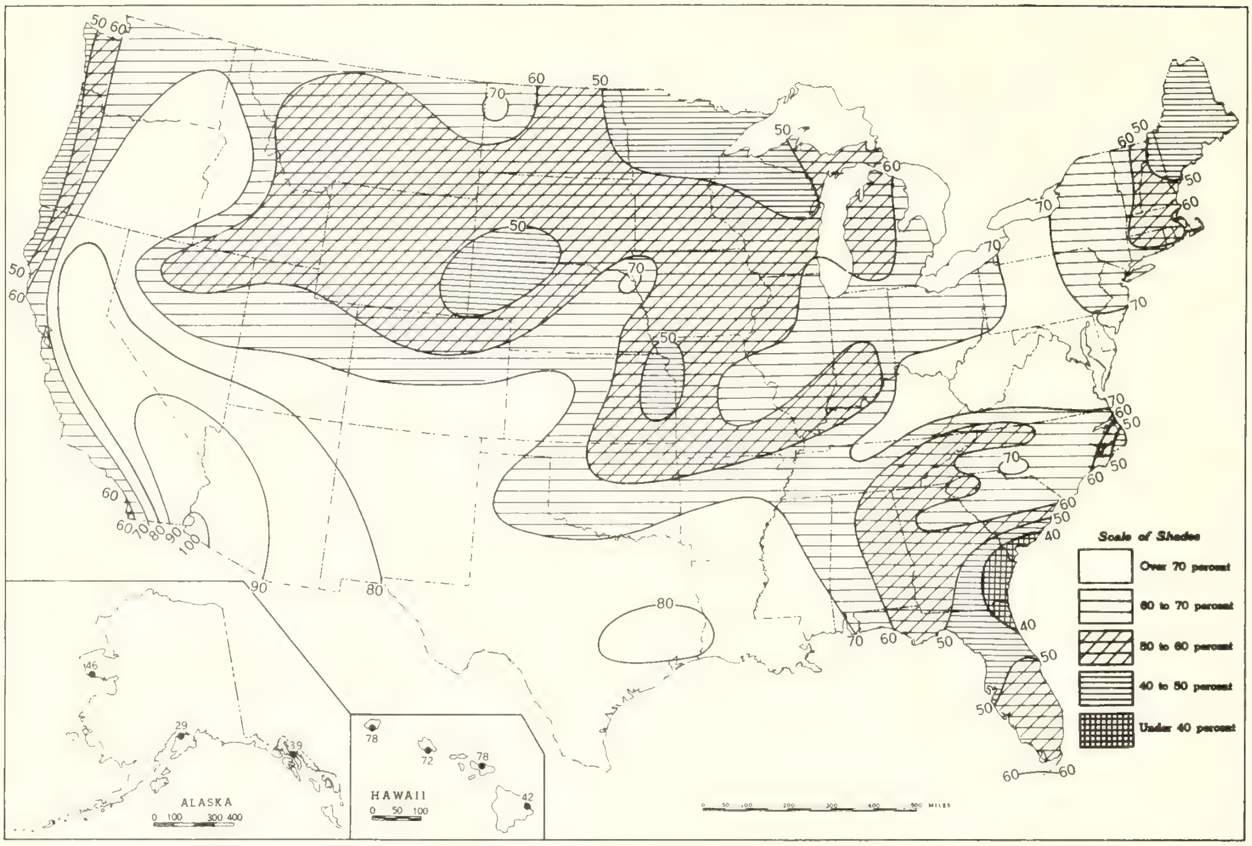


Chart III. Percentage of Normal Precipitation, June 1967.

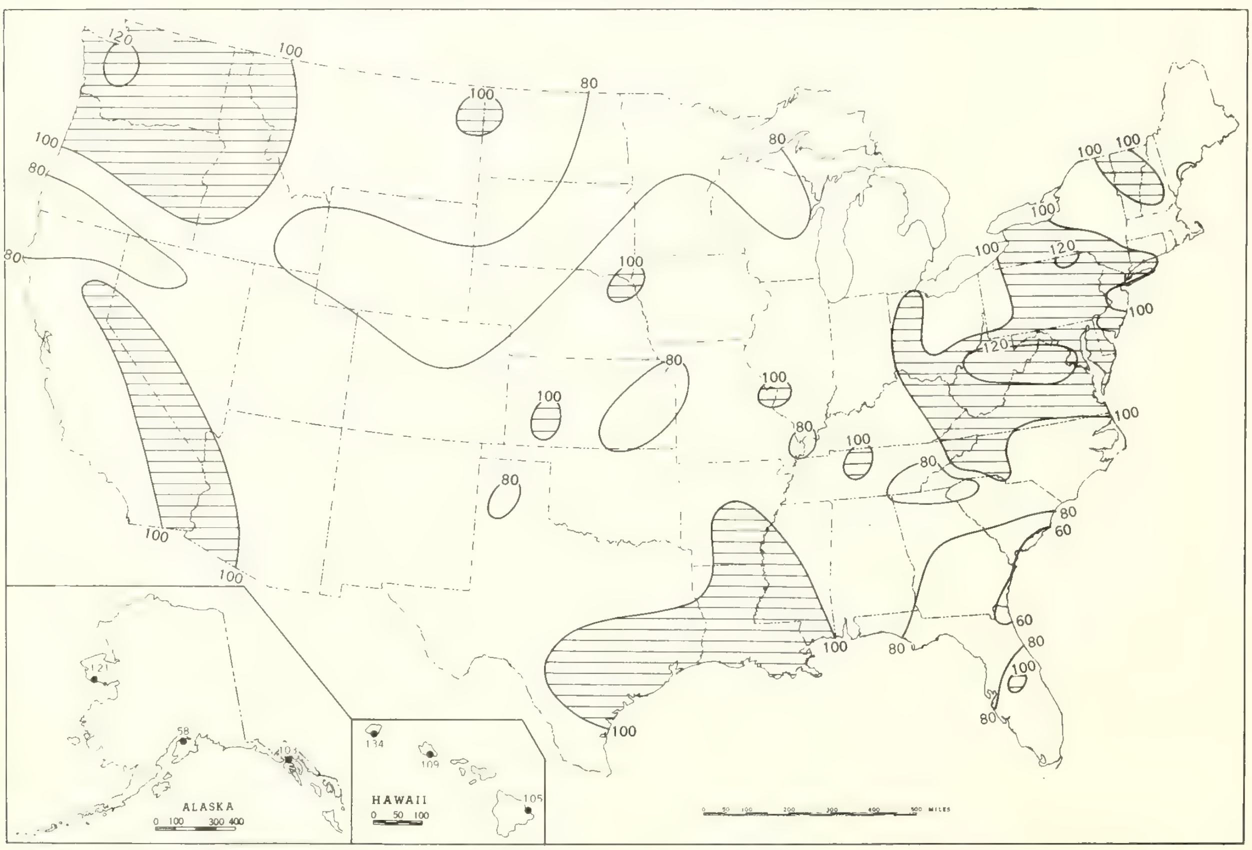


Based on preliminary telegraphic reports

Chart VI. A. Percentage of Possible Sunshine, June 1967

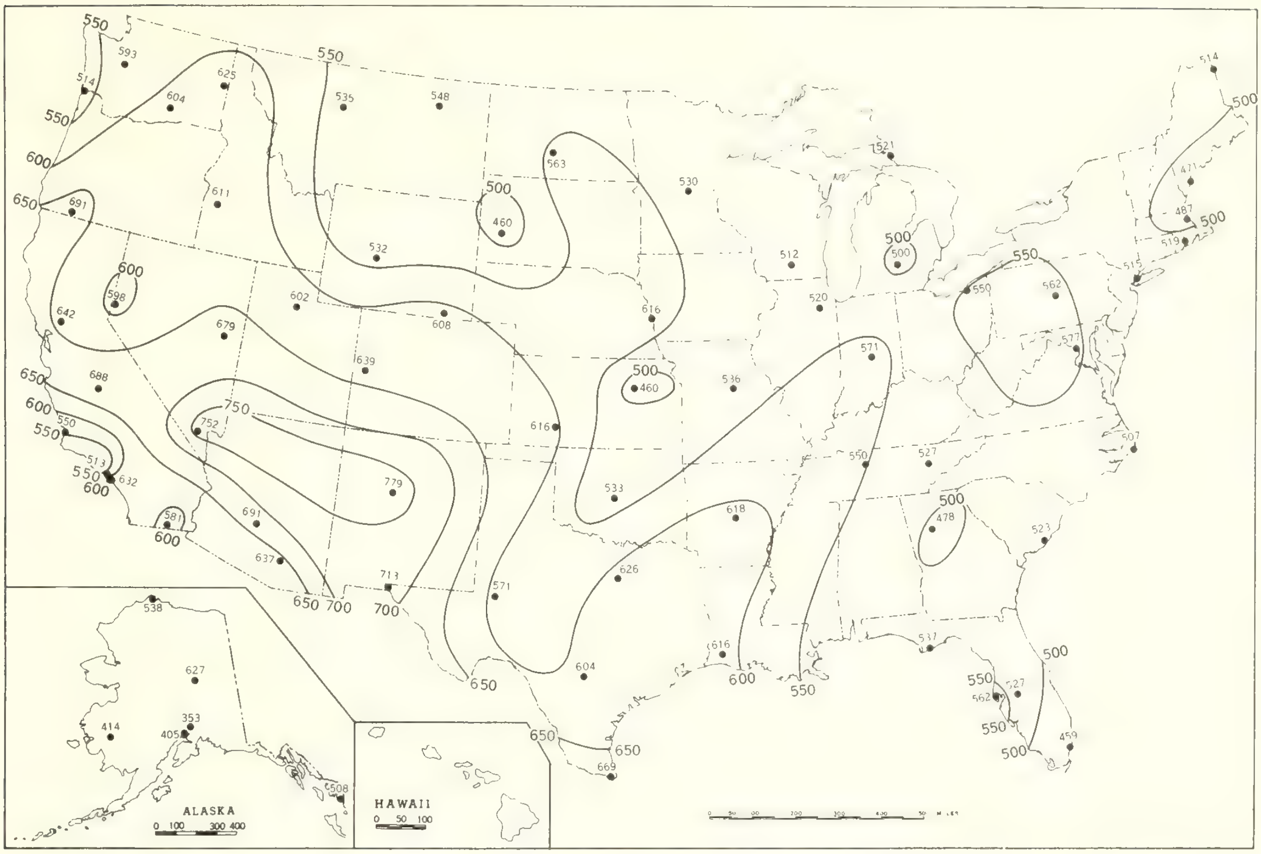


B. Percentage of Mean Monthly Sunshine, June 1967.

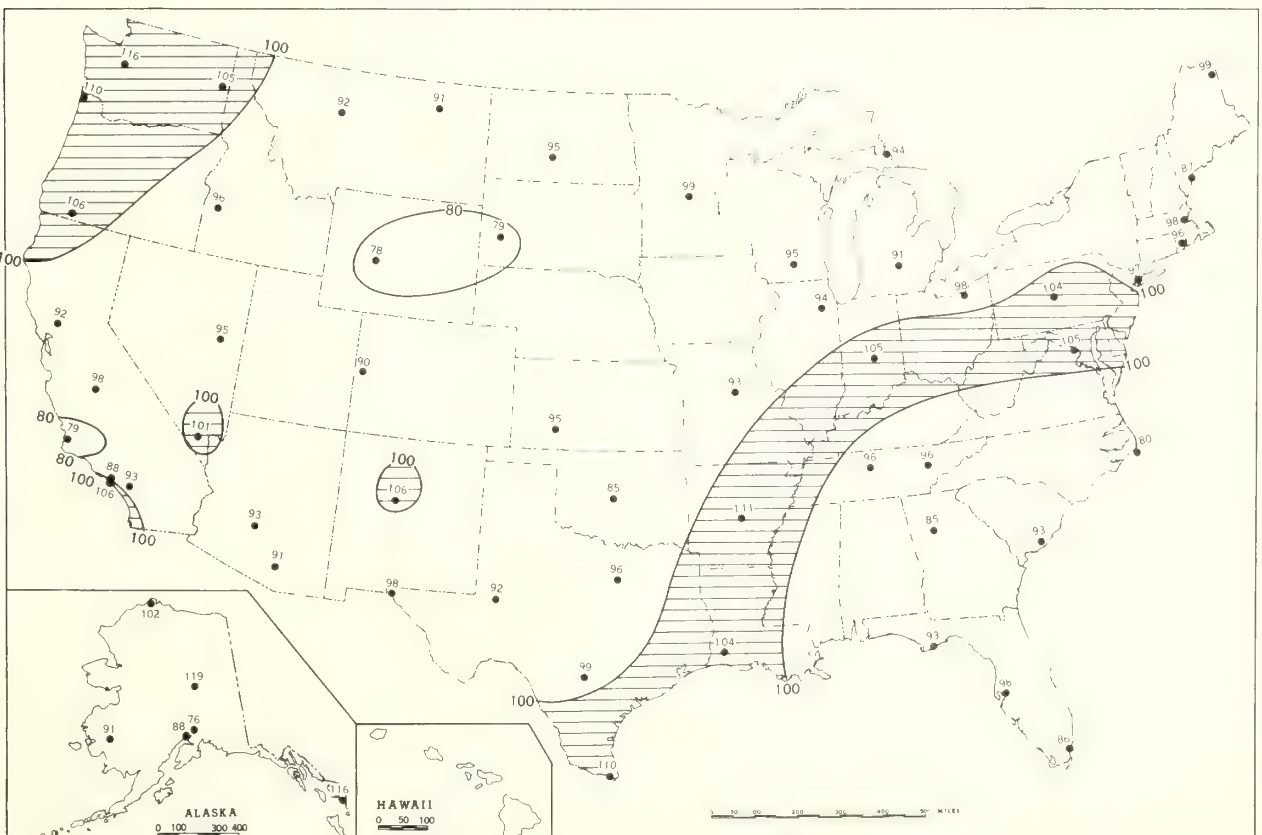


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, June 1967.

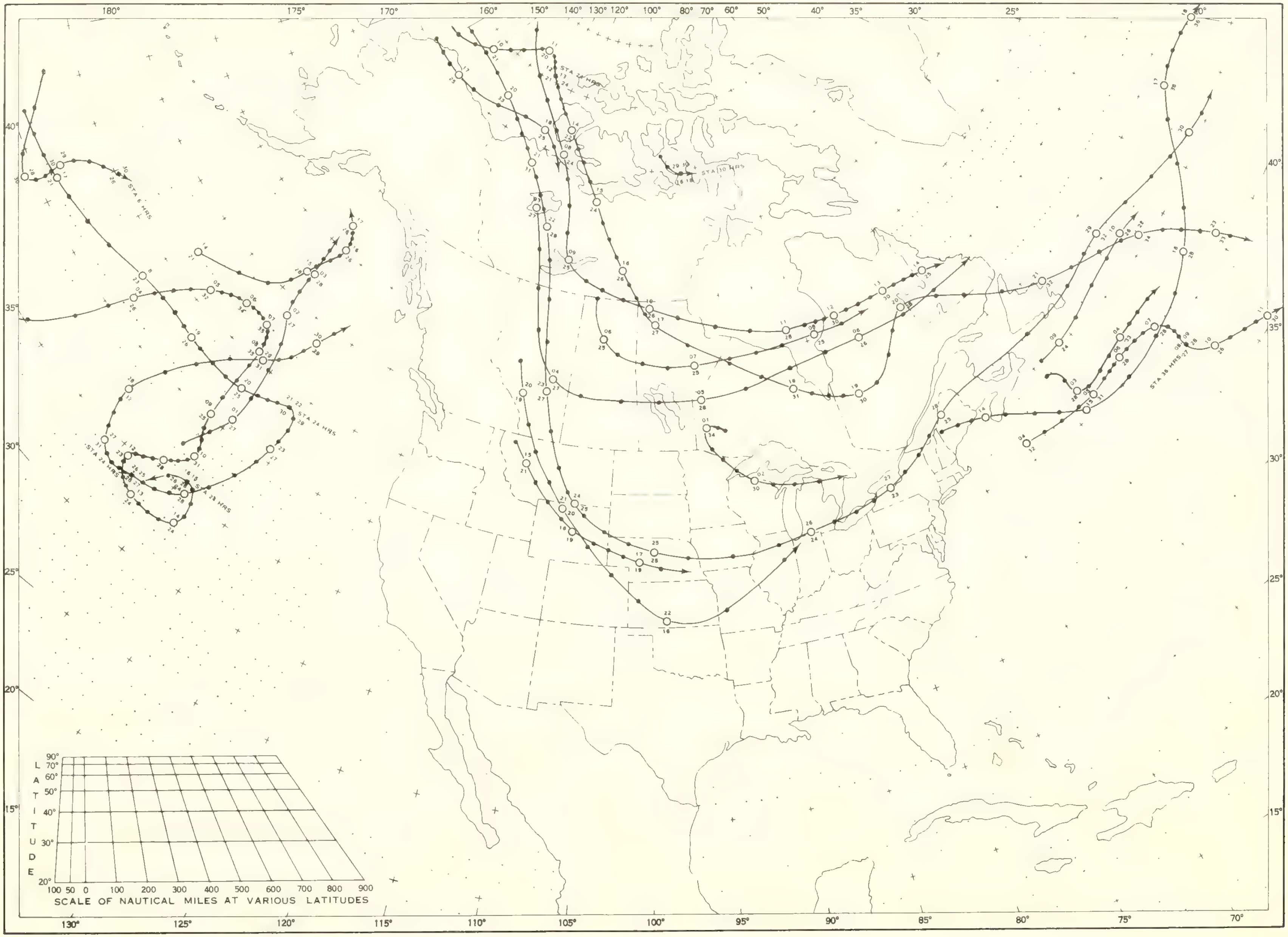


B. Percentage of Mean Daily Solar Radiation, June 1967.



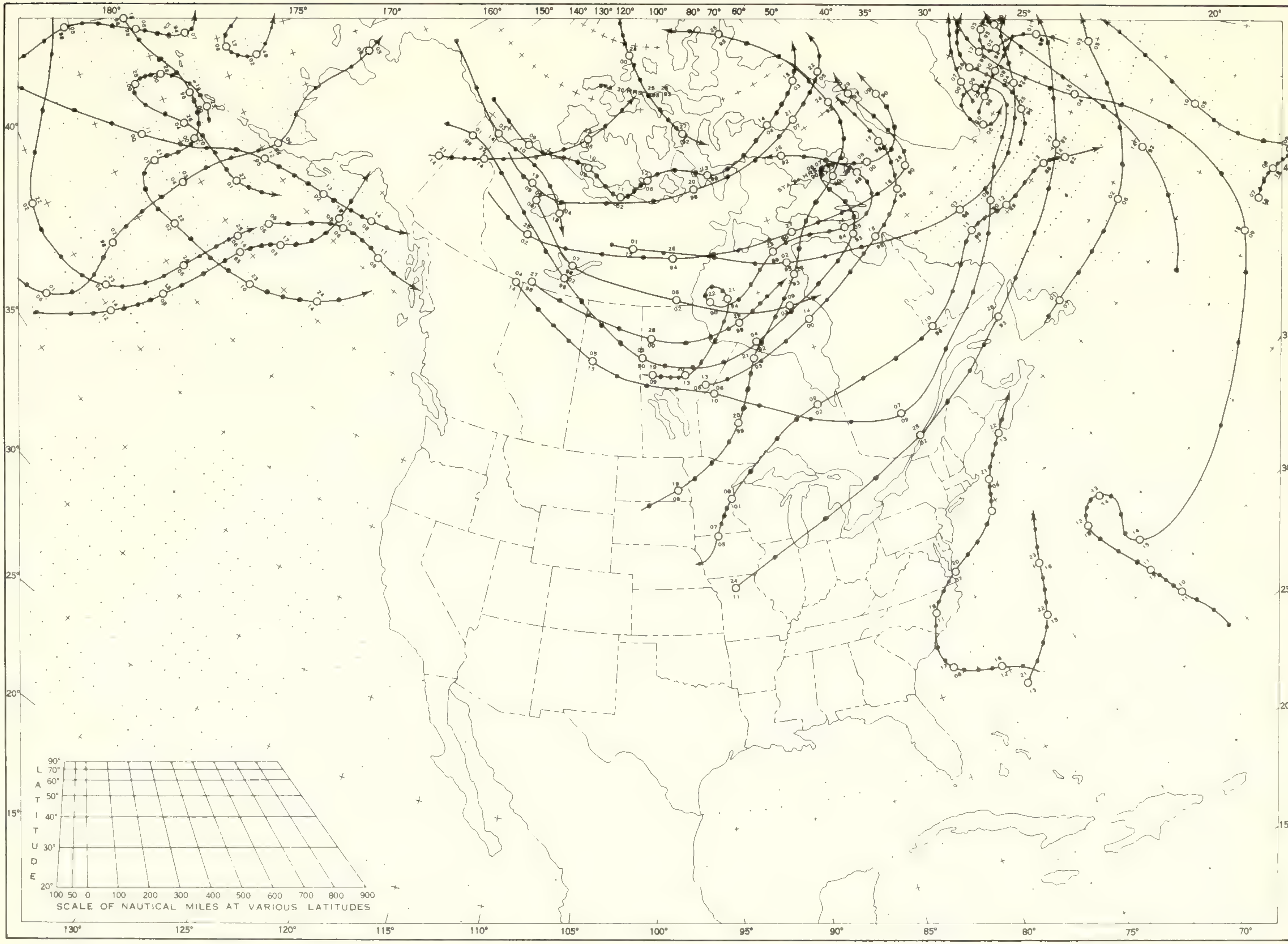
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, June 1967.



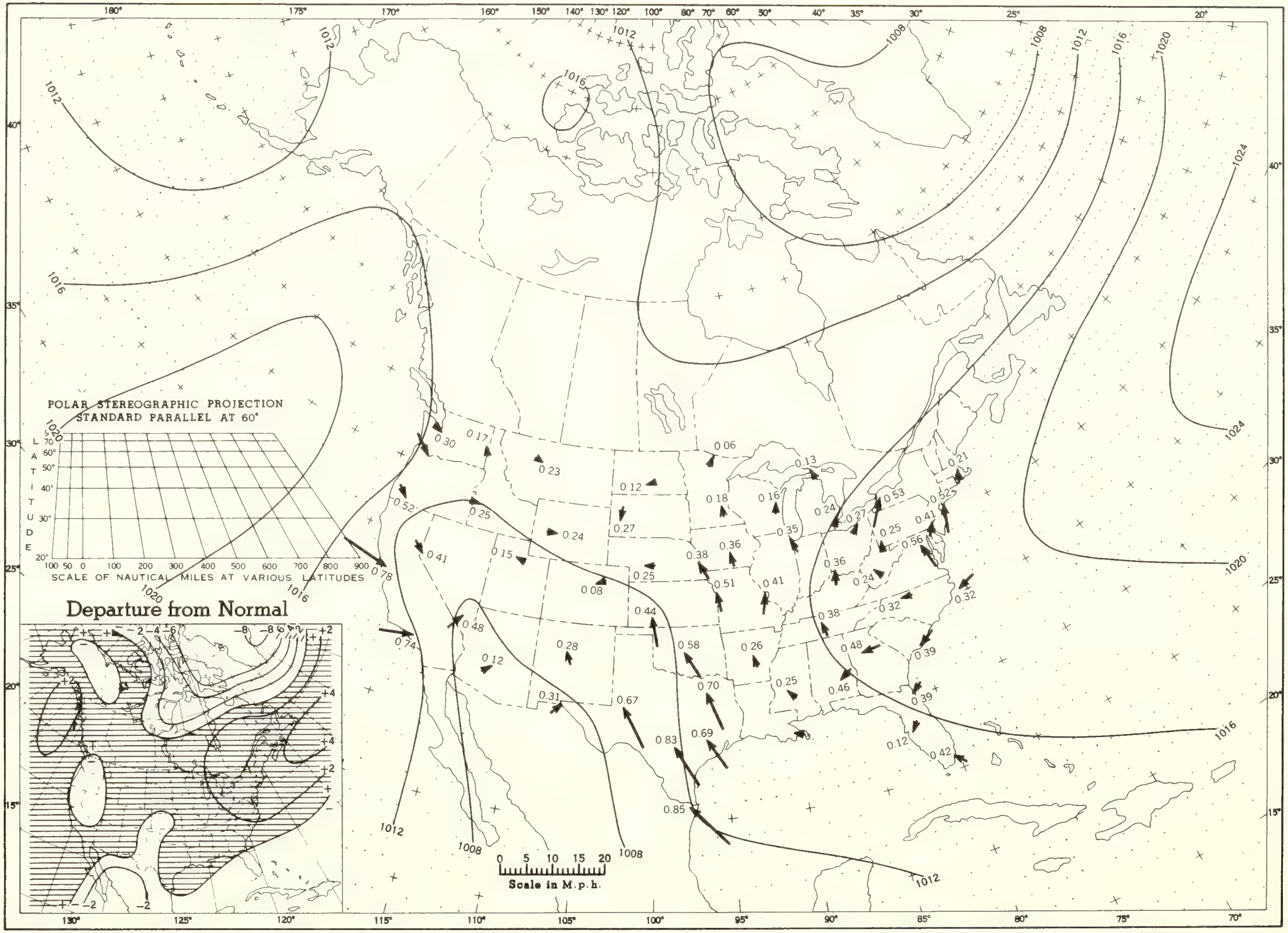
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, June 1967



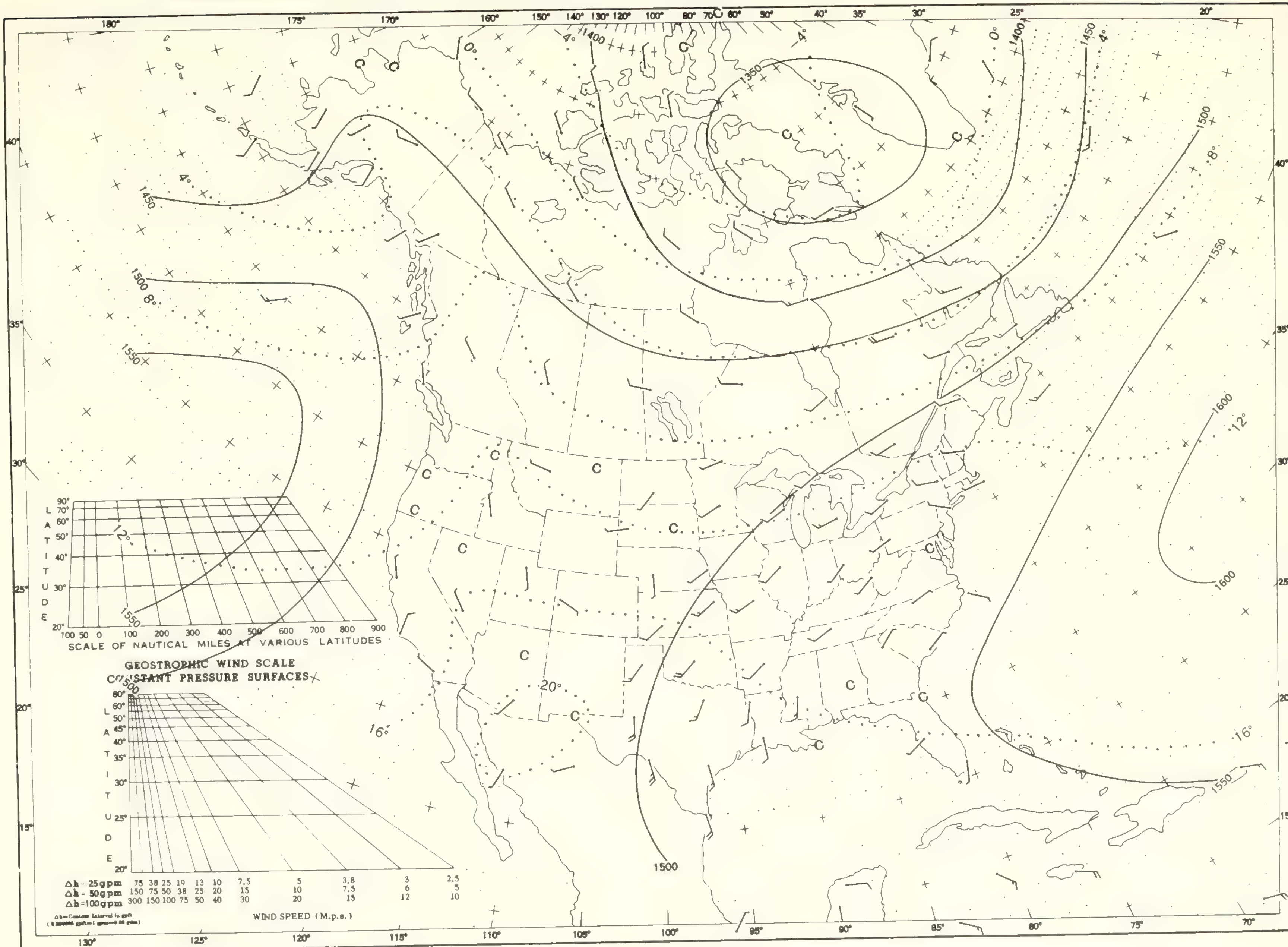
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, June 1967. Inset: Departure of Average Pressure (mb) from Normal, June 1967.



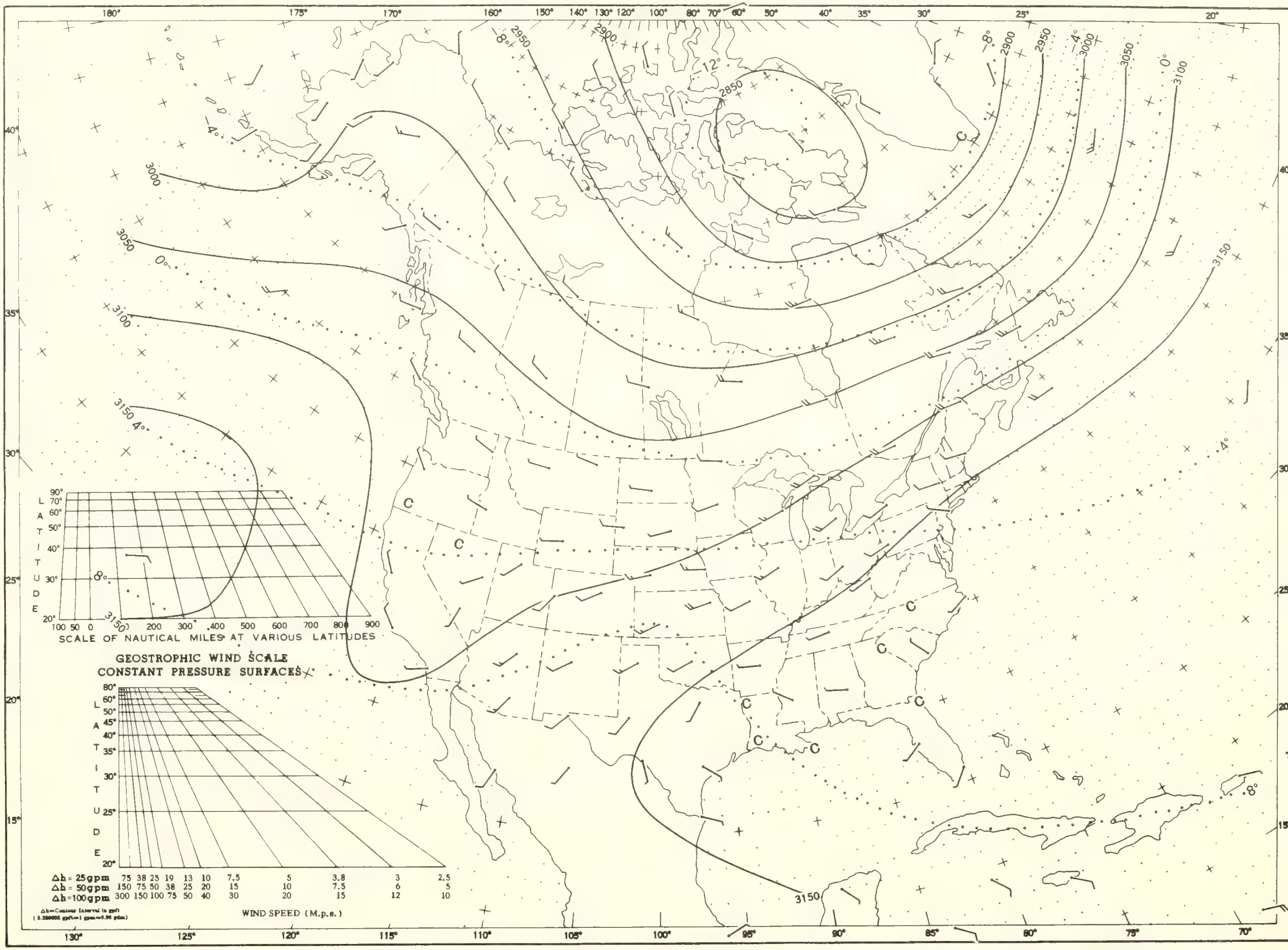
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.



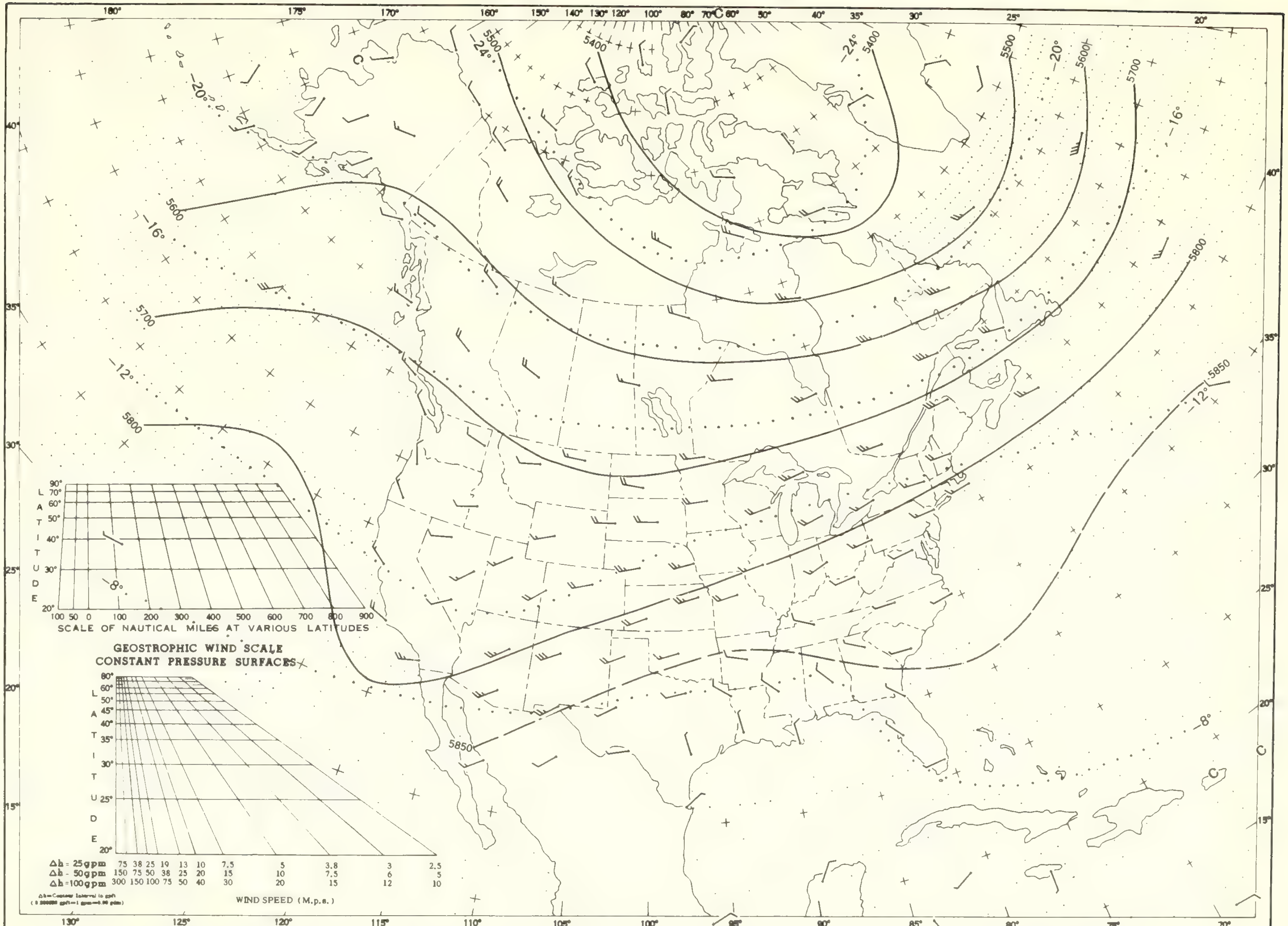
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.



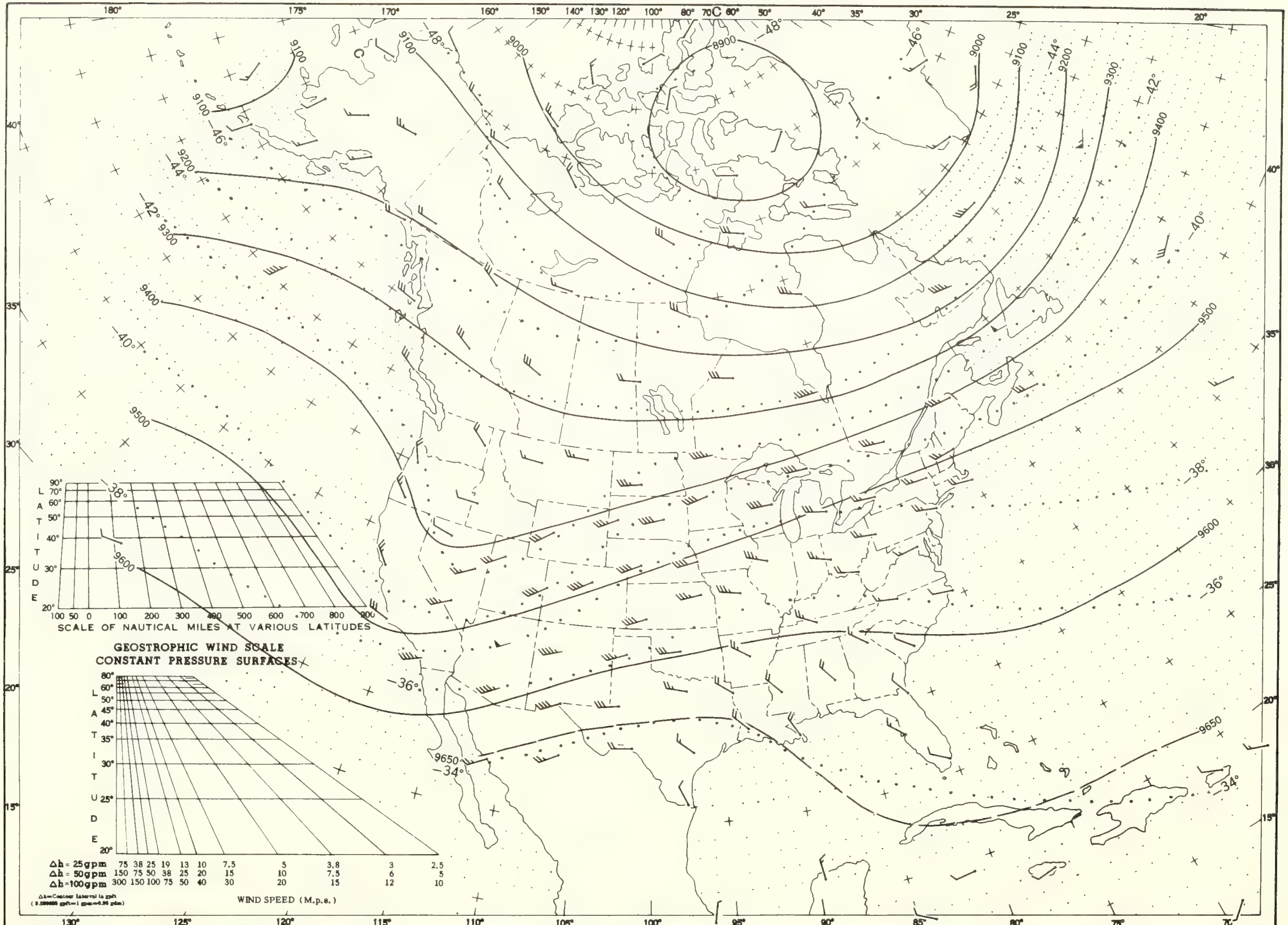
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.



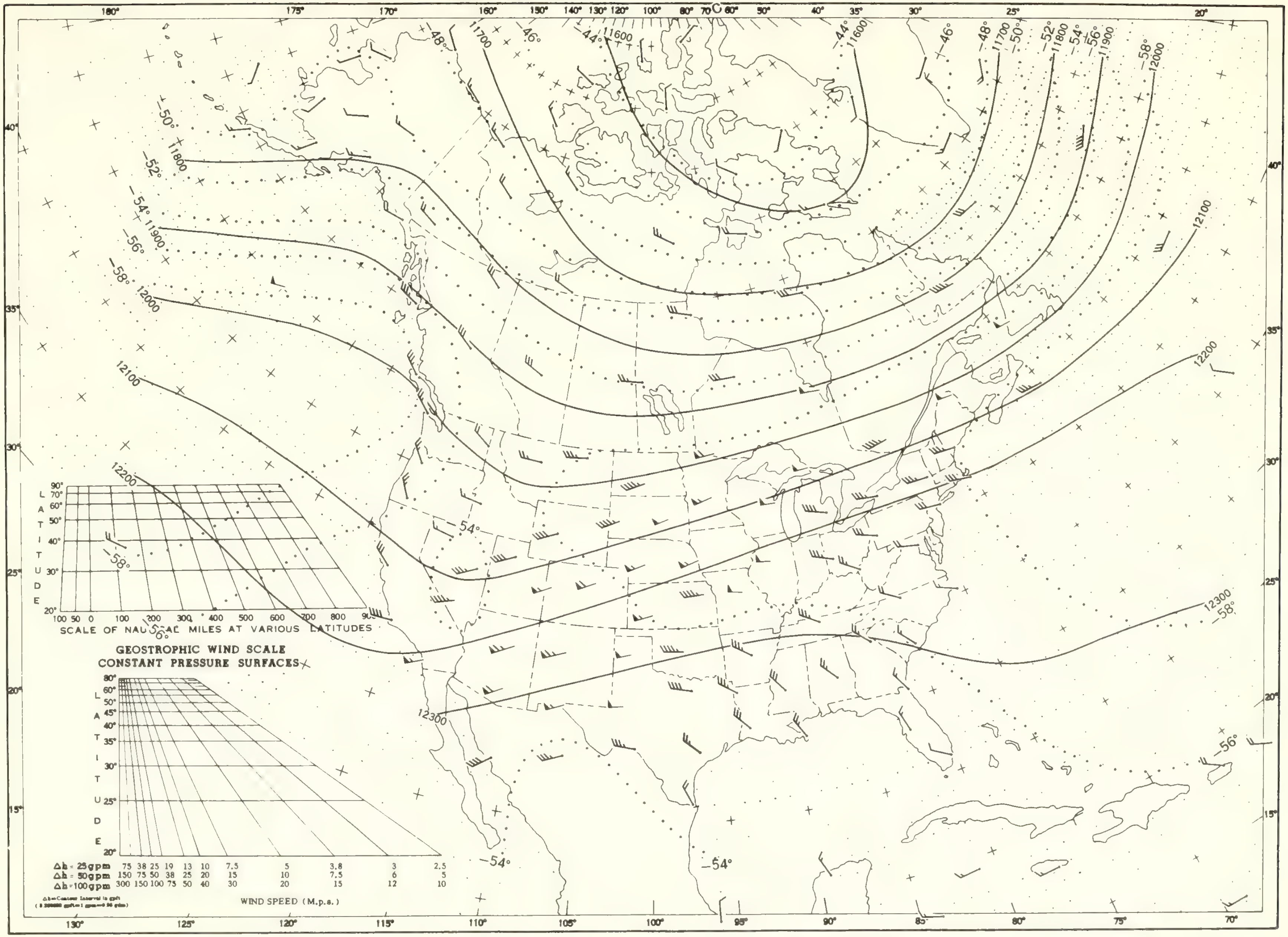
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.



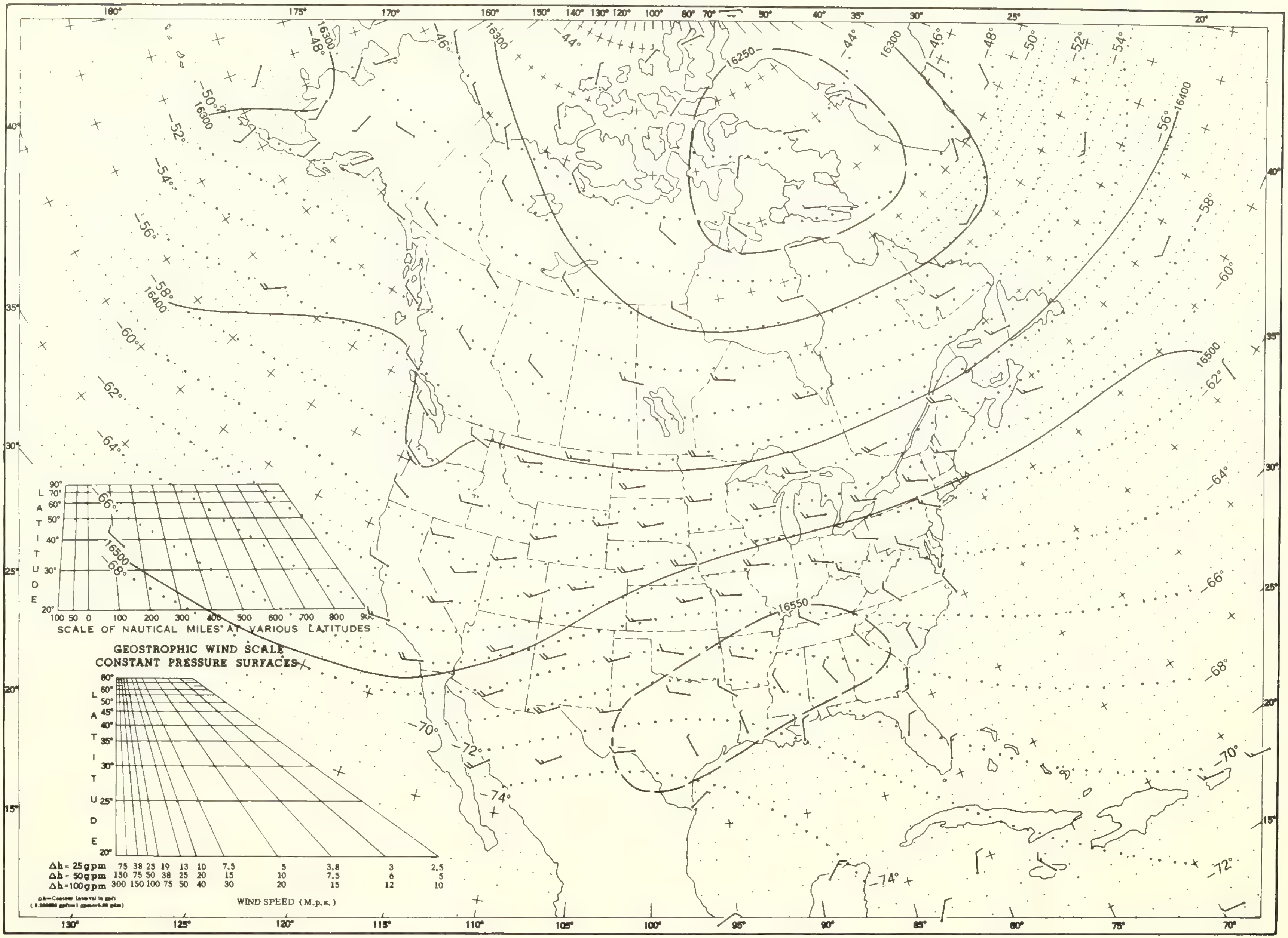
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.



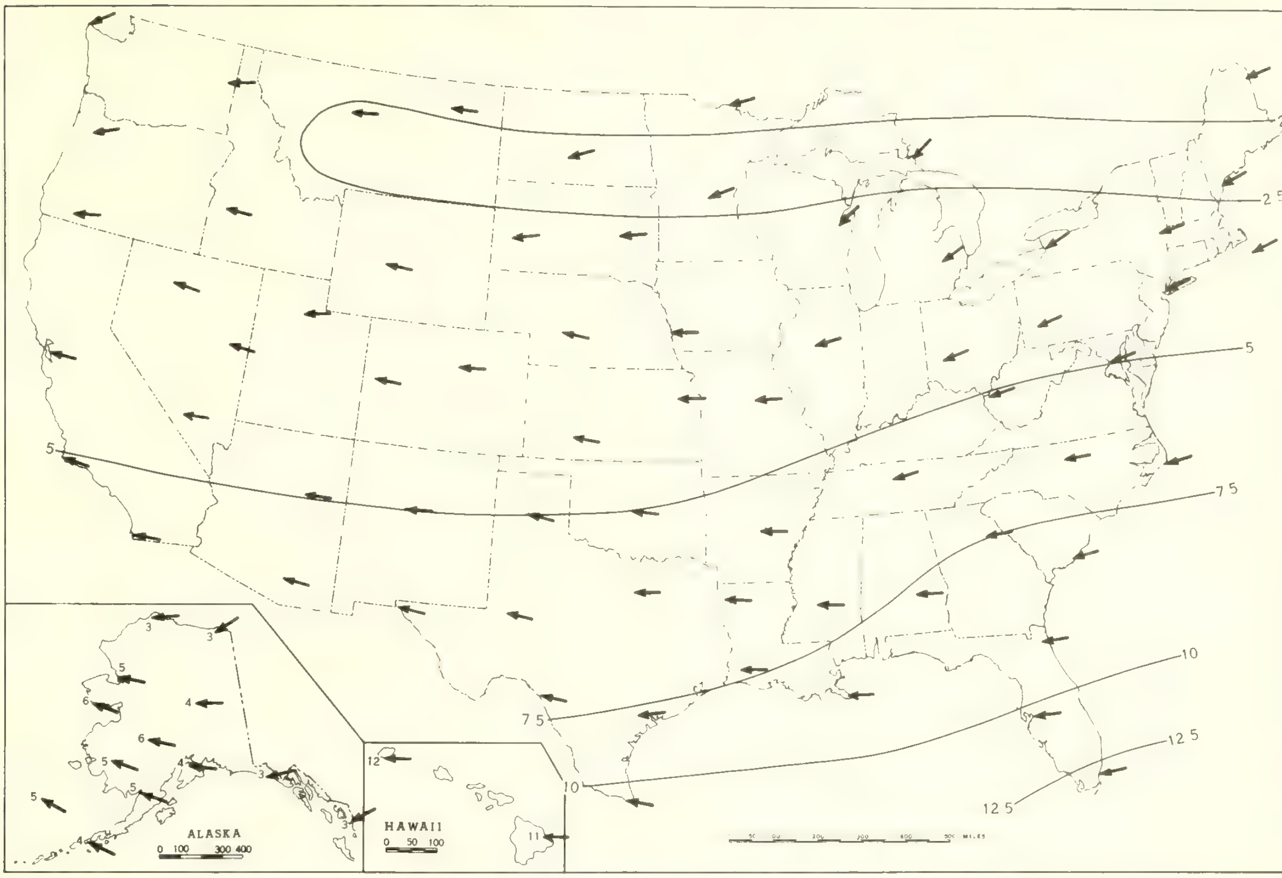
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, June 1967. Average Height and Temperature, and Resultant Winds.

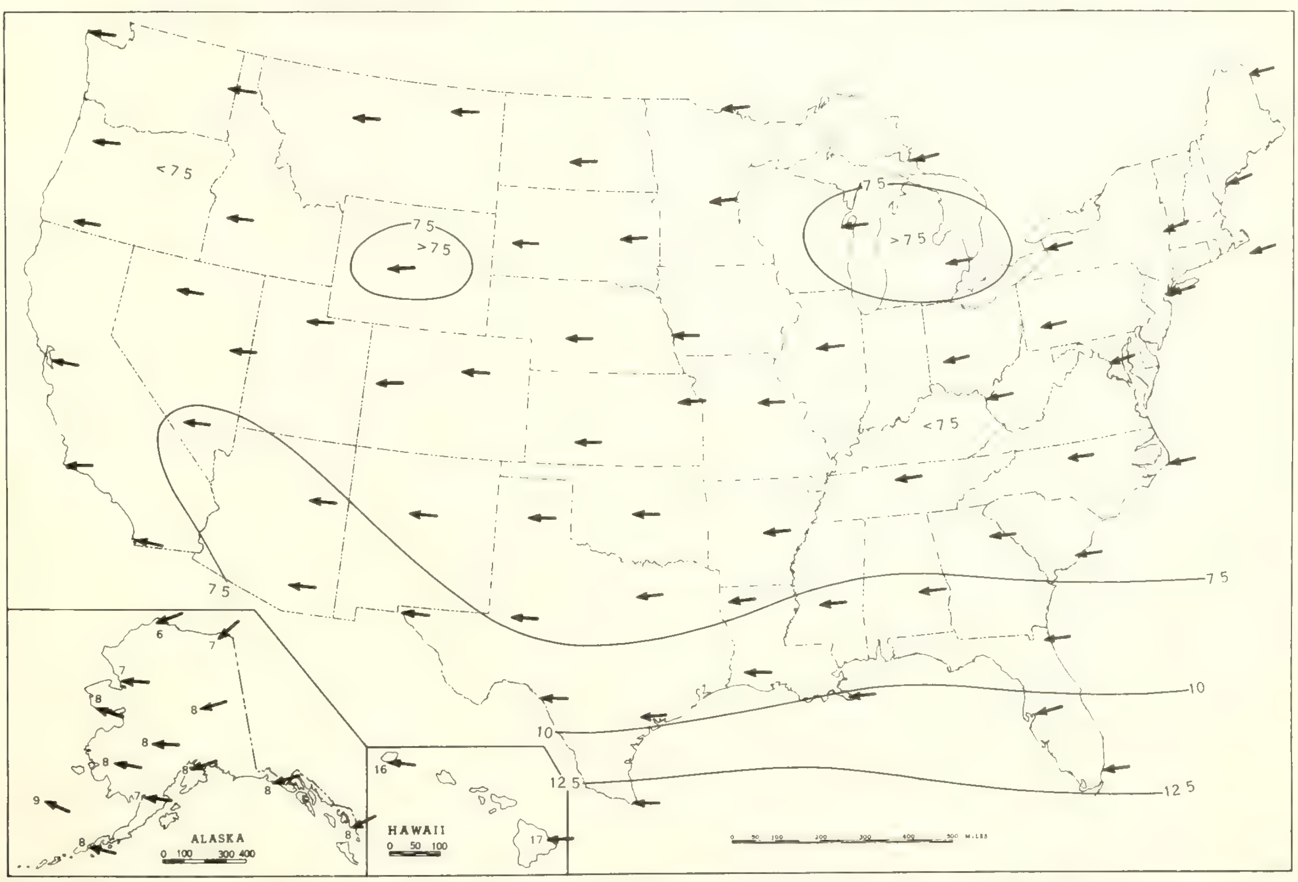


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, June 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, June 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

JULY 1967
Volume 18 No. 7

ASHEVILLE 1967

CONTENTS

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

SUBSCRIPTION PRICE: Monthly 20 cents and annual 40 cents per copy; yearly subscription, including monthly and annual issues, $2.50 domestic, $3.50 foreign. Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to "Superintendent of Documents, Government Printing Office, Washington, D.C. 20402"

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 7 JULY 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Unusually cool Central and Southeast.
2. Record cold spells first week and at midmonth.
3. Record warmth extreme southern Florida.
4. Unusually heavy rainfall central Rockies to lower Appalachians.
5. Moderate to severe drought in parts of Texas, North Dakota, Montana, Washington, and Oregon.
6. Unusually wet and foggy New England coast.

TEMPERATURE.--Abnormally cool weather in most areas east of the Rockies was one of the principal features of the month's weather. Average monthly temperatures were 4° to over 6° below normal in central and southeastern areas. The month was slightly warmer than normal in the Far West, New England, and southern portions of Texas and Florida.

Below-normal temperatures were unusually persistent east of the Rockies, but lowest temperatures in most areas occurred during a cold spell around midmonth. For example, at Birmingham, Ala., every day of the month was cooler than normal, the week ending on the 20th was 10° below normal, and 51° on the 15th was the lowest temperature ever recorded there in July during a record dating back to 1896. Macon, Ga., Fort Wayne, Ind., Waterloo, Iowa, and Chattanooga, Tenn., were some stations reporting their coolest July. In addition, a number of other stations recorded their lowest July temperatures. Among these were Macon, Ga., 54°; Detroit, Mich., 46°; Jackson, Miss., 51°; Springfield, Ill., 49°; and Chattanooga, Tenn., 51°; all of these lows occurred on either the 14th or 15th. At Evansville, Ind., the monthly maximum temperature did not rise to 90° during the entire month for the first time since the beginning of records in 1896.

Although lowest temperatures were recorded in most areas east of the Rockies about midmonth when some snowfall was reported in northern Wisconsin, temperatures in extreme northern areas were lowest during a cold spell the first week when scattered light frost was observed from North Dakota to northern Michigan. On the 5th Duluth, Minn., and Marquette, Mich., recorded their lowest temperatures on record for July, 36° and 41° respectively. Records date back to 1873 at Marquette, 1875 at Duluth.

The southern tip of Florida experienced one of its warmest Julies at Key West, Fla., temperature for the month averaged 86.8°, the lowest there on record since 1873. The average maximum temperature was 90.0° and the average minimum 82.6°. Every day was warmer than normal and the highest daily minimum temperature was equaled or broken on 23 days.

In the Northeast where the month was warmer than normal, the temperature failed to rise to 90° at many stations. Minimum temperatures, however, were rather persistently above normal.

In the Far West, Stockton, Calif., reported maxima above 90° every day of the month for the first time on record, and Fresno, Calif., had maxima of 100° or more on 21 days. At Medford, Oreg., this July equaled the 2d warmest of record.

PRECIPITATION.--Precipitation was normal or above in most of the country, but well below west of the Great Lakes and in southern Texas. Compared to normal, rainfall ranged up to 200 percent of normal in the central and lower Rockies, central Great Plains, and Tennessee and some adjacent areas of other States, but was less than 50 percent west of the Great Lakes and in southern Texas. Monthly totals exceeded 4 inches in parts of the central Great Plains and in most areas east of a line joining Erie, Pa., and Galveston, Texas. In eastern Tennessee and adjoining areas of northern Alabama and southeastern Kentucky, monthly totals exceeded 8 inches at many stations. Oak Ridge, Tenn., reported 19.27 inches. Many stations reported the wettest July in the last 10 or 15 years.

Generous rainfall in most of the Corn Belt was favorable for corn and soybean crops which generally were in good condition at the end of the month. However, soil moisture was reported short in parts of Ohio, Indiana, Michigan, and northern Iowa. Progress of the crops was behind normal because of cold wet weather in May and June. In the Northeast, too, rainfall was sufficient for good crop growth and water supplies. However, in coastal resort areas, frequent rains and fog were unfavorable for vacationers.

In central and northwestern North Dakota and extreme southwestern Oklahoma rainfall was less than 50 percent of normal in June and July, and rain was needed badly for crops and pastures. In the North Dakota-Montana area this was one of the driest Julies on record. Harve, Mont., measured only 0.01 inch for its driest July since beginning of records in 1879. At Bismarck, N. Dak., where the dry spell began about mid-May, 0.29 inch for July was the least on record except for 0.10 inch in 1936.

STORMS.--There were no outstanding storms. However, thundersqualls, some accompanied by hail, caused much local damage. Tornadoes as usual were fewer than in June. The most damaging tornado reported caused losses of about $1 million along a 20-mile path 5 miles south of Saint Cloud, Minn., on the 22d. On the 24th another tornado at East Fairfield, Ohio, 40 miles south of Youngstown, caused two injuries and minor damage. Heavy rains in the Rolling Fork and Green River Basins of central Kentucky on the 10th caused flooding which resulted in considerable crop damage.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	5 Stations	98	31+	Valley Head	45	15	Huntsville WB AP	14.81	Robertsdale 1E	2.25
Alaska	Data Delayed									
Arizona	Davis Dam No 2	121	3	3 Stations	39	10+	Nogales	9.22	2 Stations	T
Arkansas	Booneville	101	11	Huntsville	46	15+	Carpenter Dam	13.31	Eureka Springs	.75
California	Death Valley	123	4+	Bodie	25	9	White Mountain 2	4.50	362 Stations	.00
Colorado	Las Animas	105	10	Fraser	25	27	Victor	8.58	Glade Park Store	.23
Connecticut	4 Stations	91	25+	Coventry	43	7	Cream Hill	6.29	Danbury	2.52
Delaware	5 Stations	92	24+	2 Stations	51	6+	Wilmgton Porter Resvr	7.86	Middletown 1WSW	2.80
Florida	2 Stations	99	27+	Fountain 3SSE	49	16	Fort Green 12WSW	17.10	Tavernier	.47
Georgia	do	98	28+	Blairsville Exp Sta	46	15	Jesup 8S	17.54	2 Stations	2.34
Hawaii	Data Delayed									
Idaho	2 Stations	112	13+	2 Stations	30	28+	Island Park Dam	2.92	5 Stations	.00
Illinois	do	97	23+	Wheaton 3SE	41	6	Griggsville	13.05	Galva	.82
Indiana	Terre Haute 8S	99	27	Osgood	38	5	Johnson Exp Farm	8.92	Monticello	.30
Iowa	Bedford	101	23	Sandborn	39	3	Keokuk Lock & Dam 19	12.15	Peterson 1W	.13
Kansas	Ashland	108	11	2 Stations	46	15+	Arkansas City	8.47	Scott City 13N	.28
Kentucky	6 Stations	93	13+	Vanceburg	43	15	Campbellsville	14.41	Mount Sterling	3.16
Louisiana	Logansport	100	30	Converse	50	15	Lafayette FAA Airport	16.57	Rodessa	1.84
Maine	2 Stations	90	21+	Eustis 2	36	7	Ripogenus Dam	6.46	Grand Lake Stream	1.79
Maryland	Upper Marlboro 3NNW	95	25	Oakland 1SE	43	4	Parkton 2SW	7.89	Woodstock	1.99
Massachusetts	Springfield Gen Elec	93	31	Barre Falls Dam	43	7	Peru	7.61	Lowell	1.84
Michigan	2 Stations	94	22	Stambaugh 1S	30	5	Kenton U S Forest	5.40	Cornell	.54
Minnesota	Luverne	99	22	Wright 4NW	33	5	Faribault Rad Sta KDHL	5.69	Spring Grove 1NW	.25
Mississippi	4 Stations	98	5+	Fulton 3W	48	15	Hickory Flat 1WSW	14.04	Rosedale	1.41
Missouri	Cassville Ranger Sta	102	31	Berryman 6NW	40	14	Shelbyville	11.28	Plattsburg Waterworks	.93
Montana	2 Stations	103	13+	Sula 1NE	25	1	Jardine	5.75	Lonepine 1WNW	.00
Nebraska	do	108	22	Broken Bow 2W	39	14	Stratton	7.74	Ericson 6WNW	.29
Nevada	Sunrise Manr Las Vegas	118	3	Midas 4SE	30	14	Topaz Lake	3.03	I L Ranch	.03
New Hampshire	3 Stations	90	24+	Mount Washington	34	6+	Benton 5SW	7.92	Franklin Falls Dam	1.52
New Jersey	Burlington	93	24	Sussex 1SE	42	6	West Wharton	10.23	Atlantic City	2.62
New Mexico	Columbus	107	22	2 Stations	35	9	Des Moines	7.04	Orogrande	.11
New York	New York Laurel Hill	94	10	Angelica	38	6	Griffiss AFB	9.16	Lewiston 1N	.68
North Carolina	Weldon	103	13	Transou	38	5	Columbia 2	16.29	Catawba 1WSW	1.98
North Dakota	2 Stations	105	31	Keene 3W	27	3	Lisbon	4.27	Minot FAA Airport	.06
Ohio	do	96	26+	Mansfield 6W	40	4	Cooperdale	8.85	Willoughby 4N	.81
Oklahoma	Clinton	110	10	Wewoka 3W	48	15	Ponca City FAA Airport	11.15	Ardmore FAA Airport	.93
Oregon	Ontario KSRV	113	12	Fremont	28	26+	Danner	.78	133 Stations	.00
Pennsylvania	Holtwood	95	23	Clermont 4NW	35	6	Neshaminy Falls	10.33	New Castle 1N	1.71
Puerto Rico	3 Stations	95	24+	Aibonito	54	19+	Rio Grande El Verde	14.67	2 Stations	.00
Rhode Island	2 Stations	89	24+	Kingston	44	3	Newport	5.37	Kingston	3.44
South Carolina	Marion	97	12	Union 8SW	51	5	Ridgeland 2SE	14.64	Calhoun Falls	2.47
South Dakota	5 Stations	106	22+	Deerfield 4NW	29	12+	Martin	7.01	Wagner	T
Tennessee	2 Stations	95	25+	Mountain City No 2	40	5	Oak Ridge WB	19.27	Samburg Wildlife Ref	3.84
Texas	Wichita Falls WBAP	109	31	7 Stations	51	16+	Strawn 8NNE	9.19	4 Stations	.00
Utah	Saint George	112	3+	Woodruff	36	10	Park Valley	3.58	4 Stations	.00
Vermont	2 Stations	90	13+	West Burke	37	8+	Bennington 2 NNW	6.71	Canaan	2.47
Virginia	Back Bay WL Ref	98	12	Chilhowie 1S	39	5	Back Bay WL Ref	9.31	Partlow 3WNW	1.70
Washington	Lower Granite Dam NR	112	13	Wilbur	33	9	Quinault Ranger Sta	1.32	48 Stations	.00
West Virginia	Williamson	94	25+	5 Stations	40	5+	Richwood	9.79	Clarksburg 1	2.22
Wisconsin	3 Stations	94	26+	Prentice 4ENE	30	5	Gurney	6.11	La Crosse WB Airport	.16
Wyoming	Yoder	101	24	Kendall	25	28+	Whalen Dam	4.62	Kemmerer	.06

\+ And also on an earlier date or dates

NOTE Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days				Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)				
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb	Mb.	F	F.	F	F	F		F				F.	%	In.	In.	In			In	In	M p.h		M p h							%
ALABAMA																																
BIRMINGHAM	620	995.9	1018.0	85	66	75.7	- 5.9	91	27	51	15	4	0	67	78	6.60	1.44	2.03	16	12	0.0	0	2.6	27	24	NW	25	4	8	19	7.2	47
HUNTSVILLE	600	994.9	1017.5	85	67	75.7	- 5.4	92	10	53	15	1	0	67	76	14.81	10.56	4.08	15	10	0.0	0	1.8	20	25	26	12+	4	11	16	7.0	
MOBILE	211	1010.2	1018.1	91	72	81.5	- 1.1	98	1	62	16+	19	0	70	74	7.80	- 1.87	2.45	17	13	0.0	0	1.7	25	23	30	29+	3	15	13	6.5	
MONTGOMERY	194	1011.2	1018.2	88	70	78.8	- 3.0	93	25	61	15	10	0	68	74	7.07	1.67	2.47	11	13	0.0	0	2.7	23	25	W	22	2	12	17	7.3	57
ALASKA												8																				
ANCHORAGE	114	1008.8	1013.6	66	52	59.3	1.1	78	11	46	3	9	0	48	67	2.47	0.61	0.60	14	1	0.0	0	4.2	18	24	16	20	5	6	20	7.5	46
ANNETTE	110	1013.5	1017.5	64	52	57.9	0.6	79	24	48	2	5	0	50	80	8.78	2.76	2.63	19	0	0.0	0	3.8	16	24	14	28	2	5	24	8.4	
BARROW	31	1008.8	1009.3	42	33	37.5	- 1.6	57	17	27	7+	0	15	36	94	1.43	0.66	0.35	11	0	0.3	T	0.8	24	24	12	29	0	5	26	8.9	
BARTER ISLAND	39	1008.8	1010.7	47	34	40.5	- 0.8	75	13	24	7	1	13	35	83	2.59	1.71	0.63	11	0	T	T	2.1	7	32	25	23	2	5	24	8.4	
BETHEL	125	1009.8	1015.4	60	48	53.6	- 1.1	82	12	38	7	3	0	48	84	2.25	0.22	0.42	18	0	0.0	0	7.6	24	31	19	15	1	5	25	9.0	
COLD BAY	96	1016.9	1020.8	58	47	52.9	3.2	67	11	37	11	0	0	47	84	2.89	1.07	0.85	19	0	0.0	0	6.8	27	37	26	5	0	5	26	9.3	
FAIRBANKS	436	995.3	1012.0	69	51	59.8	0.1	88	14+	44	23	13	0	49	70	3.34	1.50	1.34	20	2	0.0	0	3.1	23	21	24	22	1	4	26	8.9	
JUNEAU	12	1015.6	1016.3	63	45	53.8	- 1.5	78	24	37	24	3	0	49	89	4.26	- 0.23	1.22	24	0	0.0	0	3.2	9	24	13	6	1	3	27	9.1	26
KING SALMON	49	1013.9	1015.8	62	47	54.6	- 0.3	80	12+	36	27	5	0	46	76	3.15	1.09	0.52	15	0	0.0	0	8.6	22	25	18	19+	2	9	20	8.2	
KOTZEBUE	10	1009.8	1010.3	57	48	52.8	0.1	69	12	42	20	0	0	47	81	2.61	1.15	0.68	17	0	0.0	0	5.4	27	31	29	17	2	7	22	8.3	
MC GRATH	344	1001.0	1013.6	65	47	56.3	- 2.4	87	13	40	27	8	0	46	72	2.94	0.51	0.81	17	0	0.0	0	3.9	23	23	24	21	2	7	22	8.1	
NOME	13	1010.2	1011.1	52	42	47.1	- 2.4	59	12	34	22+	0	0	40	76	4.22	1.93	0.80	20	0	0.0	0	5.5	23	24	29	16+	0	5	26	8.8	19
ST. PAUL ISLAND	22	1015.9	1017.0	51	45	48.2	2.7	55	12	32	9	0	1	46	93	1.45	- 0.80	0.23	20	0	0.0	0	6.9	21	37	23	15	0	1	30	9.7	
SHEMYA	122	1008.1	1011.8	49	44	46.6	0.2	54	26+	41	13	0	0	46	98	8.71	6.56	1.93	20	0	0.0	0	7.1	18	43	21	14	0	1	30	9.9	
YAKUTAT	28	1014.6	1015.6	58	47	52.2	- 1.9	66	23	37	5	0	0	50	91	7.70	- 0.73	1.47	24	0	0.0	0	1.1	16	20	12	6	1	2	28	9.4	
ARIZONA																																
FLAGSTAFF	6993	792.8	1017.3	80	53	66.6	1.1	90	1	47	2	1	0	51	66	3.80	1.52	1.10	14	20	0.0	0	1.8	24	17	2	4+	1	9	21	7.7	
PHOENIX	1117	972.2	1009.8	104	80	91.6	1.8	110	2+	72	11	31	0	60	38	0.99	0.22	0.53	5	8	0.0	0	0.8	20	44Y	ESE	11	7	16	8	5.5	80
TUCSON	2584	925.8	1011.3	97	74	85.4	- 0.9	107	2	68	17+	28	0	62	49	2.72	0.66	0.64	10	16	0.0	0	1.8	21	40	W	31	6	14	11	6.2	77
WINSLOW	4895	854.0	1013.9	92	64	78.3	- 1.9	101	3+	59	8+	20	0	50	43	2.67	1.65	0.78	11	16	0.0	0	3.6	23	35	26	4	5	12	14	6.5	
YUMA	194	1002.4	1009.4	105	82	93.9	1.1	111	1	75	18	31	0	62	36	0.01	- 0.22	0.01	1	1	0.0	0	7.7	17	28	S	21	11	11	9	4.7	86
ARKANSAS																																
FORT SMITH	447	1000.0	1016.4	89	68	78.2	- 4.8	98	31	55	15+	16	0	67	70	3.02	0.22	1.87	13	5	0.0	0	0.7	7	24	NW	25	3	11	17	6.9	66
LITTLE ROCK	257	1007.8	1017.1	87	69	77.9	- 4.0	95	11	58	15	13	0	68	73	4.29	0.95	2.02	6	8	0.0	0	3.0	23	25	NW	1	3	15	13	6.7	78
TEXARKANA	391	1004.1	1017.0	88	71	79.2	- 3.4	98	31	58	15	15	0	69	75	3.95	0.11	1.41	9	6	0.0	0	3.1	19				1	12	18	7.1	
CALIFORNIA																																
BAKERSFIELD	475	994.6	1011.8	101	73	86.7	2.4	109	12	65	19	31	0	49	30	T	- 0.01	T	0	2	0.0	0	4.3	32	17	29	22+	22	7	2	2.2	
BISHOP	4108	874.7		98	59	78.5	1.9	105	1	51	10	29	0			0.62	0.50	0.48	4		0.0	0						20	6	5	3.3	
BLUE CANYON	5280			79	62	70.5	2.5	86	1	56	18+	0	0			0.01	- 0.08	0.01	1		0.0	0			16	22	22	24	6	1	1.8	
EUREKA U	43			60	53	56.5	0.2	64	28+	50	26+	0	0			0.00	- 0.11	0.00	0		0.0	0			20	N	18	2	14	15	7.1	52
FRESNO	328	1000.3	1011.7	101	66	83.8	2.5	108	12+	59	20	31	0	55	40	T	0.00	T	0	0	0.0	0	4.6	29	17	NW	6+	24	4	3	2.0	92
LONG BEACH	34	1012.9	1014.3	85	66	75.4	3.8	97	27	61	20+	5	0	60	66	T	0.00	T	0	0	0.0	0	2.7	22	23	18	2	11	18	2	4.3	
LOS ANGELES	97	1010.5	1014.1	75	63	69.3	0.2	88	27	60	19+	0	0	61	80	T	- 0.01	T	0	0	0.0	0	6.1	26	22Y	W	27	8	19	4	4.7	
LOS ANGELES U	270			86	66	75.7	2.7	92	27+	62	19+	6	0			0.00	0.00	0.00	0		0.0	0			15	SW	27+	16	15	0	3.5	84
MT SHASTA R	3544			88	52	69.6	1.6	95	2+	44	8	11	0			0.05	- 0.25	0.05	1		0.0	0										
OAKLAND	6	1014.9	1015.2	70	57	63.7	- 0.6	83	28+	54	26	0	0	55	78	0.00	0.00	0.00	0	0	0.0	0	7.6	29	21	32	16+	22	5	4	2.9	
RED BLUFF	342	999.7	1012.0	98	66	82.2	- 1.6	105	15+	59	8	31	0	52	37	0.01	- 0.03	0.01	1	1	0.0	0	2.6	16	18	SE	22	26	3	2	1.4	96
SACRAMENTO	17	1011.5	1012.3	96	60	78.0	2.6	104	12	53	8	28	0	56	54	T	0.00	T	0	1	0.0	0	6.0	20	18	SW	28+	24	6	1	1.5	99
SANDBERG R	4517	865.2		86	65	75.7	1.3	95	11	57	17	7	0	42	33	T	- 0.02	T	0		0.0	0			38	36	24	20	7	4	2.9	
SAN DIEGO	13	1012.9	1014.0	76	65	70.4	0.3	86	27	62	20+	0	0	61	75	0.01	0.00	0.01	1	0	0.0	0	4.5	26	17	NW	28	9	17	5	5.0	69
SAN FRANCISCO	8	1014.6	1015.1	72	54	62.7	0.0	87	28	50	20	0	0	51	73	T	- 0.01	T	0	0	0.0	0	13.5	30	31	WNW	25+	23	4	4	2.2	
SAN FRANCISCO U	52			64	54	58.9	0.1	78	11	50	22	0	0			0.00	- 0.01	0.00	0		0.0	0			26	W	8+					71
SANTA CATALINA	1568	958.7		81	63	72.0	3.3	90	20+	54	1	2	0			0.00	- 0.02	0.00	0	0	0.0	0	2.0	23				21	9	1	3.0	
SANTA MARIA	236			75	53	63.8	1.6	86	28	47	26+	0	0			T	- 0.03	T	0		0.0	0						16	13	2	3.6	
STOCKTON	22	1011.9	1013.0	97	63	80.3	2.1	104	3	55	9	31	0	51	40	0.00	- 0.01	0.00	0	0	0.0	0	7.1	32	21	30	6	23	7	1	1.9	
COLORADO																																
ALAMOSA	7536	777.5		80	51	65.2	0.3	86	1	42	5	0	0			1.78	0.71	0.74	15		0.0	0						8	15	8	5.6	
COLORADO SPRINGS	6145	816.1	1016.4	81	58	69.3	- 1.2	90	27+	47	11	2	0	54	63	5.26	2.89	2.01	16	20	0.0	0	2.5	4	35	34	11	4	18	9	5.9	
DENVER	5283	840.2	1015.2	82	56	69.1	- 3.8	93	22	51	3+	2	0	54	67	3.25	1.72	0.83	15	14	0.0	0	0.9	15	30	N	4	10	13	8	5.1	70
GRAND JUNCTION	4855	854.0	1012.7	92	63	77.7	- 0.5	97	29+	57	18	23	0	48	40	1.03	0.46	0.59	9	8	0.0	0	2.3	14	36	NE	24	12	10	9	5.0	71

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 90 F or above	No. of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F	F	F	F		F				F	%	In	In	In			In.	In	Mph		Mph							%
COLORADO																																
PUEBLO	4684	858.5	1014.4	89	63	75.8	- 0.7	97	30	57	18	14	0	55	55	3.59	1.77	0.80	16	19	0.0	0	1.3	7	57	N	27	8	14	9	5.4	74
CONNECTICUT																																
BRIDGEPORT	7	1014.9	1015.6	81	67	73.7	0.0	90	12	58	7	1	0	66	80	4.07	0.30	1.76	12	3	0.0	0	4.0	21	29	26	25	1	12	18	7.7	
HARTFORD	169	1008.8	1015.3	84	64	74.0	0.6	91	25	52	7	3	0	62	70	2.59	- 1.02	0.75	13	7	0.0	0	3.7	21	24	SW	25	0	9	22	8.3	50
NEW HAVEN	6	1015.6		80	65	72.5	0.6	86	12	53	7	0	0			4.17	0.74	1.51	13		0.0	0			33	SW	25	1	14	16	7.4	56
DELAWARE																																
WILMINGTON	74	1012.9	1015.9	83	66	74.4	- 1.6	89	24+	55	5	0	0	66	80	4.45	0.20	1.10	16	12	0.0	0	2.7	22	28	30	4	1	13	17	7.5	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1013.9	1016.1	86	68	77.2	- 1.0	93	24	59	5+	7	0	67	72	5.24	1.00	2.85	13	9	0.0	0	3.3	20	38	NW	4	0	10	21	8.0	42
FLORIDA																																
APALACHICOLA U	13			86	73	79.8	- 1.7	90	2	65	15	1	0			7.73	- 0.20	1.44	17	16	0.0	0			23	E	31	9	7	15	6.2	57
DAYTONA BEACH	31	1018.3	1019.8	88	71	79.4	- 0.7	94	13	68	19+	8	0	71	81	9.04	2.30	3.90	19	23	0.0	0	3.4	18	32	17	28	2	13	16	7.2	
FORT MYERS	15	1019.0	1019.1	90	76	82.9	0.7	94	21	72	19	25	0	73	78	6.69	- 2.39	1.17	17	26	0.0	0	2.3	14	28	14	21	2	18	11	6.6	
JACKSONVILLE	20	1018.0	1019.0	91	73	82.1	- 0.5	97	13	68	16	26	0	70	74	5.22	- 2.46	1.07	16	17	0.0	0	4.3	22	34	W	14	3	15	13	6.9	53
KEY WEST	4	1017.6	1018.4	91	83	86.8	3.5	93	16	77	17	30	0	75	68	2.53	- 1.63	0.64	9	7	0.0	0	9.3	12	36	E	9	6	17	8	5.7	81
LAKELAND U	214			90	72	81.0	- 0.6	94	12+	68	27+	21	0			6.90	- 1.40	1.97	19		0.0	0						2	18	11	6.8	53
MIAMI	7	1018.6	1018.9	88	76	82.4	0.6	91	13+	72	15+	7	0	72	72	5.55	- 1.20	2.30	17	11	0.0	0	6.8	13	26	25	2	4	14	13	6.4	
ORLANDO	108	1015.2	1019.7	92	73	82.4	- 0.1	97	12	70	25+	28	0	72	77	4.63	- 3.37	0.95	17	19	0.0	0	3.4	19	29	18	26+	3	17	11	7.0	
PENSACOLA	112	1014.6	1018.6	87	72	79.5	- 2.2	92	27	61	16+	9	0	70	76	4.72	- 3.30	1.75	15		0.0	0	1.9	21	40	SW	19	4	15	12	6.5	64
TALLAHASSEE	55	1016.3	1018.7	90	70	79.9	- 1.4	95	28+	57	16	19	0	71	81	8.31	0.26	2.48	23	22	0.0	0	1.0	24	21	28	26	4	15	12	6.7	
TAMPA	19	1018.6	1019.0	89	73	80.8	- 0.8	93	20	70	22+	13	0	72	78	10.30	1.68	2.56	16	22	0.0	0	1.0	18	23	36	1	3	10	18	7.1	52
WEST PALM BEACH	15	1018.6	1019.3	90	74	81.6	- 1.0	93	26	69	4	17	0	73	78	4.88	- 1.78	1.55	12	13	0.0	0	6.0	13	23	16	3+	6	12	13	6.3	
GEORGIA																																
ATHENS	802	989.2	1017.5	84	66	75.3	- 4.4	88	31+	55	15	0	0	67	80	7.98	2.99	2.53	14	15	0.0	0	3.9	26	20	27	20	5	10	16	7.1	
ATLANTA	1010	981.7	1017.9	83	65	74.1	- 4.8	90	25	53	15	1	0	65	78	6.46	1.74	1.45	15	10	0.0	0	4.1	26	38	NW	26	3	10	18	7.2	66
AUGUSTA	145	1011.9	1017.2	87	68	77.4	- 3.3	91	29+	57	15	8	0	67	75	11.43	6.93	2.93	17	13	0.0	0	3.6	23	28	28	8	2	15	14	7.0	
COLUMBUS	385			87	70	78.6	- 2.5	92	27	59	15	6	0	69	77	3.81	- 2.06	2.00	15		0.0	0	2.3	26	32	25	2	3	9	19	7.6	
MACON	354	1005.1	1017.8	88	66	76.6	- 5.3	92	29+	54	15	11	0	67	77	5.56	- 0.08	1.34	17	12	0.0	0	3.0	23	42	SW	22	3	10	18	7.4	56
ROME	637			84	65	74.4	- 4.6	89	27+	53	16	0	0			5.60	0.71	1.57	15		0.0	0										
SAVANNAH	46	1016.3	1017.9	90	70	79.9	- 1.4	94	29+	62	16	18	0	69	74	6.23	- 0.38	2.02	18	15	0.0	0	4.4	22	25	NW	14	1	17	13	7.0	59
HAWAII																																
HILO	27	1014.9	1016.2	85	71	77.8	2.9	87	9+	68	13+	0	0	69	79	14.03	4.21	3.16	28	1	0.0	0	0.4	14	19	E	20	1	11	19	8.0	28
HONOLULU	7	1014.9	1015.5	88	75	81.5	2.7	90	31+	72	19+	2	0	67	65	1.21	0.77	1.03	10	0	0.0	0	11.8	6	27	NE	17+	4	23	4	5.3	70
KAHULUI	48	1012.9	1015.0	86	71	78.8	0.5	91	30+	67	9	3	0	69	75	1.12	0.69	0.42	8	1	0.0	0	12.0	5	28	NE	15	8	19	4	5.0	70
LIHUE	103	1011.9	1016.9	84	74	79.0	1.4	86	28+	66	1	0	0	70	76	1.84	- 0.10	0.76	20	0	0.0	0	10.7	6	23	NE	6+	0	20	11	7.0	73
IDAHO																																
BOISE	2838	915.0	1012.5	94	63	78.5	3.3	107	12	55	20+	28	0	46	35	0.05	- 0.16	0.04	2	1	0.0	0	1.9	28	28	SW	2	23	5	3	2.5	90
IDAHO FALLS 46W R	4934			89	50	69.3	0.3	96	13	39	28	13	0			0.56	0.30	0.24	4		0.0	0	2.2	25	32	S	25+					
LEWISTON	1413			92	60	76.3	2.5	110	12	53	10+	21	0			0.03	- 0.40	0.03	1		0.0	0						22	6	3	2.4	
POCATELLO	4454	864.5	1014.1	90	53	71.5	- 0.9	97	12	45	28	20	0	45	43	0.22	- 0.29	0.09	4	6	0.0	0	3.7	22	35	S	18	16	11	4	3.5	83
ILLINOIS																																
CAIRO U	314			85	69	76.6	- 4.5	92	31+	57	14	7	0			5.17	1.98	2.78	9		0.0	0			41	N	10	5	13	13	6.8	65
CHICAGO O HARE	658	991.9	1015.9	79	58	68.4	- 4.3	87	22+	46	6	0	0	60	76	1.87	- 1.52	0.85	7	6	0.0	0	1.8	27	32	5	26	6	21	4	5.5	
CHICAGO MIDWAY	607	993.6		80	62	70.6	- 5.0	90	1	50	5	1	0	60	70	2.36	- 1.01	0.69	8	7	0.0	0	2.1	23	43	NW	23	6	20	5	5.5	66
MOLINE	582	994.2	1015.6	83	60	71.4	- 4.2	92	26+	48	15+	4	0	63	77	4.15	0.89	1.47	9	7	0.0	0	2.1	25	39	NE	26	5	18	8	5.7	64
PEORIA	652	992.6	1016.1	83	61	72.0	- 4.0	91	23	50	14	4	0	60	69	5.74	2.20	1.68	12	11	0.0	0	2.1	25	40	W	1	7	16	8	5.7	64
ROCKFORD	724	988.8	1015.4	80	59	69.6	- 4.6	91	24+	43	5	3	0	59	72	1.32	- 2.82	0.88	9	9	0.0	0	2.4	26	25	2	23	8	18	5	5.3	
SPRINGFIELD	588	993.9	1015.8	83	63	72.9	- 5.1	93	23	48	14	2	0	62	69	3.39	- 0.10	1.66	10	11	0.0	0	2.2	24	26	N	26+	8	14	9	5.7	68
INDIANA																																
EVANSVILLE	381	1002.4	1016.3	83	64	73.4	- 5.4	89	26+	52	4	0	0	64	76	5.44	2.12	3.67	11	10	0.0	0	1.9	27	29	SW	28	3	14	14	6.7	64
FORT WAYNE	791	986.5	1016.0	81	58	69.8	- 4.4	90	24+	44	14	2	0	57	66	2.06	- 1.31	0.78	14	7	0.0	0	3.6	27	27	NW	2	4	15	12	6.4	66

See footnotes at end of table

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 90 F. or above	No. of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F.	F	F	F		F				F	%	In	In	In			In	In	M.p.h		M.p.h							%
INDIANA																																
INDIANAPOLIS	792	987.5	1016.1	84	63	73.8	-1.4	93	11	50	16	2	0	61	67	2.34	-1.16	1.29	10	6	0.0	0	2.8	26	38	NW	19	6	16	9	5.9	55
SOUTH BEND	773	988.2	1015.7	79	61	69.8	-3.8	88	24+	48	5	0	0	58	67	2.11	-1.36	0.79	13	9	0.0	0	3.3	27	32	31	11	5	15	11	6.2	
IOWA																																
BURLINGTON	692			82	62	72.0	-4.6	95	23	49	4	1	0	61	71	4.81	1.41		9	10	0.0		1.9	27	52	36	30	3	22	6	5.5	
DES MOINES	938	982.1	1016.3	83	61	72.1	-4.2	93	22	48	4	6	0	59	66	0.81	-2.25	0.58	4	6	0.0	0	1.1	24	28	NW	2	7	19	5	5.4	83
DUBUQUE	1056	977.3		81	58	69.6	-3.0	93	26	45	4	3	0			1.00	-2.51	0.26	10		0.0	0						3	22	6	6.0	
SIOUX CITY	1095	976.3	1015.5	85	62	73.2	-4.2	97	22	46	4	8	0	60	65	2.02	-1.09	1.51	4	4	0.0	0	1.6	18	66	NW	9	14	14	3	3.8	88
WATERLOO	868	984.4	1015.7	81	57	68.6	-5.2	92	26	43	4	3	0	58	72	2.25	-1.54	1.32	9	8	0.0	0	1.3	28	32	34	1	5	18	8	5.9	
KANSAS																																
CONCORDIA	1470	963.8	1015.7	85	63	73.7	-6.6	99	23	50	4	11	0	64	74	4.63	1.80	2.72	13	10	0.0	0	4.6	17	38	NE	26	12	10	9	5.0	71
DODGE CITY	2582	926.2	1015.0	85	65	74.9	-5.3	100	31	58	5	13	0	62		5.06	2.75	2.06	10	12	0.0	0	6.6	16	35	NW	31	6	12	13	6.5	75
GOODLAND	3650	890.6	1015.1	85	59	72.1	-4.5	99	22	51	2	10	0	58	69	1.20	-1.47	0.40	11	8	0.0	0	4.8	15	37	28	7	10	10	11	5.6	
TOPEKA	876	984.8	1016.1	85	65	75.0	-4.9	96	23+	52	15	10	0	65	72	3.06	-0.54	1.27	11	9	0.0	0	1.8	20	34	W	24	10	11	10	5.2	72
WICHITA	1321	968.8	1015.5	86	66	76.2	-4.7	99	31+	52	14	13	0	64	69	4.28	0.64	2.17	10	7	0.0	0	4.9	16	33	N	28	9	10	12	5.6	63
KENTUCKY																																
COVINGTON	869	985.4	1016.5	83	63	72.9	-2.5	91	26+	53	5	5	0	62	72	4.99	1.38	1.77	11	8	0.0	0	3.2	25	21	1	30	2	17	12	6.8	
LEXINGTON	966	982.1	1016.9	81	64	72.5	-4.9	88	24	53	5	0	0	63	75	5.87	1.89	1.30	13	8	0.0	0	4.0	20	29	23	20	1	15	15	7.0	
LOUISVILLE	477	998.6	1016.0	84	65	74.5	-3.1	93	25	55	16+	7	0	63	71	7.33	3.97	1.66	15	10	0.0	0	2.5	23	32	NW	20	4	12	15	6.7	57
LOUISIANA																																
ALEXANDRIA	92	1013.5	1017.6	89	69	78.9	-3.3	95	1	55	15	18	0	71	81	6.28	1.03	2.21	12	11	0.0	0	1.9	20	23	35	6	2	12	17	7.4	
BATON ROUGE	64	1015.6	1018.2	89	70	79.9	-2.8	94	1	58	15	17	0	70		9.32	3.05	2.57	13	13	0.0	0	2.1	21	35	7	4	3	12	16	7.1	
LAKE CHARLES	9	1016.9	1017.9	90	73	81.4	-0.9	95	10+	61	15	21	0	72	79	5.47	-1.82	1.39	10	11	0.0	0	2.6	20	25	15	21	3	12	16	7.0	
NEW ORLEANS	3	1017.3	1018.0	90	72	80.5	-1.1	94	3+	60	16	18	0	70	74	6.42	-0.30	2.24	14	12	0.0	0	1.7	21	30	25	24	3	13	15	6.7	
SHREVEPORT	254	1007.8	1016.8	89	70	79.8	-3.9	96	31	60	15	19	0	69	74	6.15	2.40	2.01	11	10	0.0	0	3.4	18	30	1	3	2	14	15	7.1	64
MAINE																																
CARIBOU	624	990.9		78	59	68.4	3.9	87	2	47	7	0	0			4.18	0.14	2.12	14		0.0	0						2	9	20	7.6	
PORTLAND	47	1012.9	1015.2	76	60	67.5	-0.6	84	27+	48	7+	0	0	61	84	3.46	0.60	0.94	10	5	0.0	0	3.0	18	19	NW	6+	3	6	22	7.9	41
MARYLAND																																
BALTIMORE	148	1010.5	1015.9	85	66	75.2	-1.6	92	24+	56	5+	6	0	65	73	3.56	-0.66	2.91	9	9	0.0	0	2.8	22	39	NW	4	2	15	14	7.3	60
MASSACHUSETTS																																
BLUE HILL OBS R	629			79	63	71.3	0.4	87	10	54	1	0	0			2.95	-0.32	1.16	13		0.0	0			32	W	25+					43
BOSTON	15	1014.6	1015.4	80	66	73.0	-0.7	89	10	56	1	0	0	63	74	2.47	-0.41	1.08	11	3	0.0	0	5.4	21	26	SW	23	1	14	16	7.6	48
NANTUCKET	43	1016.3	1016.6	73	60	66.2	-1.8	82	10	51	7	0	0	64	96	6.58	3.87	1.83	16	7	0.0	0	6.1	20	31	S	13	2	3	26	8.5	42
PITTSFIELD	1170			79	58	68.5	0.7	84	31+	44	7	0	0			4.62	-0.27	1.36	16		0.0	0										
WORCESTER	986	980.0	1016.4	79	63	70.7	0.9	86	10	53	6	0	0	61	74	5.91	2.28	2.16	13	4	0.0	0	4.5	24	20	30	5	2	13	16	7.4	
MICHIGAN																																
ALPENA	689	989.5	1014.4	76	52	64.0	-1.9	87	23+	38	6	0	0	55	76	3.12	0.26	1.24	10	6	0.0	0	1.5	24	19	SE	17+	5	16	10	6.3	58
DETROIT	619			78	63	70.2	-4.2	90	24	51	14	1	0	58	68					7			2.8	27	24	30	12					
DETROIT M WAYNE CO	633	990.9	1014.8	79	59	69.0	-3.9	90	24+	46	14	2	0	58	70	2.85	0.16	1.30	8	5	0.0	0	3.1	25	34	N	19	9	11	11	6.2	61
DETROIT WILLOW RUN	711	987.5	1015.3	80	59	69.1	-5.1	92	24	47	14+	1	0	55	61	1.01	-1.67	0.46	8	7	0.0	0	3.3	25	24	30	13+	7	13	11	6.1	
FLINT	770	987.5	1014.9	77	58	67.3	-3.9	86	23+	47	13	0	0	57	72	1.76	-1.15	0.98	10	8	0.0	0	3.4	25	22	27	24	6	8	17	6.6	
GRAND RAPIDS	784	986.5	1015.2	80	58	68.6	-3.7	91	22	47	6	1	0	57	68	2.77	0.04	0.97	8	6	0.0	0	4.1	25	33	NW	2	8	10	13	5.8	56
HOUGHTON LAKE	1149	973.9	1015.5	76	54	65.2		86	22	44	15	0	0	56	73	1.28		0.57	10	6	0.0	0	3.2	27	20	28	12+	4	14	13	6.2	
LANSING	841	983.7	1015.0	80	58	69.0	-2.7	90	22	47	16+	1	0	57	67	1.15	-1.43	0.37	8	8	0.0	0	3.7	27	37	NW	2	8	13	10	6.0	65
MARQUETTE U	677			74	55	64.6	-2.1	92	21	41	5	1	0			1.44	-1.76	0.48	9		0.0	0			32	W	23	9	9	13	5.9	65
MUSKEGON	627	992.2	1015.0	79	61	69.8	-1.5	86	30+	51	6	0	0	57	66	1.58	-0.83	0.75	7	6	0.0	0	3.6	25	25	26	23	12	11	8	4.8	
SAULT STE MARIE	721	987.8	1014.2	74	49	61.3	-3.3	85	21	37	15	0	0	55	82	1.87	-0.61	0.87	11	6	0.0	0	3.3	28	24	NW	3	5	11	15	6.7	54
MINNESOTA																																
DULUTH	1428	964.4	1015.3	75	53	64.1	-1.4	87	21+	36	5	0	0	52	67	2.91	-0.63	1.76	10	5	0.0	0	3.1	26	47	NW	22	9	14	8	5.6	67
INTERNATIONAL FALLS	1179	971.9	1014.6	76	53	64.5	-1.1	92	20	36	4	1	0	54	72	3.40	-0.09	1.12	15	8	0.0	0	2.1	28	25	18	21+	7	13	11	5.8	
MINNEAPOLIS	834	985.1	1015.3	79	58	68.8	-3.5	91	22+	45	5	2	0	57	68	1.36	-1.91	0.80	5	5	0.0	0	1.8	26	33	N	22	12	11	8	4.9	65

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 90 F or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb.	F	F	F	F	F		F.				F	%	In	In	In			In	In.	M.p.h.		M p h.							%
MINNESOTA																																
ROCHESTER	1297	968.8	1016.2	78	56	66.9	- 5.4	88	20	42	5	0	0	56	70	1.05	- 2.63	0.42	5	4	0.0	0	3.3	25	26	30	2	9	15	7	4.9	
ST CLOUD	1034	977.7	1014.9	81	58	69.1	- 1.9	92	22	43	5	4	0		64	0.59	- 2.67	0.36	5		0.0	0						11	15	5	4.6	
MISSISSIPPI																																
JACKSON	310	1006.4	1018.1	87	68	77.3	- 5.0	91	31+	51	15	13	0	69	82	4.05	- 0.71	1.56	11	11	0.0	0	2.5	22	35	NW	6	3	11	17	7.3	58
MERIDIAN	290	1007.1	1018.2	89	68	78.2	- 3.3	94	31+	55	15	16	0	67	73	4.84	- 1.38	1.22	11	9	0.0	0	2.5	23	31	17	19	3	12	16	7.1	
MISSOURI																																
COLUMBIA	778	988.2	1015.9	86	64	75.1	- 3.6	97	23	50	14	10	0	62	67	2.04	- 1.37	0.86	9	9	0.0	0	2.3	25	24	SE	29	9	15	7	5.1	79
KANSAS CITY	742	989.5	1016.0	86	67	76.5	- 5.0	99	24	54	6	12	0	63	66	1.81	- 1.38	0.84	7	7	0.0	0	2.0	22	29	W	24	12	10	9	5.2	72
SAINT JOSEPH	811			85	62	73.5	- 5.9	97	23	49	15+	10	0	65	76	3.79	0.57		9	10	0.0		1.7	21	40	3	24+	14	13	4	4.1	
ST LOUIS	535	996.3	1016.4	85	65	74.9	- 3.2	95	23	51	14	8	0	65		3.84	0.54	1.48	10	8	0.0	0	3.3	27	38	N	23	6	15	10	5.7	67
SPRINGFIELD	1268	972.6	1017.0	85	62	73.5	- 5.3	93	10	49	14	10	0	62	71	2.43	- 1.46	1.43	6	3	0.0	0	1.3	20	34	NW	28	11	10	10	5.3	67
MONTANA																																
BILLINGS	3567	893.0	1014.4	87	59	72.7	- 2.0	95	24	53	2+	11	0	48	48	0.37	- 0.53	0.13	6	7	0.0	0	1.7	25	43	W	26	14	13	4	3.8	81
GLASGOW	2284	933.3		87	55	71.0	0.3	98	17	41	3+	13	0			0.12	- 1.21	0.08	4		0.0	0						20	11	0	3.0	
GREAT FALLS	3662	889.6	1013.8	88	58	73.0	3.6	97	16	48	22	15	0	40	33	0.91	- 0.37	0.63	5	9	0.0	0	4.1	24	47	W	31	14	14	3	3.7	87
HAVRE	2582	923.1	1013.2	89	54	71.5	1.5	97	16+	46	11+	19	0	42	37	0.01	- 1.26	0.01	1	6	0.0	0	2.8	26	43	SW	8	20	9	2	2.9	90
HELENA	3828	882.5	1015.0	87	54	70.5	2.1	95	30+	47	7+	10	0	45	44	0.46	- 0.57	0.13	10	9	0.0	0	2.1	26	47	SW	13	17	11	3	3.3	83
KALISPELL	2965	911.6	1014.7	86	45	65.8	0.1	96	12	37	22+	9	0	45	50	0.07	- 0.97	0.05	2	2	0.0	0	1.8	21	23	36	25	19	11	1	2.9	
MILES CITY	2629	922.5	1013.5	89	60	74.3	- 1.0	98	31	45	3	15	0	48	44	0.86	- 0.48		8	6	0.0		0.4	2								
MISSOULA	3190	905.2	1015.3	89	51	70.0	3.0	100	12	43	10+	13	0	42	41	0.40	- 0.45	0.20	6	4	0.0	0	2.3	30	28	SW	8	16	14	1	2.9	86
NEBRASKA																																
GRAND ISLAND	1841	950.9	1015.8	87	63	74.8	- 2.4	102	22	47	14	11	0	61	66	0.98	- 1.53	0.50	7	6	0.0	0	3.0	19	23	3	26	12	11	8	4.8	
LINCOLN U	1150			85	65	74.9	- 5.2	99	22	52	4	10	0			3.99	0.72	2.94	9		0.0	0			52	NE	26	10	16	5	4.5	78
NORFOLK	1544			86	61	73.4	- 3.6	101	22	47	4	10	0			0.82	- 2.20	0.37	5		0.0	0						14	11	6	4.3	
NORTH PLATTE	2775	919.4	1015.6	82	59	70.3	- 5.8	98	22	49	14	7	0	58	69	3.74	1.22	2.10	9	12	0.0	0	4.1	13	33	N	1	12	8	11	5.3	67
OMAHA	977	981.4	1016.0	86	63	74.4	- 4.1	96	22	47	3	13	0	62	67	4.33	0.96	1.81	8	7	0.0	0	1.5	17	56	NW	9	12	16	3	4.6	74
SCOTTSBLUFF	3957	881.8	1014.8	87	58	72.7	- 2.0	98	21	53	29+	11	0	56	64	2.29	0.84	0.83	11	12	0.0	0	3.5	10	52	5	4	15	10	6	4.1	
VALENTINE	2587			86	58	71.8	- 3.6	102	22	44	3	11	0			2.04	- 0.28	1.29	6		0.0	0			38	N	15	12	11	8	4.8	73
NEVADA																																
ELKO	5050	846.9	1014.0	95	55	74.9	5.3	102	28+	46	10	28	0			1.03	0.63	0.65	4	7	0.0	0	2.0	22	23	26	26+	14	11	6	4.1	
ELY	6253	813.1	1014.4	86	50	68.1	0.6	91	28+	43	10	7	0	43	48	0.84	0.19	0.37	10	10	0.0	0	5.0	21	33	SW	22	11	14	6	4.8	72
LAS VEGAS	2162	936.0	1010.1	105	78	91.7	2.0	114	3	68	7	31	0	51	28	0.20	- 0.30	0.11	3	5	0.0	0	3.4	20	38	NE	11	15	9	7	4.5	85
RENO	4404	867.9	1014.9	93	47	69.6	1.9	101	2	37	19	26	0	44	45	0.57	0.30	0.28	5	6	0.0	0	2.1	29	29	SW	28+	19	5	7	3.3	90
WINNEMUCCA	4299	868.9	1013.3	93	52	72.5	1.5	101	1	44	27	26	0	36	29	0.37	0.10	0.37	1	3	0.0	0	3.4	24	33	SE	28	16	11	4	3.6	78
NEW HAMPSHIRE																																
CONCORD	342	1003.1	1015.6	81	59	70.2	0.6	89	24	45	7	0	0	62	80	5.91	2.50	2.16	14	6	0.0	0	1.9	20	23	SW	24	3	11	17	7.4	55
MT WASHINGTON OBS	6262			55	45	50.1	1.0	62	22+	34	6+	0	0			6.80	0.09	1.76	19	5	0.0	0			61Y	W	24	1	1	29	9.3	21
NEW JERSEY																																
ATLANTIC CITY	64	1014.2	1016.7	83	64	73.4	- 1.7	91	12	53	7+	4	0	66	81	4.19	0.47	0.71	13	8	0.0	0	3.9	20	23	29	4	2	8	21	7.9	42
ATLANTIC CITY U	11			81	70	75.3	1.1	91	12	59	5	1	0			2.62	- 1.24	1.13	10													
NEWARK	7	1014.9	1016.0	82	67	74.2	- 2.1	90	24	59	5	1	0	63	71	7.53	3.86	2.33	17	7	0.0	0	4.0	21	35	25	23	1	9	21	7.8	
TRENTON U	56			84	67	75.5	- 0.5	91	25+	58	5	5	0			8.96	4.78	2.34	15		0.0	0			34	N	21	0	13	18	7.7	39
NEW MEXICO																																
ALBUQUERQUE	5311	840.8	1012.8	92	66	79.2	0.7	99	1	58	18	26	0	48	39	0.61	- 0.59	0.29	9	10	0.0	0	2.4	15	42	SE	28+	10	18	3	4.8	76
CLAYTON	4969			85	60	72.8	- 1.7	95	31+	53	13	9	0			1.61	- 0.72	0.41	12		0.0	0						11	12	8	5.2	
RATON	6379			83	55	69.2	- 0.6	91	9	50	9	1	0			4.62	2.22	2.27	14		0.0	0						1	18	12	7.0	
ROSWELL	3617	893.0		95	65	80.0	1.4	103	31	57	15	26	0	58	52	0.97	- 0.80	0.58	8	11	0.0	0	3.3	13	34	NE	2	7	13	11	5.7	80
SILVER CITY	5373			89	64	76.6	- 0.5	96	1	58	1	14	0			1.56	- 0.53	0.47	10		0.0	0						4	19	8	5.7	
NEW YORK																																
ALBANY	275	1005.1	1015.5	82	61	71.6	- 0.5	88	10	48	7	0	0	63	76	3.38	- 0.11	0.90	14	8	0.0	0	3.2	22	24	W	24+	2	8	21	7.9	55
BINGHAMTON	1590	958.3	1016.5	76	60	67.8	- 0.6	84	1	51	6+	0	0	61	80	3.45	- 0.26	0.99	13	8	0.0	0	3.4	23	23	SW	24	1	13	17	7.7	52

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground) Ft.	Pressure: Station Mb.	Pressure: Sea level Mb.	Temperature: Average maximum F.	Temperature: Average minimum F	Temperature: Average F.	Temperature: Departure from normal F	Temperature: Highest F	Temperature: Date	Temperature: Lowest F	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min 32 F or below	Average dew point F.	Average relative humidity %	Precipitation: Total In	Precipitation: Departure from normal In.	Precipitation: Greatest in 24 hours In	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total In	Snow, Sleet: Maximum depth on ground In	Wind: Resultant speed Mph	Wind: Resultant direction	Fastest mile: Speed Mph	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine %
NEW YORK																																
BUFFALO	705	989.8	1015.2	80	63	71.2	1.4	87	18+	54	17+	0	0	60	71	1.57	-1.00	0.55	9	7	0.0	0	6.7	23	29	S	24+	3	15	13	6.8	52
NEW YORK U	132	1012.2	1015.5	83	68	75.3	-1.5	90	24+	60	6+	3	0	65	74	6.99	3.29	3.11	14	9	0.0	0	2.1	21	28	NW	23					48
J.F. KENNEDY	13	1015.2	1016.0	80	67	73.3	-2.6	89	12	59	6	0	0	65	79	4.98	0.94	1.41	18	5	0.0	0	5.4	21	26	20	23	2	10	19	7.6	
NEW YORK LA GUARDIA	11	1013.9	1015.8	82	69	75.3	-1.5	90	24	62	6+	1	0	62	67	5.02	1.31	1.77	14	8	0.0	0	3.3	21	32	NW	25	1	8	22	7.9	
ROCHESTER	547	996.3	1016.1	79	59	69.4	-2.2	89	1	48	6	0	0	59	72	2.68	-0.16	1.56	15	11	0.0	0	3.7	24	26	NW	23+	1	15	15	6.9	52
SYRACUSE	410	1000.3	1015.2	77	58	67.7	-4.5	87	1	48	7	0	0	60	80	6.33	3.24	1.53	14	17	0.0	0	3.3	24	33	NW	23	4	15	12	6.6	47
NORTH CAROLINA																																
ASHEVILLE	2140	942.8	1017.9	78	59	68.7	-3.7	86	12+	46	5	0	0	62	83	6.90	1.05	2.94	15	15	0.0	0	1.9	35	23	32	31+	2	8	21	7.8	56
CAPE HATTERAS R	7	1016.9	1017.2	84	72	77.6	-0.4	89	12	62	2	0	0	72	83	8.36	2.21	5.53	20	10	0.0	0	8.1	21	31	SW	30	1	9	21	8.1	52
CHARLOTTE	736	989.8	1016.8	85	68	76.3	-2.9	90	25+	57	5	2	0	67	77	5.13	0.25	2.42	13	7	0.0	0	2.8	23	22	SW	29	2	9	20	7.5	64
GREENSBORO	897	985.8	1017.0	87	68	77.1	-0.2	93	12	56	5	5	0	69	82	3.11	-1.68	0.95	13	6	0.0	0	1.8	21	26	NW	31	3	8	20	7.7	50
RALEIGH	434	1001.0	1016.6	86	68	76.9	-1.0	93	11	57	5	6	0	67	77	3.49	-2.00	1.60	8	7	0.0	0	3.1	22	29	29	29	2	10	19	7.4	57
WILMINGTON	28	1016.3	1017.6	90	73	81.1	1.1	96	12	67	17+	18	0	71	75	5.78	-1.90	2.79	17	11	0.0	0	4.7	22	26	SW	14+	1	15	15	7.4	73
NORTH DAKOTA																																
BISMARCK	1647	956.0	1014.8	87	51	69.0	-2.7	102	31	36	4	13	0	48	50	0.29	-1.90	0.12	5	4	0.0	0	1.3	26	37	NW	1	10	19	2	4.1	86
FARGO	896	982.4	1014.6	82	54	67.9	-3.5	93	25+	36	3	7	0	53	61	0.60	-2.31	0.31	4	6	0.0	0	1.9	24	37	NW	1	15	13	3	3.9	85
WILLISTON	1899	946.5	1013.8	86	55	70.3	-1.0	100	29	34	3	12	0	48	49	1.05	-0.82	0.86	6	5	0.0	0	2.6	26	43	NW	21+	18	11	2	3.1	86
OHIO																																
AKRON	1208	972.2	1016.1	82	60	70.7	-1.9	90	1	50	5+	1	0	59	70	2.11	-1.66	0.67	12	8	0.0	0	3.0	24	23	31	27	4	14	13	6.7	
CINCINNATI ORS	761			84	63	73.1	-3.8	94	25	52	14	5	0			2.84	-0.75	0.96	13		0.0	0			14	NE	30+					62
CLEVELAND	777	987.1	1016.0	80	60	69.7	-2.2	90	23+	52	30	2	0	59	72	1.90	-1.41	0.39	12	3	0.0	0	2.8	24	24	W	23	7	11	13	6.4	54
COLUMBUS	812	986.8	1016.4	82	62	71.7	-3.1	89	24+	50	5	0	0	60	69	4.22	0.29	1.41	12	8	0.0	0	1.5	24	41	W	2	2	17	12	6.8	59
DAYTON	1002	980.7	1016.2	83	64	73.5	-1.7	91	25	49	14	2	0	61	67	2.42	-1.11	1.17	9	7	0.0	0	2.8	24	29	NE	30	7	10	14	6.5	68
MANSFIELD	1295			80	61	70.2	-1.5	89	9	52	17+	0	0	57	68	3.29	-0.19	1.78	10	7	0.0	0	2.6	24				6	13	12	6.5	
TOLEDO	676	990.9	1015.8	80	58	69.1	-3.6	91	24	46	14	1	0	58	71	3.95	1.36	2.15	11	9	0.0	0	3.1	26	35	N	30	5	15	11	6.4	59
YOUNGSTOWN	1178	973.9	1016.3	78	58	68.0	-2.5	86	23+	48	15+	0	0	59	76	5.51	1.19	3.82	10	9	0.0	0	1.8	24	22	35	2	2	15	14	7.0	
OKLAHOMA																																
OKLAHOMA CITY	1285	970.2	1015.6	90	69	79.7	-2.8	103	31	59	15+	16	0	65	64	1.21	-1.16	0.35	8	2	0.0	0	4.4	15	27	NE	28	7	6	18	7.0	58
TULSA	650	992.6	1016.2	87	68	77.5	-4.7	98	10	54	15+	13	0	67	75	6.88	3.94	2.55	7	5	0.0	0	4.4	16	31	N	28	8	10	13	5.9	61
OREGON																																
ASTORIA	8	1019.0	1019.6	70	52	61.1	0.5	88	1	44	10	0	0	54	82	0.22	-1.05	0.12	3	0	0.0	0	5.9	30	20	31	22+	9	14	8	5.4	
BURNS U	4151	874.7	1014.6	88	56	72.0	2.5	98	12	46	27	15	0	40	34	0.02	-0.32	0.02	1		0.0	0	3.6	30				22	7	2	2.7	
EUGENE	359	1004.4	1017.7	86	52	68.8	2.2	98	1	46	26	6	0	51	57	0.00	-0.27	0.00	0	0	0.0	0	3.6	32	20	34	20+	22	8	1	2.6	
MEACHAM	4050	879.1	1015.0	79	53	66.1	2.7	93	12	43	9	1	0	36	35	0.08	-0.42	0.05	3		0.0	0	3.4	29				22	6	3	2.3	
MEDFORD	1298	968.8	1015.6	94	57	75.5	3.5	107	1	50	27	25	0	50	44	T	-0.21	T	0	0	0.0	0	4.0	31	17	32	13	28	2	1	0.9	
PENDLETON	1482	962.4	1015.0	92	61	76.4	2.8	103	12	53	9	20	0	41	30	T	-0.22	T	0	1	0.0	0	5.7	27	25	26	12+	26	3	2	1.7	
PORTLAND	21	1016.6	1017.9	83	56	69.3	2.1	99	1	52	7+	3	0	53	60	0.00	-0.41	0.00	0	0	0.0	0	7.2	33	23	NW	21	19	8	4	3.0	82
SALEM	196	1010.5	1018.0	85	50	67.6	1.5	101	1	44	15+	5	0	50	57	0.00	-0.35	0.00	0	0	0.0	0	4.0	32	18	31	20	22	8	1	2.7	
SEXTON SUMMIT R	3836	886.6	1015.8	77	53	65.0	1.4	92	1	44	26+	2	0			0.00	-0.32	0.00	0		0.0	0			28	33	15	28	3	0	0.7	
PACIFIC AREA																																
CANTON ISLAND	8			87	78	82.1	-1.5	88	31+	73	20	0	0			1.93	-0.66	0.54	14		0.0	0						7	15	9	5.8	
TAGUAC GUAM R	361			86	72	79.1	-0.4	91	13	69	4	1	0			12.62	3.64	2.33	28		0.0	0			23	E	14					47
JOHNSTON	7	1011.9	1012.6	86	77	81.5	0.4	87	29+	74	15	0	0	74	78	2.96	1.66	0.64	15	2	0.0	0	13.9	10	29	E	27+	5	18	8	5.9	59
KOROR R	94	1005.1	1008.7	87	75	81.2	0.3	90	17+	73	29+	2	0	75	84	12.20	-2.97	1.47	25	2	0.0	0	5.6	24	27	SW	29	0	2	29	9.6	64
KWAJALEIN	8	1008.1	1008.8	87	77	81.8	0.2	90	30	72	4	1	0	76	81	9.64	0.73	2.10	23	1	0.0	0	5.6	10	30	13	13	1	3	27	9.0	
MAJURO	10	1008.8	1009.2	86	77	81.4	1.2	88	31+	74	23	0	0	75	80	13.87	1.34	2.20	21	2	0.0	0	4.2	8	25	E	5	1	6	24	8.6	58
MARCUS ISLAND	20	1008.5	1010.2	86	75	80.8	-1.8	89	23	67	31	0	0	75	82	10.06	3.00	1.71	24	1	0.0	0	10.0	11	49	E	30	1	9	21	8.2	60
PAGO PAGO	12	1012.2	1012.4	82	73	77.4		84	23+	69	5	0	0	72	82	9.00		2.61	25	0	0.0	0	9.4	11	28	SE	27+	3	11	17	7.5	63
PONAPE R	123	1003.4	1008.6	88	72	80.1	0.4	90	27+	69	16	3	0	75	88	14.02	-2.20	3.21	27	3	0.0	0	2.9	15	20	SW	26	2	3	26	8.4	49
TRUK MOEN ISLAND	5	1008.5	1008.8	87	74	80.4	-0.1	89	12	71	10	0	0	75	85	19.90	7.57	3.62	22	3	0.0	0	1.5	24	29	NE	24+	0	5	26	8.9	64
WAKE	11	1010.8	1011.1	86	77	81.4	-0.6	88	22+	71	24	0	0	74	77	10.56	5.96	4.20	24	3	0.0	0	8.2	10	37	SW	31	0	5	26	8.6	47
YAP R	62	1006.1	1007.9	86	75	80.7	-0.7	89	30+	72	23+	0	0	76	86	14.14	0.36	2.50	26	1	0.0	0	3.3	23	20	SW	23	0	0	31	9.9	50

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average max mum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No of days: Max 90 F or above	No of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 01 inch or more	No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F	F	F	F		F				F	%	In	In	In			In	In	M.p.h.		M p h							%
PENNSYLVANIA																																
ALLENTOWN	387	1002.4	1016.0	83	62	72.7	-1.4	89	12+	54	6	0	0	61	72	5.85	1.03	1.84	16	10	0.0	0	2.4	24	23	16	28+	2	12	17	7.3	
ERIE	731	989.5	1015.8	77	61	68.8	-2.3	87	23	48	6	0	0	60	75	4.79	1.12	2.96	11	11	0.0	0	3.8	23	24	21	2	7	14	10	5.6	
HARRISBURG	338	1003.4	1015.9	84	65	74.2	-2.0	92	25	54	5	4	0	63	71	5.96	2.45	2.14	15	11	0.0	0	1.9	24	32	N	25	1	11	19	7.9	58
PHILADELPHIA	5	1014.9	1016.0	86	68	76.6	1.0	93	24	56	5	4	0	66	74	7.11	2.95	2.04	12	7	0.0	0	3.5	23	40	NW	31	1	10	20	7.7	54
PITTSBURGH	1137	972.9	1016.3	82	61	71.5	-0.6	91	1	52	16+	2	0	59	68	4.54	0.66	1.44	11	8	0.0	0	2.3	24	21	25	27+	3	9	19	7.4	51
READING U	266			84	66	75.2	-1.7	91	27+	58	6+	4	0			4.95	0.69	1.37	16		0.0	0			33	W	25	2	17	12	7.0	51
SCRANTON	930	982.7	1016.5	81	63	71.7	-0.7	87	23+	52	6	0	0	64	79	3.61	-1.18	0.84	18	10	0.0	0	2.3	22	22	SW	11	1	14	16	7.3	54
WILLIAMSPORT	524	997.3	1016.0	81	62	71.4	-2.2	88	1	51	6	0	0	65	84	6.03	1.85	1.66	13	9	0.0	0	2.1	25	28	24	4	1	14	16	7.3	
RHODE ISLAND																																
BLOCK ISLAND	110			75	65	69.9	0.3	82	10	58	1	0	0			4.09	1.40	2.24	13		0.0	0						3	9	19	7.7	
PROVIDENCE	51	1013.5	1015.9	80	65	72.8	0.7	89	10	56	7	0	0	64	79	3.95	1.04	1.32	12	6	0.0	0	5.2	19	23	27	12	1	10	20	7.7	35
SOUTH CAROLINA																																
CHARLESTON	40	1015.9	1017.5	89	71	79.9	-0.7	95	12	63	16	17	0	70	77	9.19	1.48	2.53	15	13	0.0	0	5.3	21	53Y	E	22	1	14	16	7.5	60
CHARLESTON U	9			87	74	80.1	-1.4	94	12	70	16+	5	0			9.30	1.52	1.81	14		0.0	0			27	SW	14					
COLUMBIA	213	1009.5	1017.4	88	68	77.6	-4.0	92	12	59	16	7	0	68	79	7.27	1.18	3.56	10	13	0.0	0	3.5	23	29	25	29	3	15	13	6.6	68
GNVLE-SPARTANBURG	957	983.4	1017.3	85	66	75.2	-3.8	91	12	58	5	3	0	66	77	3.86	-0.79	2.07	14	14	0.0	0	1.9	23	21	W	29	1	13	17	7.3	52
SOUTH DAKOTA																																
ABERDEEN	1296	968.5	1014.8	84	54	69.2	-4.3	101	31	40	4	9	0	54	60	1.06	-1.44	0.97	5	6	0.0	0	1.2	17	30	30	9	19	8	4	3.5	
HURON	1282	969.2	1014.9	85	56	70.6	-4.4	101	31	41	14+	11	0	58	67	0.69	-1.12	0.38	7	7	0.0	0	2.1	17	43	NW	9	20	6	5	3.5	82
RAPID CITY	3162	906.2	1015.3	84	57	70.6	-3.2	95	29+	45	3+	9	0	52	57	1.07	-0.71	0.39	10	10	0.0	0	0.6	3	30	NW	31	15	12	4	4.1	76
SIOUX FALLS	1418	965.1	1015.5	86	58	71.7	-2.6	104	22	38	4	10	0	56	61	0.53	-2.31	0.35	7	6	0.0	0	1.0	19	37	22	22	16	9	6	3.8	
TENNESSEE																																
BRISTOL	1507	964.4	1017.9	79	60	69.8	-6.1	87	24	48	5	0	0	63	83	4.87	-0.68	2.08	17	7	0.0	0	1.5	26	21	28	29	2	11	18	7.6	
CHATTANOOGA	665	992.9	1017.2	82	64	72.8	-7.9	88	24	51	15	0	0	66	84	10.56	5.45	3.19	19	13	0.0	0	1.5	21	29	S	28	3	8	20	7.5	41
KNOXVILLE	980	982.4	1016.9	80	63	71.8	-6.6	87	24	52	15	0	0	65	85	10.09	5.27	2.99	19	12	0.0	0	1.8	26	30	N	28	4	7	20	7.7	48
MEMPHIS	258	1007.1	1017.3	86	69	77.7	-3.6	93	11	58	15	9	0	67	71	6.01	2.47	1.72	11	8	0.0	0	3.0	22	40	NW	11	4	12	15	7.0	58
NASHVILLE	590	995.3	1016.5	85	67	75.7	-4.5	91	24	56	14	4	0	67	79	7.46	3.74	2.00	15	12	0.0	0	3.0	23	24	NW	27+	3	13	15	6.9	67
OAK RIDGE R	905			81	63	72.1	-5.1	88	24	50	15	0	0			19.27	13.32	4.91	16		0.0	0			35Y		11	4	6	21	8.1	
TEXAS																																
ABILENE	1762	954.3	1014.3	94	72	82.8	-0.4	103	11	65	14	22	0	63	55	1.32	-0.96	0.62	4	3	0.0	0	6.9	17	34	N	4	7	15	9	6.1	76
AMARILLO	3604	893.3	1013.6	88	66	77.2	-3.4	99	31	60	4	16	0	60	62	3.70	1.36	1.84	10	6	0.0	0	7.8	18	40	SE	11+	7	16	8	5.7	66
AUSTIN	597	994.2	1015.7	97	74	85.2	0.7	102	31+	64	16	28	0	65	57	1.15	-1.03	0.96	6	3	0.0	0	7.0	18	35	NW	2	5	17	9	6.0	78
BROWNSVILLE	19	1014.9	1015.4	94	77	85.3	1.3	96	31+	70	15+	30	0	72	69	0.58	-1.10	0.36	3	2	0.0	0	12.9	15	28	SE	28	12	14	5	4.8	82
CORPUS CHRISTI	41	1014.2	1015.7	94	76	84.6	0.5	98	31+	64	16	27	0	72	71	1.05	-1.27	0.75	5	1	0.0	0	13.1	15	32	SE	23	10	12	9	5.4	73
DALLAS	481	998.6	1015.6	93	75	83.8	-1.1	105	31	65	15	22	0	66	59	2.56	0.62	1.30	8	5	0.0	0	6.3	15	32	N	3	4	17	10	6.4	73
DEL RIO	1026	978.3	1013.5	99	75	86.8	0.6	103	31	71	20+	31	0	62	47	0.12	-1.19	0.08	3	3	0.0	0	10.6	13	22	13	21	10	17	4	4.4	
EL PASO	3918	882.8	1011.1	94	72	83.0	1.1	98	31+	67	30+	30	0	56	42	0.84	-0.45	0.58	4	9	0.0	0	3.2	17	35	W	18+	8	13	10	5.6	82
FORT WORTH	537	995.6	1015.6	93	73	82.9	-2.5	104	31	59	15	22	0	66	61	2.20	0.45	1.27	7	5	0.0	0	5.0	17	23	2	3	3	16	12	6.8	
GALVESTON U	7			85	78	81.5	-1.6	88	11+	71	13	0	0			8.73	3.94	2.90	6		0.0	0			28	SW	23					62
HOUSTON U	41			91	74	82.5	-1.4	98	3	66	15	22	0			4.80	-0.35	1.90	12		0.0	0										
HOUSTON	50	1014.9	1016.9	92	73	82.1	-0.9	97	10+	64	16+	23	0	71	75	7.77	3.48	2.01	12	10	0.0	0	5.4	17	28	3	6	4	15	12	6.5	62
LUBBOCK	3254	905.2	1014.2	88	66	77.0	-2.5	99	31	58	14	15	0	61	62	3.29	1.28	2.40	8	6	0.0	0	5.8	15	29	9	28	7	14	10	5.9	
MIDLAND	2851	916.7	1012.7	93	68	80.7	-2.2	100	31	60	14+	25	0	58	51	1.64	-0.24	0.92	6	5	0.0	0	7.4	15	35	2	29	10	10	11	5.4	
PORT ARTHUR	16			91	72	81.7	-0.2	99	10	61	15	21	0	70	71	4.20	-1.80	2.03	10	11	0.0	0	4.1	18	32	SW	21	3	16	12	6.6	73
SAN ANGELO	1903	948.5	1013.3	96	73	84.5	-0.3	104	31	62	14	27	0	61	50	0.59	-0.82	0.48	4	2	0.0	0	5.9	17	36	8	3	10	13	8	5.3	
SAN ANTONIO	788	988.2	1015.7	96	74	85.3	1.3	102	31	62	16	28	0	67	60	2.12	0.03	0.98	4	2	0.0	0	7.0	16	24	19	25	8	15	8	5.6	81
VICTORIA	104	1011.9	1016.0	95	75	84.6	1.4	99	3	62	16	29	0	71	69	1.26	-2.35	0.56	7	7	0.0	0	8.3	17	33Y	S	23	8	12	11	5.9	
WACO	501	997.6	1015.4	97	77	86.9	1.6	105	31+	64	15	27	0	65	54	1.59	-0.40	1.50	3	3	0.0	0	7.9	15	23	14	23	6	18	7	5.5	
WICHITA FALLS	994	979.0	1014.9	96	70	83.0	-2.6	109	31	62	15	22	0	65	60	3.18	1.21	1.29	8	8	0.0	0	5.7	15	39	4	28	4	13	14	7.1	
UTAH																																
MILFORD	5028	848.6		93	58	75.3	1.5	100	28	50	9+	22	0			1.42	0.72	1.24	6		0.0	0			-			7	13	11	6.1	
SALT LAKE CITY	4220	872.7	1013.1	95	62	78.4	1.5	101	21	54	28	28	0	48	39	1.14	0.56	0.97	6	6	0.0	0	2.8	14	40	NE	16	12	15	4	4.5	82
WENDOVER	4237			92	68	79.9	0.5	98	21	62	9+	22	0			0.63	0.32	0.39	5		0.0	0										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F		F.				F.	%	In.	In	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1002.0	1014.3	80	60	70.1	1.1	85	27+	48	7	0	0	60	73	4.60	0.75	2.05	12	8	0.0	0	3.6	19	26	S	24+	1	16	14	7.4	78
VIRGINIA																																
LYNCHBURG	916	983.7		83	63	72.8	-3.5	90	12	52	5	1	0	64	77	5.41	1.20	1.38	15	6	0.0	0	1.2	25	20	NW	20	5	10	16	7.0	53
NORFOLK	22	1015.6	1016.6	84	69	76.3	-2.5	94	12	60	6	4	0	67	76	7.21	1.29	2.87	16	8	0.0	0	4.2	19	30	N	21	2	9	20	7.7	66
RICHMOND	164	1010.5	1016.5	87	66	76.6	-1.5	94	12	52	5	12	0	68	81	5.00	-0.61	2.22	14	6	0.0	0	2.8	19	38	SW	20	3	9	19	7.4	62
ROANOKE	1149	975.3	1016.7	83	63	73.4	-3.2	90	26+	53	5	4	0	61	68	4.05	-0.20	0.95	15	5	0.0	0	2.5	27	30	31	15	3	14	14	7.0	
WALLOPS ISLAND	9	1016.9	1017.4	78	66	71.8		90	12	56	5	1	0	68	90	2.53		0.62	12	7	0.0	0	4.6	19	37Y	NNW	4	4	10	17	7.2	
WASHINGTON																																
OLYMPIA	195	1011.5	1018.7	80	48	63.9	0.0	91	3	43	28+	1	0	53	71	0.02	-0.74	0.02	1	0	0.0	0	2.6	22	20	22	17	13	14	4	4.4	
QUILLAYUTE	179	1011.9	1019.6	70	51	60.1	0.4	91	1	42	10	1	0	52	78	1.10	-1.21	0.78	9	0	0.0	0	3.2	28	16	S	18+	9	7	15	6.0	57
SEATTLE TACOMA	400	1002.4	1018.6	77	56	66.5	1.6	87	3	50	9	0	0	52	63	0.01	-0.80	0.01	1	0	0.0	0	1.5	30	17	25	19+	11	13	7	4.7	71
SPOKANE	2356	931.6	1013.9	86	55	70.6	0.1	103	12	45	9	11	0	40	35	0.06	-0.32	0.06	1	2	0.0	0	5.4	21	25	S	12	20	11	0	2.2	90
STAMPEDE PASS R	3958	882.8		67	48	57.4	1.2	84	2	39	9	0	0			0.33	-1.13	0.19	8		0.0	0						13	11	7	4.7	
WALLA WALLA U	949			91	65	77.8	1.8	103	12	56	22	17	0			T	-0.21	T	0		0.0	0			23	W	12	25	4	2	2.1	91
YAKIMA	1052	976.6	1014.4	89	54	71.4	0.4	98	12+	44	9	18	0	46	41	T	-0.13	T	0	0	0.0	0	4.4	31	23	30	17	24	4	3	2.0	
WEST INDIES																																
SAN JUAN P.R.	13	1015.6	1018.0	87	78	82.1	1.7	90	28	73	26	1	0	73	76	4.79	-1.46	1.02	25	3	0.0	0	11.6	9	30	E	5	2	23	6	6.5	62
SWAN ISLAND	28			88	77	82.3	-0.2	90	5	71	21	1	0			3.31	-0.89	1.34	15		0.0	0						6	15	10	6.1	
WEST VIRGINIA																																
BECKLEY	2504	930.6	1017.3	76	57	66.5		84	1	45	5	0	0	60	81	7.62		1.17	20	14	0.0	0	3.6	23	25	12	6	1	11	19	7.8	
CHARLESTON	939	982.7	1016.5	81	62	71.1	-3.8	90	1	51	5	1	0	63	80	4.59	-1.08	1.44	16	12	0.0	0	2.4	23	22	31	2	1	15	15	7.5	
ELKINS	1970	947.5	1017.8	77	56	66.7	-3.4	85	1	44	5	0	0	60	84	4.55	-0.94	0.86	17	12	0.0	0	1.8	24	36	26	4	1	12	18	7.8	
HUNTINGTON	827	987.1	1016.7	81	62	71.4	-3.8	91	1	47	5	1	0	63	78	5.82	1.32	1.63	13	8	0.0	0	2.4	20	17	24	4	2	16	13	6.9	
PARKERSBURG U	615			82	63	72.4	-3.4	89	27+	54	15+	0	0			4.16	0.05	2.28	8		0.0	0			24	W	20					51
WISCONSIN																																
GREEN BAY	682	989.5	1014.8	79	57	68.3	-2.2	90	22	46	6	1	0	57	70	1.96	-0.75	1.20	5	5	0.0	0	2.8	26	40	W	1	8	15	8	5.5	64
LA CROSSE	651	991.2	1015.3	84	59	71.3	-2.5	92	26+	44	4	12	0	57	65	0.16	-3.59	0.08	3	3	0.0	0	1.2	27	23	30	24+	11	14	6	5.1	
MADISON	858	984.8	1015.6	79	55	67.1	-4.0	90	23	39	6	1	0	57	71	2.51	-1.07	0.83	7	10	0.0	0	2.3	26	26	SW	21+	6	20	5	5.3	66
MILWAUKEE	672	990.9	1015.9	78	59	68.6	-0.1	91	22	46	5	3	0	58	72	1.35	-1.60	0.71	7	9	0.0	0	1.7	24	45	NW	23	14	9	8	4.9	70
WYOMING																																
CASPER	5338	840.8	1015.1	86	54	69.8	-1.9	95	29+	46	2	6	0	46	49	1.46	0.46	0.29	13	15	0.0	0	2.1	26	40	28	30	14	12	5	4.2	
CHEYENNE	6126	817.1	1016.6	81	54	67.3	-2.7	89	22	49	27+	0	0	50	59	1.71	-0.11	0.78	11	10	0.0	0	2.3	28	33	N	4	12	13	6	4.9	65
LANDER	5563	832.7	1015.2	83	55	69.0	-1.6	90	22+	49	27+	2	0	48	50	0.91	0.14	0.55	10	10	0.0	0	2.4	25	31	SW	8	9	16	6	4.6	78
SHERIDAN	3964	881.1	1015.8	83	50	66.6	-4.7	90	31	43	3+	1	0	49	54	0.22	-0.97	0.11	3	11	0.0	0	1.2	28	34	NW	31	12	14	5	4.6	80

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hour	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
ALABAMA																																
BIRMINGHAM	189	995.9	1018.0	29.4	18.9	24.3	-3.3	32.8	27	10.6	15	4	0	19.4	78	168	37	52	16	12	0	0	1.2	27	10.7	NW	25	4	8	19	7.2	47
HUNTSVILLE	183	994.9	1017.5	29.4	19.4	24.3	-3.0	33.3	10	11.7	15	1	0	19.4	76	376	268	104	15	10	0	0	0.8	20	11.2	26	12+	4	11	16	7.0	
MOBILE	64	1010.2	1018.1	32.8	22.2	27.5	-0.6	36.7	1	16.7	16+	19	0	21.1	74	198	-47	62	17	13	0	0	0.8	25	10.3	30	29+	3	15	13	6.5	
MONTGOMERY	59	1011.2	1018.2	31.1	21.1	26.0	-1.7	33.9	25	16.1	15	10	0	20.0	74	180	42	63	11	13	0	0	1.2	23	11.2	W	22	2	12	17	7.3	57
ALASKA												B																				
ANCHORAGE	35	1008.8	1013.6	18.9	11.1	15.2	0.6	25.6	11	7.8	3	9	0	8.9	67	63	15	15	14	1	0	0	1.9	18	10.7	16	20	5	6	20	7.5	46
ANNETTE	34	1013.5	1017.5	17.8	11.1	14.4	0.3	26.1	24	8.9	2	5	0	10.0	80	223	70	67	19	0	0	0	1.7	16	10.7	14	28	2	5	24	8.4	
BARROW	9	1008.8	1009.3	5.6	0.6	3.1	-0.9	13.9	17	-2.8	7+	0	15	2.2	94	36	17	9	11	0	8	T	0.4	24	10.7	12	29	0	5	26	8.9	
BARTER ISLAND	12	1008.8	1010.7	8.3	1.1	4.7	-0.4	23.9	13	-4.4	7	1	13	1.7	83	66	43	16	11	0	T	T	0.9	7	14.3	25	23	2	5	24	8.4	
BETHEL	38	1009.8	1015.4	15.6	8.9	12.0	-0.6	27.8	12	3.3	7	3	0	8.9	84	57	6	11	18	0	0	0	3.4	24	13.9	19	15	1	5	25	9.0	
COLD BAY	29	1016.9	1020.8	14.4	8.3	11.6	1.8	19.4	11	2.8	11	0	0	8.3	84	73	27	22	19	0	0	0	3.0	27	16.5	26	5	0	5	26	9.3	
FAIRBANKS	133	995.3	1012.0	20.6	10.6	15.4	0.1	31.1	14+	6.7	23	13	0	9.4	70	85	38	34	20	2	0	0	1.4	23	9.4	24	22	1	4	26	8.9	
JUNEAU	4	1015.6	1016.3	17.2	7.2	12.1	-0.8	25.6	24	2.8	24	3	0	9.4	89	108	-6	31	24	0	0	0	1.4	9	10.7	13	6	1	3	27	9.1	26
KING SALMON	15	1013.9	1015.8	16.7	8.3	12.6	-0.2	26.7	12+	2.2	27	5	0	7.8	76	80	28	13	15	0	0	0	3.8	22	11.2	18	19+	2	9	20	8.2	
KOTZEBUE	3	1009.8	1010.3	13.9	8.9	11.6	0.1	20.6	12	5.6	20	0	0	8.3	81	66	29	17	17	0	0	0	2.4	27	13.9	29	17	2	7	22	8.3	
MC GRATH	105	1001.0	1013.6	18.3	8.3	13.5	-1.3	30.6	13	4.4	27	8	0	7.8	72	75	13	21	17	0	0	0	1.7	23	10.3	24	21	2	7	22	8.1	
NOME	4	1010.2	1011.1	11.1	5.6	8.4	-1.3	15.0	12	1.1	22+	0	0	4.4	76	107	49	20	20	0	0	0	2.5	23	10.7	29	16+	0	5	26	8.8	19
ST. PAUL ISLAND	7	1015.9	1017.0	10.6	7.2	9.0	1.5	12.8	12	0.0	9	0	1	7.8	93	37	-20	6	20	0	0	0	3.1	21	16.5	23	15	0	1	30	9.7	
SHEMYA	37	1008.1	1011.8	9.4	6.7	8.1	0.1	12.2	26+	5.0	13	0	0	7.8	98	221	167	49	20	0	0	0	3.2	18	19.2	21	14	0	1	30	9.9	
YAKUTAT	9	1014.6	1015.6	14.4	8.3	11.2	-1.1	18.9	23	2.8	5	0	0	10.0	91	196	-19	37	24	0	0	0	0.5	16	8.9	12	6	1	2	28	9.4	
ARIZONA																																
FLAGSTAFF	2131	792.8	1017.3	26.7	11.7	19.2	0.6	32.2	1	8.3	2	1	0	10.6	66	97	39	28	14	20	0	0	0.8	24	7.6	2	4+	1	9	21	7.7	
PHOENIX	340	972.2	1009.8	40.0	26.7	33.1	1.0	43.3	2+	22.2	11	31	0	15.6	38	25	6	13	5	8	0	0	0.4	20	19.7Y	ESE	11	7	16	8	5.5	80
TUCSON	788	925.8	1011.3	36.1	23.3	29.7	-0.5	41.7	2	20.0	17+	28	0	16.7	49	69	17	16	10	16	0	0	0.8	21	17.9	W	31	6	14	11	6.2	77
WINSLOW	1492	854.0	1013.9	33.3	17.8	25.7	-1.1	38.3	3+	15.0	8+	20	0	10.0	43	68	42	20	11	16	0	0	1.6	23	15.6	26	4	5	12	14	6.5	
YUMA	59	1002.4	1009.4	40.6	27.8	34.4	0.6	43.9	1	23.9	18	31	0	16.7	36	T	-6	T	1	1	0	0	3.4	17	12.5	S	21	11	11	9	4.7	86
ARKANSAS																																
FORT SMITH	136	1000.0	1016.4	31.7	20.0	25.7	-2.7	36.7	31	12.8	15+	16	0	19.4	70	77	6	47	13	5	0	0	0.3	7	10.7	NW	25	3	11	17	6.9	66
LITTLE ROCK	78	1007.8	1017.1	30.6	20.6	25.5	-2.2	35.0	11	14.4	15	13	0	20.0	73	109	24	51	6	8	0	0	1.3	23	11.2	NW	1	3	15	13	6.7	78
TEXARKANA	119	1004.1	1017.0	31.1	21.7	26.2	-1.9	36.7	31	14.4	15	15	0	20.6	75	100	3	36	9	6	0	0	1.4	19				1	12	18	7.1	
CALIFORNIA																																
BAKERSFIELD	145	994.6	1011.8	38.3	22.8	30.4	1.3	42.8	12	18.3	19	31	0	9.4	30	T	0	T	0	2	0	0	1.9	32	7.6	29	22+	22	7	2	2.2	
BISHOP	1252	874.7		36.7	15.0	25.8	1.1	40.6	1	10.6	10	29	0			16	13	12	4		0	0						20	6	5	3.3	
BLUE CANYON	1609			26.1	16.7	21.4	1.4	30.0	1	13.3	18+	0	0			T	-2	T	1		0	0			7.2	22	22	24	6	1	1.8	
EUREKA U	13			15.6	11.7	13.6	0.1	17.8	28+	10.0	26+	0	0			0	-3	0	0		0	0			8.9	N	18	2	14	15	7.1	52
FRESNO	100	1000.3	1011.7	38.3	18.9	28.8	1.4	42.2	12+	15.0	20	31	0	12.8	40	T	0	T	0	0	0	0	2.1	29	7.6	NW	6+	24	4	3	2.0	92
LONG BEACH	10	1012.9	1014.3	29.4	18.9	24.1	2.1	36.1	27	16.1	20+	5	0	15.6	66	T	0	T	0	0	0	0	1.2	22	10.3	18	2	11	18	2	4.3	
LOS ANGELES	30	1010.5	1014.1	23.9	17.2	20.7	0.1	31.1	27	15.6	19+	0	0	16.1	80	T	0	T	0	0	0	0	2.7	26	9.8Y	W	27	8	19	4	4.7	
LOS ANGELES U	82			30.0	18.9	24.3	1.5	33.3	27+	16.7	19+	6	0			0	0	0	0		0	0			6.7	SW	27+	16	15	0	3.5	84
MT SHASTA R	1080			31.1	11.1	20.9	0.9	35.0	2+	6.7	8	11	0			1	-6	1	1		0	0										
OAKLAND	2	1014.9	1015.2	21.1	13.9	17.6	-0.3	28.3	28+	12.2	26	0	0	12.8	78	0	0	0	0	0	0	0	3.4	29	9.4	32	16+	22	5	4	2.9	
RED BLUFF	104	999.7	1012.0	36.7	18.9	27.9	-0.9	40.6	15+	15.0	8	31	0	11.1	37	T	-1	T	1	1	0	0	1.2	16	8.0	SE	22	26	3	2	1.4	96
SACRAMENTO	5	1011.5	1012.3	35.6	15.6	25.6	1.4	40.0	12	11.7	8	28	0	13.3	54	T	0	T	0	1	0	0	2.7	20	8.0	SW	28+	24	6	1	1.5	99
SANDBERG R	1377	865.2		30.0	18.3	24.3	0.7	35.0	11	13.9	17	7	0	5.6	33	T	-1	T	0		0	0			17.0	36	24	20	7	4	2.9	
SAN DIEGO	4	1012.9	1014.0	24.4	18.3	21.3	0.2	30.0	27	16.7	20+	0	0	16.1	75	T	0	T	1	0	0	0	2.0	26	7.6	NW	28	9	17	5	5.0	69
SAN FRANCISCO	2	1014.6	1015.1	22.2	12.2	17.1	0.0	30.6	28	10.0	20	0	0	10.6	73	T	0	T	0	0	0	0	6.0	30	13.9	WNW	25+	23	4	4	2.2	
SAN FRANCISCO U	16			17.8	12.2	14.9	0.1	25.6	11	10.0	22	0	0			0	0	0	0		0	0			11.6	W	8+					71
SANTA CATALINA	478	958.7		27.2	17.2	22.2	1.8	32.2	20+	12.2	1	2	0			0	-1	0	0	0	0	0	0.9	23				21	9	1	3.0	
SANTA MARIA	72			23.9	11.7	17.7	0.9	30.0	28	8.3	26+	0	0			T	-1	T	0		0	0						16	13	2	3.6	
STOCKTON	7	1011.9	1013.0	36.1	17.2	26.8	1.2	40.0	3	12.8	9	31	0	10.6	40	0	0	0	0	0	0	0	3.2	32	9.4	30	6	23	7	1	1.9	
COLORADO																																
ALAMOSA	2297	777.5		26.7	10.6	18.4	0.2	30.0	1	5.6	5	0	0			45	18	19	15		0	0						8	15	8	5.6	
COLORADO SPRINGS	1873	816.1	1016.4	27.2	14.4	20.7	-0.7	32.2	27+	8.3	11	2	0	12.2	63	134	73	51	16	20	0	0	1.1	4	15.6	34	11	4	18	9	5.9	
DENVER	1610	840.2	1015.2	27.8	13.3	20.6	-2.1	33.9	22	10.6	3+	2	0	12.2	67	83	44	21	15	14	0	0	0.4	15	13.4	N	4	10	13	8	5.1	70
GRAND JUNCTION	1480	854.0	1012.7	33.3	17.2	25.4	-0.3	36.1	29+	13.9	18	23	0	8.9	40	26	12	15	9	8	0	0	1.0	14	16.1	NE	24	12	10	9	5.0	71
PUEBLO	1428	858.5	1014.4	31.7	17.2	24.3	-0.4	36.1	30	13.9	18	14	0	12.8	55	91	45	20	16	19	0	0	0.6	7	25.5	N	27	8	14	9	5.4	74

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max 32.2 °C or above	Temperature: No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days: Partly cloudy, 4-7	No of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
CONNECTICUT																																
BRIDGEPORT	2	1014.9	1015.6	27.2	19.4	23.2	0.0	32.2	12	14.4	7	1	0	18.9	80	103	8	45	12	3	0	0	1.8	21	13.0	26	25	1	12	18	7.7	
HARTFORD	52	1008.8	1015.3	28.9	17.8	23.3	0.3	32.8	25	11.1	7	3	0	16.7	70	66	- 26	19	13	7	0	0	1.7	21	10.7	SW	25	0	9	22	8.3	50
NEW HAVEN	2	1015.6		26.7	18.3	22.5	0.3	30.0	12	11.7	7	0	0			106	19	38	13		0	0			14.8	SW	25	1	14	16	7.4	56
DELAWARE																																
WILMINGTON	23	1012.9	1015.9	28.3	18.9	23.6	-0.9	31.7	24+	12.8	5	0	0	18.9	80	113	5	28	16	12	0	0	1.2	22	12.5	30	4	1	13	17	7.5	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1013.9	1016.1	30.0	20.0	25.1	-0.6	33.9	24	15.0	5+	7	0	19.4	72	133	28	72	13	9	0	0	1.5	20	17.0	NW	4	0	10	21	8.0	42
FLORIDA																																
APALACHICOLA U	4			30.0	22.8	26.6	-0.9	32.2	2	18.3	15	1	0			196	- 5	37	17	16	0	0			10.3	E	31	9	7	15	6.2	57
DAYTONA BEACH	9	1018.3	1019.8	31.1	21.7	26.3	-0.4	34.4	13	20.0	19+	8	0	21.7	81	230	58	99	19	23	0	0	1.5	18	14.3	17	28	2	13	16	7.2	
FORT MYERS	5	1019.0	1019.1	32.2	24.4	28.3	0.4	34.4	21	22.2	19	25	0	22.8	78	170	- 61	30	17	26	0	0	1.0	14	12.5	14	21	2	18	11	6.6	
JACKSONVILLE	6	1018.0	1019.0	32.8	22.8	27.8	-0.3	36.1	13	20.0	16	26	0	21.1	74	133	- 62	27	16	17	0	0	1.9	22	15.2	W	14	3	15	13	6.9	53
KEY WEST	1	1017.6	1018.4	32.8	28.3	30.4	1.9	33.9	16	25.0	17	30	0	23.9	68	64	- 41	16	9	7	0	0	4.2	12	16.1	E	9	6	17	8	5.7	81
LAKELAND U	65			32.2	22.2	27.2	-0.3	34.4	12+	20.0	27+	21	0			175	- 36	50	19		0	0						2	18	11	6.8	53
MIAMI	2	1018.6	1018.9	31.1	24.4	28.0	0.3	32.8	13+	22.2	15+	7	0	22.2	72	141	- 30	58	17	11	0	0	3.0	13	11.6	25	2	4	14	13	6.4	
ORLANDO	33	1015.2	1019.7	33.3	22.8	28.0	-0.1	36.1	12	21.1	25+	28	0	22.2	77	118	- 86	24	17	19	0	0	1.5	19	13.0	18	26+	3	17	11	7.0	
PENSACOLA	34	1014.6	1018.6	30.6	22.2	26.4	-1.2	33.3	27	16.1	16+	9	0	21.1	76	120	- 84	44	15		0	0	0.8	21	17.9	SW	19	4	15	12	6.5	64
TALLAHASSEE	17	1016.3	1018.7	32.2	21.1	26.6	-0.8	35.0	28+	13.9	16	19	0	21.7	81	211	7	63	23	22	0	0	0.4	24	9.4	28	26	4	15	12	6.7	
TAMPA	6	1018.6	1019.0	31.7	22.8	27.1	-0.4	33.9	20	21.1	22+	13	0	22.2	78	262	43	65	16	22	0	0	0.4	18	10.3	36	1	3	10	18	7.1	52
WEST PALM BEACH	5	1018.6	1019.3	32.2	23.3	27.6	-0.6	33.9	26	20.6	4	17	0	22.8	78	124	- 45	39	12	13	0	0	2.7	13	10.3	16	3+	6	12	13	6.3	
GEORGIA																																
ATHENS	244	989.2	1017.5	28.9	18.9	24.1	-2.4	31.1	31+	12.8	15	0	0	19.4	80	203	76	64	14	15	0	0	1.7	26	8.9	27	20	5	10	16	7.1	
ATLANTA	308	981.7	1017.9	28.3	18.3	23.4	-2.7	32.2	25	11.7	15	1	0	18.3	78	164	44	37	15	10	0	0	1.8	26	17.0	NW	26	3	10	18	7.2	66
AUGUSTA	44	1011.9	1017.2	30.6	20.0	25.2	-1.8	32.8	29+	13.9	15	8	0	19.4	75	290	176	74	17	13	0	0	1.6	23	12.5	28	8	2	15	14	7.0	
COLUMBUS	117			30.6	21.1	25.9	-1.4	33.3	27	15.0	15	6	0	20.6	77	97	- 52	51	15		0	0	1.0	26	14.3	25	2	3	9	19	7.6	
MACON	108	1005.1	1017.8	31.1	18.9	24.8	-2.9	33.3	29+	12.2	15	11	0	19.4	77	141	- 2	34	17	12	0	0	1.3	23	18.8	SW	22	3	10	18	7.4	56
ROME	194			28.9	18.3	23.6	-2.6	31.7	27+	11.7	16	0	0			142	18	40	15		0	0										
SAVANNAH	14	1016.3	1017.9	32.2	21.1	26.6	-0.8	34.4	29+	16.7	16	18	0	20.6	74	158	- 10	51	18	15	0	0	2.0	22	11.2	NW	14	1	17	13	7.0	59
HAWAII																																
HILO	8	1014.9	1016.2	29.4	21.7	25.4	1.6	30.6	9+	20.0	13+	0	0	20.6	79	356	107	80	28	1	0	0	0.2	14	8.5	E	20	1	11	19	8.0	28
HONOLULU	2	1014.9	1015.5	31.1	23.9	27.5	1.5	32.2	31+	22.2	19+	2	0	19.4	65	31	20	26	10	0	0	0	5.3	6	12.1	NE	17+	4	23	4	5.3	70
KAHULUI	15	1012.9	1015.0	30.0	21.7	26.0	0.3	32.8	30+	19.4	9	3	0	20.6	75	28	18	11	8	1	0	0	5.4	5	12.5	NE	15	8	19	4	5.0	70
LIHUE	31	1011.9	1016.9	28.9	23.3	26.1	0.8	30.0	28+	18.9	1	0	0	21.1	76	47	- 3	19	20	0	0	0	4.8	6	10.3	NE	6+	0	20	11	7.0	73
IDAHO																																
BOISE	865	915.0	1012.5	34.4	17.2	25.8	1.8	41.7	12	12.8	20+	28	0	7.8	35	1	- 4	1	2	1	0	0	0.8	28	12.5	SW	2	23	5	3	2.5	90
IDAHO FALLS 46W R	1504			31.7	10.0	20.7	0.2	35.6	13	3.9	28	13	0			14	8	6	4		0	0	1.0	25	14.3	S	25+					
LEWISTON	431			33.3	15.6	24.6	1.4	43.3	12	11.7	10+	21	0			1	- 10	1	1		0	0						22	6	3	2.4	
POCATELLO	1358	864.5	1014.1	32.2	11.7	21.9	-0.5	36.1	12	7.2	28	20	0	7.2	43	6	- 7	2	4	6	0	0	1.7	22	15.6	S	18	16	11	4	3.5	83
ILLINOIS																																
CAIRO U	96			29.4	20.6	24.8	-2.5	33.3	31+	13.9	14	7	0			131	50	71	9		0	0			18.3	N	10	5	13	13	6.8	65
CHICAGO O HARE	201	991.9	1015.9	26.1	14.4	20.2	-2.4	30.6	22+	7.8	6	0	0	15.6	76	47	- 39	22	7	6	0	0	0.8	27	14.3	5	26	6	21	4	5.5	
CHICAGO MIDWAY	185	993.6		26.7	16.7	21.4	-2.8	32.2	1	10.0	5	1	0	15.6	70	60	- 26	18	8	7	0	0	0.9	23	19.2	NW	23	6	20	5	5.5	66
MOLINE	177	994.2	1015.6	28.3	15.6	21.9	-2.3	33.3	26+	8.9	15+	4	0	17.2	77	105	23	37	9	7	0	0	0.9	25	17.4	NE	26	5	18	8	5.7	64
PEORIA	199	992.6	1016.1	28.3	16.1	22.2	-2.2	32.8	23	10.0	14	4	0	15.6	69	146	56	43	12	11	0	0	0.9	25	17.9	W	1	7	16	8	5.7	64
ROCKFORD	221	988.8	1015.4	26.7	15.0	20.9	-2.6	32.8	24+	6.1	5	3	0	15.0	72	34	- 72	22	9	9	0	0	1.1	26	11.2	2	23	8	18	5	5.3	
SPRINGFIELD	179	993.9	1015.8	28.3	17.2	22.7	-2.8	33.9	23	8.9	14	2	0	16.7	69	86	- 3	42	10	11	0	0	1.0	24	11.6	N	26+	8	14	9	5.7	68
INDIANA																																
EVANSVILLE	116	1002.4	1016.3	28.3	17.8	23.0	-3.0	31.7	26+	11.1	4	0	0	17.8	76	138	54	93	11	10	0	0	0.8	27	13.0	SW	28	3	14	14	6.7	64
FORT WAYNE	241	986.5	1016.0	27.2	14.4	21.0	-2.4	32.2	24+	6.7	14	2	0	13.9	66	52	- 33	20	14	7	0	0	1.6	27	12.1	NW	2	4	15	12	6.4	66
INDIANAPOLIS	241	987.5	1016.1	28.9	17.2	23.2	-0.8	33.9	11	10.0	16	2	0	16.1	67	59	- 29	33	10	6	0	0	1.3	26	17.0	NW	19	6	16	9	5.9	55
SOUTH BEND	236	988.2	1015.7	26.1	16.1	21.0	-2.1	31.1	24+	8.9	5	0	0	14.4	67	54	- 35	20	13	9	0	0	1.5	27	14.3	31	11	5	15	11	6.2	
IOWA																																
BURLINGTON	211			27.8	16.7	22.2	-2.6	35.0	23	9.4	4	1	0	16.1	71	122	36		9	10	0		0.8	27	23.2	36	30	3	22	6	5.5	
DES MOINES	286	982.1	1016.3	28.3	16.1	22.3	-2.3	33.9	22	8.9	4	6	0	15.0	66	21	- 57	15	4	6	0	0	0.5	24	12.5	NW	2	7	19	5	5.4	83

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 2.54 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days sunrise to sunset: Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths, sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
IOWA																																
DUBUQUE	322	977.3		27.2	14.4	20.9	-1.7	33.9	26	7.2	4	3	0			25	- 64	7	10		0	0						3	22	6	6.0	
SIOUX CITY	334	976.3	1015.5	29.4	16.7	22.9	-2.3	36.1	22	7.8	4	8	0	15.6	65	51	- 28	38	4	4	0	0	0.7	18	29.5	NW	9	14	14	3	3.8	88
WATERLOO	265	984.4	1015.7	27.2	13.9	20.3	-2.9	33.3	26	6.1	4	3	0	14.4	72	57	- 39	34	9	8	0	0	0.6	28	14.3	34	1	5	18	8	5.9	
KANSAS																																
CONCORDIA	448	963.8	1015.7	29.4	17.2	23.2	-3.7	37.2	23	10.0	4	11	0	17.8	74	118	46	69	13	10	0	0	2.1	17	17.0	NE	26	12	10	9	5.0	71
DODGE CITY	787	926.2	1015.0	29.4	18.3	23.8	-2.9	37.8	31	14.4	5	13	0	16.7		129	70	52	10	12	0	0	3.0	16	15.6	NW	31	6	12	13	6.5	75
GOODLAND	1113	890.6	1015.1	29.4	15.0	22.3	-2.5	37.2	22	10.6	2	10	0	14.4	69	30	- 37	10	11	8	0	0	2.1	15	16.5	28	7	10	10	11	5.6	
TOPEKA	267	984.8	1016.1	29.4	18.3	23.9	-2.7	35.6	23+	11.1	15	10	0	18.3	72	78	- 14	32	11	9	0	0	0.8	20	15.2	W	24	10	11	10	5.2	72
WICHITA	403	968.8	1015.5	30.0	18.9	24.6	-2.6	37.2	31+	11.1	14	13	0	17.8	69	109	16	55	10	7	0	0	2.2	16	14.8	N	28	9	10	12	5.6	63
KENTUCKY																																
COVINGTON	265	985.4	1016.5	28.3	17.2	22.7	-1.4	32.8	26+	11.7	5	5	0	16.7	72	127	35	45	11	8	0	0	1.4	25	9.4	1	30	2	17	12	6.8	
LEXINGTON	294	982.1	1016.9	27.2	17.8	22.5	-2.7	31.1	24	11.7	5	0	0	17.2	75	149	48	33	13	8	0	0	1.8	20	13.0	23	20	1	15	15	7.0	
LOUISVILLE	145	998.6	1016.0	28.9	18.3	23.6	-1.7	33.9	25	12.8	16+	7	0	17.2	71	186	101	42	15	10	0	0	1.1	23	14.3	NW	20	4	12	15	6.7	57
LOUISIANA																																
ALEXANDRIA	28	1013.5	1017.6	31.7	20.6	26.1	-1.8	35.0	1	12.8	15	18	0	21.7	81	160	26	56	12	11	0	0	0.8	20	10.3	35	6	2	12	17	7.4	
BATON ROUGE	20	1015.6	1018.2	31.7	21.1	26.6	-1.6	34.4	1	14.4	15	17	0	21.1		237	77	65	13	13	0	0	0.9	21	15.6	7	4	3	12	16	7.1	
LAKE CHARLES	3	1016.9	1017.9	32.2	22.8	27.4	-0.5	35.0	10+	16.1	15	21	0	22.2	79	139	- 46	35	10	11	0	0	1.2	20	11.2	15	21	3	12	16	7.0	
NEW ORLEANS	1	1017.3	1018.0	32.2	22.2	26.9	-0.6	34.4	3+	15.6	16	18	0	21.1	74	163	- 8	57	14	12	0	0	0.8	21	13.4	25	24	3	13	15	6.7	
SHREVEPORT	77	1007.8	1016.8	31.7	21.1	26.6	-2.2	35.6	31	15.6	15	19	0	20.6	74	156	61	51	11	10	0	0	1.5	18	13.4	1	3	2	14	15	7.1	64
MAINE																																
CARIBOU	190	990.9		25.6	15.0	20.2	2.2	30.6	2	8.3	7	0	0			106	4	54	14		0	0						2	9	20	7.6	
PORTLAND	14	1012.9	1015.2	24.4	15.6	19.7	-0.3	28.9	27+	8.9	7+	0	0	16.1	84	88	15	24	10	5	0	0	1.3	18	8.5	NW	6+	3	6	22	7.9	41
MARYLAND																																
BALTIMORE	45	1010.5	1015.9	29.4	18.9	24.0	-0.9	33.3	24+	13.3	5+	6	0	18.3	73	90	- 17	74	9	9	0	0	1.3	22	17.4	NW	4	2	15	14	7.3	60
MASSACHUSETTS																																
BLUE HILL OBS R	192			26.1	17.2	21.8	0.2	30.6	10	12.2	1	0	0			75	- 8	29	13		0	0			14.3	W	25+					43
BOSTON	5	1014.6	1015.4	26.7	18.9	22.8	-0.4	31.7	10	13.3	1	0	0	17.2	74	63	- 10	27	11	3	0	0	2.4	21	11.6	SW	23	1	14	16	7.6	48
NANTUCKET	13	1016.3	1016.6	22.8	15.6	19.0	-1.0	27.8	10	10.6	7	0	0	17.8	96	167	98	46	16	7	0	0	2.7	20	13.9	S	13	2	3	26	8.5	42
PITTSFIELD	357			26.1	14.4	20.3	0.4	28.9	31+	6.7	7	0	0			117	- 7	35	16		0	0										
WORCESTER	301	980.0	1016.4	26.1	17.2	21.5	0.5	30.0	10	11.7	6	0	0	16.1	74	150	58	55	13	4	0	0	2.0	24	8.9	30	5	2	13	16	7.4	
MICHIGAN																																
ALPENA	210	989.5	1014.4	24.4	11.1	17.8	-1.1	30.6	23+	3.3	6	0	0	12.8	76	79	7	31	10	6	0	0	0.7	24	8.5	SE	17+	5	16	10	6.3	58
DETROIT	189			25.6	17.2	21.2	-2.3	32.2	24	10.6	14	1	0	14.4	68					7			1.3	27	10.7	30	12					
DETROIT M WAYNE CO	193	990.9	1014.8	26.1	15.0	20.6	-2.2	32.2	24+	7.8	14	2	0	14.4	70	72	4	33	8	5	0	0	1.4	25	15.2	N	19	9	11	11	6.2	61
DETROIT WILLOW RUN	217	987.5	1015.3	26.7	15.0	20.6	-2.8	33.3	24	8.3	14+	1	0	12.8	61	26	- 42	12	8	7	0	0	1.5	25	10.7	30	13+	7	13	11	6.1	
FLINT	235	987.5	1014.9	25.0	14.4	19.6	-2.2	30.0	23+	8.3	13	0	0	13.9	72	45	- 29	25	10	8	0	0	1.5	25	9.8	27	24	6	8	17	6.6	
GRAND RAPIDS	239	986.5	1015.2	26.7	14.4	20.3	-2.1	32.8	22	8.3	6	1	0	13.9	68	70	1	25	8	6	0	0	1.8	25	14.8	NW	2	8	10	13	5.8	56
HOUGHTON LAKE	350	973.9	1015.5	24.4	12.2	18.4		30.0	22	6.7	15	0	0	13.3	73	33		14	10	6	0	0	1.4	27	8.9	28	12+	4	14	13	6.2	
LANSING	256	983.7	1015.0	26.7	14.4	20.6	-1.5	32.2	22	8.3	16+	1	0	13.9	67	29	- 36	9	8	8	0	0	1.7	27	16.5	NW	2	8	13	10	6.0	65
MARQUETTE U	206			23.3	12.8	18.1	-1.2	33.3	21	5.0	5	1	0			37	- 45	12	9		0	0			14.3	W	23	9	9	13	5.9	65
MUSKEGON	191	992.2	1015.0	26.1	16.1	21.0	-0.8	30.0	30+	10.6	6	0	0	13.9	66	40	- 21	19	7	6	0	0	1.6	25	11.2	26	23	12	11	8	4.8	
SAULT STE MARIE	220	987.8	1014.2	23.3	9.4	16.3	-1.8	29.4	21	2.8	15	0	0	12.8	82	47	- 15	22	11	6	0	0	1.5	28	10.7	NW	3	5	11	15	6.7	54
MINNESOTA																																
DULUTH	435	964.4	1015.3	23.9	11.7	17.8	-0.8	30.6	21+	2.2	5	0	0	11.1	67	74	- 16	45	10	5	0	0	1.4	26	21.0	NW	22	9	14	8	5.6	67
INTERNATIONAL FALLS	359	971.9	1014.6	24.4	11.7	18.1	-0.6	33.3	20	2.2	4	1	0	12.2	72	86	- 2	28	15	8	0	0	0.9	28	11.2	18	21+	7	13	11	5.8	
MINNEAPOLIS	254	985.1	1015.3	26.1	14.4	20.4	-1.9	32.8	22+	7.2	5	2	0	13.9	68	35	- 49	20	5	5	0	0	0.8	26	14.8	N	22	12	11	8	4.9	65
ROCHESTER	395	968.8	1016.2	25.6	13.3	19.4	-3.0	31.1	20	5.6	5	0	0	13.3	70	27	- 67	11	5	4	0	0	1.5	25	11.6	30	2	9	15	7	4.9	
ST CLOUD	315	977.7	1014.9	27.2	14.4	20.6	-1.1	33.3	22	6.1	5	4	0		64	15	- 68	9	5		0	0						11	15	5	4.6	
MISSISSIPPI																																
JACKSON	94	1006.4	1018.1	30.6	20.0	25.2	-2.8	32.8	31+	10.6	15	13	0	20.6	82	103	- 18	40	11	11	0	0	1.1	22	15.6	NW	6	3	11	17	7.3	58
MERIDIAN	88	1007.1	1018.2	31.7	20.0	25.7	-1.8	34.4	31+	12.8	15	16	0	19.4	73	123	- 35	31	11	9	0	0	1.1	23	13.9	17	19	3	12	16	7.1	
MISSOURI																																
COLUMBIA	237	988.2	1015.9	30.0	17.8	23.9	-2.0	36.1	23	10.0	14	10	0	16.7	67	52	- 35	22	9	9	0	0	1.0	25	10.7	SE	29	9	15	7	5.1	79

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p.s		M p s							%
MISSOURI																																
KANSAS CITY	226	989.5	1016.0	30.0	19.4	24.7	-2.8	37.2	24	12.2	6	12	0	17.2	66	46	-35	21	7	7	0	0	0.9	22	13.0	W	24	12	10	9	5.2	72
SAINT JOSEPH	247			29.4	16.7	23.1	-3.3	36.1	23	9.4	15+	10	0	18.3	76	96	14		9	10	0		0.8	21	17.9	3	24+	14	13	4	4.1	
ST LOUIS	163	996.3	1016.4	29.4	18.3	23.8	-1.8	35.0	23	10.6	14	8	0	18.3		98	14	38	10	8	0	0	1.5	27	17.0	N	23	6	15	10	5.7	67
SPRINGFIELD	386	972.6	1017.0	29.4	16.7	23.1	-2.9	33.9	10	9.4	14	10	0	16.7	71	62	-37	36	6	3	0	0	0.6	20	15.2	NW	28	11	10	10	5.3	67
MONTANA																																
BILLINGS	1087	893.0	1014.4	30.6	15.0	22.6	-1.1	35.0	24	11.7	2+	11	0	8.9	48	9	-13	3	6	7	0	0	0.8	25	19.2	W	26	14	13	4	3.8	81
GLASGOW	696	933.3		30.6	12.8	21.7	0.2	36.7	17	5.0	3+	13	0			3	-31	2	4		0	0						20	11	0	3.0	
GREAT FALLS	1116	889.6	1013.8	31.1	14.4	22.8	2.0	36.1	16	8.9	22	15	0	4.4	33	23	-9	16	5	9	0	0	1.8	24	21.0	W	31	14	14	3	3.7	87
HAVRE	787	923.1	1013.2	31.7	12.2	21.9	0.8	36.1	16+	7.8	11+	19	0	5.6	37	T	-32	T	1	6	0	0	1.3	26	19.2	SW	8	20	9	2	2.9	90
HELENA	1167	882.5	1015.0	30.6	12.2	21.4	1.2	35.0	30+	8.3	7+	10	0	7.2	44	12	-14	3	10	9	0	0	0.9	26	21.0	SW	13	17	11	3	3.3	83
KALISPELL	904	911.6	1014.7	30.0	7.2	18.8	0.1	35.6	12	2.8	22+	9	0	7.2	50	2	-25	1	2	2	0	0	0.8	21	10.3	36	25	19	11	1	2.9	
MILES CITY	801	922.5	1013.5	31.7	15.6	23.5	-0.6	36.7	31	7.2	3	15	0	8.9	44	22	-12		8	6	0		0.2	2								
MISSOULA	972	905.2	1015.3	31.7	10.6	21.1	1.7	37.8	12	6.1	10+	13	0	5.6	41	10	-11	5	6	4	0	0	1.0	30	12.5	SW	8	16	14	1	2.9	86
NEBRASKA																																
GRAND ISLAND	561	950.9	1015.8	30.6	17.2	23.8	-1.3	38.9	22	8.3	14	11	0	16.1	66	25	-39	13	7	6	0	0	1.3	19	10.3	3	26	12	11	8	4.8	
LINCOLN U	351			29.4	18.3	23.8	-2.9	37.2	22	11.1	4	10	0			101	18	75	9		0	0			23.2	NE	26	10	16	5	4.5	78
NORFOLK	471			30.0	16.1	23.0	-2.0	38.3	22	8.3	4	10	0			21	-56	9	5		0	0						14	11	6	4.3	
NORTH PLATTE	846	919.4	1015.6	27.8	15.0	21.3	-3.2	36.7	22	9.4	14	7	0	14.4	69	95	31	53	9	12	0	0	1.8	13	14.8	N	1	12	8	11	5.3	67
OMAHA	298	981.4	1016.0	30.0	17.2	23.6	-2.3	35.6	22	8.3	3	13	0	16.7	67	110	24	46	8	7	0	0	0.7	17	25.0	NW	9	12	16	3	4.6	74
SCOTTSBLUFF	1206	881.8	1014.8	30.6	14.4	22.6	-1.1	36.7	21	11.7	29+	11	0	13.3	64	58	21	21	11	12	0	0	1.6	10	23.2	5	4	15	10	6	4.1	
VALENTINE	789			30.0	14.4	22.1	-2.0	38.9	22	6.7	3	11	0			52	-7	33	6		0	0			17.0	N	15	12	11	8	4.8	73
NEVADA																																
ELKO	1539	846.9	1014.0	35.0	12.8	23.8	2.9	38.9	28+	7.8	10	28	0			26	16	17	4	7	0	0	0.9	22	10.3	26	26+	14	11	6	4.1	
ELY	1906	813.1	1014.4	30.0	10.0	20.1	0.3	32.8	28+	6.1	10	7	0	6.1	48	21	5	9	10	10	0	0	2.2	21	14.8	SW	22	11	14	6	4.8	72
LAS VEGAS	659	936.0	1010.1	40.6	25.6	33.2	1.1	45.6	3	20.0	7	31	0	10.6	28	5	-8	3	3	5	0	0	1.5	20	17.0	NE	11	15	9	7	4.5	85
RENO	1342	867.9	1014.9	33.9	8.3	20.9	1.1	38.3	2	2.8	19	26	0	6.7	45	14	8	7	5	6	0	0	0.9	29	13.0	SW	28+	19	5	7	3.3	90
WINNEMUCCA	1310	868.9	1013.3	33.9	11.1	22.5	0.8	38.3	1	6.7	27	26	0	2.2	29	9	3	9	1	3	0	0	1.5	24	14.8	SE	28	16	11	4	3.6	78
NEW HAMPSHIRE																																
CONCORD	104	1003.1	1015.6	27.2	15.0	21.2	0.3	31.7	24	7.2	7	0	0	16.7	80	150	64	55	14	6	0	0	0.8	20	10.3	SW	24	3	11	17	7.4	55
MT WASHINGTON OBS	1909			12.8	7.2	10.1	0.6	16.7	22+	1.1	6+	0	0			173	2	45	19	5	0	0			27.3Y	W	24	1	1	29	9.3	21
NEW JERSEY																																
ATLANTIC CITY	20	1014.2	1016.7	28.3	17.8	23.0	-0.9	32.8	12	11.7	7+	4	0	18.9	81	106	12	18	13	8	0	0	1.7	20	10.3	29	4	2	8	21	7.9	42
ATLANTIC CITY U	3			27.2	21.1	24.1	0.6	32.8	12	15.0	5	1	0			67	-31	29	10													
NEWARK	2	1014.9	1016.0	27.8	19.4	23.4	-1.2	32.2	24	15.0	5	1	0	17.2	71	191	98	59	17	7	0	0	1.8	21	15.6	25	23	1	9	21	7.8	
TRENTON U	17			28.9	19.4	24.2	-0.3	32.8	25+	14.4	5	5	0			228	121	59	15		0	0			15.2	N	21	0	13	18	7.7	39
NEW MEXICO																																
ALBUQUERQUE	1619	840.8	1012.8	33.3	18.9	26.2	0.4	37.2	1	14.4	18	26	0	8.9	39	15	-15	7	9	10	0	0	1.1	15	18.8	SE	28+	10	18	3	4.8	76
CLAYTON	1515			29.4	15.6	22.7	-0.9	35.0	31+	11.7	13	9	0			41	-18	10	12		0	0						11	12	8	5.2	
RATON	1944			28.3	13.3	20.7	-0.3	32.8	9	10.0	9	1	0			117	56	58	14		0	0						1	18	12	7.0	
ROSWELL	1102	893.0		35.0	18.3	26.7	0.8	39.4	31	13.9	15	26	0	14.4	52	25	-20	15	8	11	0	0	1.5	13	15.2	NE	2	7	13	11	5.7	80
SILVER CITY	1638			31.7	17.8	24.8	-0.3	35.6	1	14.4	1	14	0			40	-13	12	10		0	0						4	19	8	5.7	
NEW YORK																																
ALBANY	84	1005.1	1015.5	27.8	16.1	22.0	-0.3	31.1	10	8.9	7	0	0	17.2	76	86	-3	23	14	8	0	0	1.4	22	10.7	W	24+	2	8	21	7.9	55
BINGHAMTON	485	958.3	1016.5	24.4	15.6	19.9	-0.3	28.9	1	10.6	6+	0	0	16.1	80	88	-7	25	13	8	0	0	1.5	23	10.3	SW	24	1	13	17	7.7	52
BUFFALO	215	989.8	1015.2	26.7	17.2	21.8	0.8	30.6	18+	12.2	17+	0	0	15.6	71	40	-25	14	9	7	0	0	3.0	23	13.0	S	24+	3	15	13	6.8	52
NEW YORK U	40	1012.2	1015.5	28.3	20.0	24.1	-0.8	32.2	24+	15.6	6+	3	0	18.3	74	178	84	79	14	9	0	0	0.9	21	12.5	NW	23					48
J.F. KENNEDY	4	1015.2	1016.0	26.7	19.4	22.9	-1.4	31.7	12	15.0	6	0	0	18.3	79	126	24	36	18	5	0	0	2.4	21	11.6	20	23	2	10	19	7.6	
NEW YORK LA GUARDIA	3	1013.9	1015.8	27.8	20.6	24.1	-0.8	32.2	24	16.7	6+	1	0	16.7	67	128	33	45	14	8	0	0	1.5	21	14.3	NW	25	1	8	22	7.9	
ROCHESTER	167	996.3	1016.1	26.1	15.0	20.8	-1.2	31.7	1	8.9	6	0	0	15.0	72	68	-4	40	15	11	0	0	1.7	24	11.6	NW	23+	1	15	15	6.9	52
SYRACUSE	125	1000.3	1015.2	25.0	14.4	19.8	-2.5	30.6	1	8.9	7	0	0	15.6	80	161	82	39	14	17	0	0	1.5	24	14.8	NW	23	4	15	12	6.6	47
NORTH CAROLINA																																
ASHEVILLE	652	942.8	1017.9	25.6	15.0	20.4	-2.1	30.0	12+	7.8	5	0	0	16.7	83	175	27	75	15	15	0	0	0.8	35	10.3	32	31+	2	8	21	7.8	56
CAPE HATTERAS R	2	1016.9	1017.2	28.9	22.2	25.3	-0.2	31.7	12	16.7	2	0	0	22.2	83	212	56	140	20	10	0	0	3.6	21	13.9	SW	30	1	9	21	8.1	52
CHARLOTTE	224	989.8	1016.8	29.4	20.0	24.6	-1.6	32.2	25+	13.9	5	2	0	19.4	77	130	6	61	13	7	0	0	1.3	23	9.8	SW	29	2	9	20	7.5	64
GREENSBORO	273	985.8	1017.0	30.6	20.0	25.1	-0.1	33.9	12	13.3	5	5	0	20.6	82	79	-43	24	13	6	0	0	0.8	21	11.6	NW	31	3	8	20	7.7	50

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths, sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C		Mm	Mm	Mm			Mm	Mm	M p s		M p s							
NORTH CAROLINA																																
RALEIGH	132	1001.0	1016.6	30.0	20.0	24.9	-0.6	33.9	11	13.9	5	6	0	19.4	77	89	- 51	41	8	7	0	0	1.4	22	13.0	29	29	2	10	19	7.4	57
WILMINGTON	9	1016.3	1017.6	32.2	22.8	27.3	0.6	35.6	12	19.4	17+	18	0	21.7	75	147	- 48	71	17	11	0	0	2.1	22	11.6	SW	14+	1	15	15	7.4	73
NORTH DAKOTA																																
BISMARCK	502	956.0	1014.8	30.6	10.6	20.6	-1.5	38.9	31	2.2	4	13	0	8.9	50	7	- 48	3	5	4	0	0	0.6	26	16.5	NW	1	10	19	2	4.1	86
FARGO	273	982.4	1014.6	27.8	12.2	19.9	-1.9	33.9	25+	2.2	3	7	0	11.7	61	15	- 59	8	4	6	0	0	0.8	24	16.5	NW	1	15	13	3	3.9	85
WILLISTON	579	946.5	1013.8	30.0	12.8	21.3	-0.6	37.8	29	1.1	3	12	0	8.9	49	27	- 21	22	6	5	0	0	1.2	26	19.2	NW	21+	18	11	2	3.1	86
OHIO																																
AKRON	368	972.2	1016.1	27.8	15.6	21.5	-1.1	32.2	1	10.0	5+	1	0	15.0	70	54	- 42	17	12	8	0	0	1.3	24	10.3	31	27	4	14	13	6.7	
CINCINNATI OBS	232			28.9	17.2	22.8	-2.1	34.4	25	11.1	14	5	0			72	- 19	24	13		0				6.3	NE	30+					62
CLEVELAND	237	987.1	1016.0	26.7	15.6	20.9	-1.2	32.2	23+	11.1	30	2	0	15.0	72	48	- 36	10	12	3	0	0	1.3	24	10.7	W	23	7	11	13	6.4	54
COLUMBUS	247	986.8	1016.4	27.8	16.7	22.1	-1.7	31.7	24+	10.0	5	0	0	15.6	69	107	7	36	12	8	0	0	0.7	24	18.3	W	2	2	17	12	6.8	59
DAYTON	305	980.7	1016.2	28.3	17.8	23.1	-0.9	32.8	25	9.4	14	2	0	16.1	67	61	- 28	30	9	7	0	0	1.3	24	13.0	NE	30	7	10	14	6.5	68
MANSFIELD	395			26.7	16.1	21.2	-0.8	31.7	9	11.1	17+	0	0	13.9	68	84	- 5	45	10	7	0	0	1.2	24				6	13	12	6.5	
TOLEDO	206	990.9	1015.8	26.7	14.4	20.6	-2.0	32.8	24	7.8	14	1	0	14.4	71	100	35	55	11	9	0	0	1.4	26	15.6	N	30	5	15	11	6.4	59
YOUNGSTOWN	359	973.9	1016.3	25.6	14.4	20.0	-1.4	30.0	23+	8.9	15+	0	0	15.0	76	140	30	97	10	9	0	0	0.8	24	9.8	35	2	2	15	14	7.0	
OKLAHOMA																																
OKLAHOMA CITY	392	970.2	1015.6	32.2	20.6	26.5	-1.6	39.4	31	15.0	15+	16	0	18.3	64	31	- 29	9	8	2	0	0	2.0	15	12.1	NE	28	7	6	18	7.0	58
TULSA	198	992.6	1016.2	30.6	20.0	25.3	-2.6	36.7	10	12.2	15+	13	0	19.4	75	175	100	65	7	5	0	0	2.0	16	13.9	N	28	8	10	13	5.9	61
OREGON																																
ASTORIA	2	1019.0	1019.6	21.1	11.1	16.2	0.3	31.1	1	6.7	10	0	0	12.2	82	6	- 27	3	3	0	0	0	2.6	30	8.9	31	22+	9	14	8	5.4	
BURNS U	1265	874.7	1014.6	31.1	13.3	22.2	1.4	36.7	12	7.8	27	15	0	4.4	34	1	- 8	1	1		0	0	1.6	30				22	7	2	2.7	
EUGENE	109	1004.4	1017.7	30.0	11.1	20.4	1.2	36.7	1	7.8	26	6	0	10.6	57	0	- 7	0	0	0	0	0	1.6	32	8.9	34	20+	22	8	1	2.6	
MEACHAM	1234	879.1	1015.0	26.1	11.7	18.9	1.5	33.9	12	6.1	9	1	0	2.2	35	2	- 11	1	3		0	0	1.5	29				22	6	3	2.3	
MEDFORD	396	968.8	1015.6	34.4	13.9	24.2	1.9	41.7	1	10.0	27	25	0	10.0	44	T	- 5	T	0	0	0	0	1.8	31	7.6	32	13	28	2	1	0.9	
PENDLETON	452	962.4	1015.0	33.3	16.1	24.7	1.6	39.4	12	11.7	9	20	0	5.0	30	T	- 6	T	0	1	0	0	2.5	27	11.2	26	12+	26	3	2	1.7	
PORTLAND	6	1016.6	1017.9	28.3	13.3	20.7	1.2	37.2	1	11.1	7+	3	0	11.7	60	0	- 10	0	0	0	0	0	3.2	33	10.3	NW	21	19	8	4	3.0	82
SALEM	60	1010.5	1018.0	29.4	10.0	19.8	0.8	38.3	1	6.7	15+	5	0	10.0	57	0	- 9	0	0	0	0	0	1.8	32	8.0	31	20	22	8	1	2.7	
SEXTON SUMMIT R	1169	886.6	1015.8	25.0	11.7	18.3	0.8	33.3	1	6.7	26+	2	0			0	- 8	0	0		0				12.5	33	15	28	3	0	0.7	
PACIFIC AREA																																
CANTON ISLAND	2			30.6	25.6	27.8	-0.8	31.1	31+	22.8	20	0	0			49	- 17	14	14		0	0						7	15	9	5.8	
TAGUAC GUAM R	110			30.0	22.2	26.2	-0.2	32.8	13	20.6	4	1	0			321	92	59	28		0	0			10.3	E	14					47
JOHNSTON	2	1011.9	1012.6	30.0	25.0	27.5	0.2	30.6	29+	23.3	15	0	0	23.3	78	75	42	16	15	2	0	0	6.2	10	13.0	E	27+	5	18	8	5.9	59
KOROR R	29	1005.1	1008.7	30.6	23.9	27.3	0.2	32.2	17+	22.8	29+	2	0	23.9	84	310	- 75	37	25	2	0	0	2.5	24	12.1	SW	29	0	2	29	9.6	64
KWAJALEIN	2	1008.1	1008.8	30.6	25.0	27.7	0.1	32.2	30	22.2	4	1	0	24.4	81	245	19	53	23	1	0	0	2.5	10	13.4	13	13	1	3	27	9.0	
MAJURO	3	1008.8	1009.2	30.0	25.0	27.4	0.7	31.1	31+	23.3	23	0	0	23.9	80	352	34	56	21	2	0	0	1.9	8	11.2	E	5	1	6	24	8.6	58
MARCUS ISLAND	6	1008.5	1010.2	30.0	23.9	27.1	-1.0	31.7	23	19.4	31	0	0	23.9	82	256	76	43	24	1	0	0	4.5	11	21.9	E	30	1	9	21	8.2	60
PAGO PAGO	4	1012.2	1012.4	27.8	22.8	25.2		28.9	23+	20.6	5	0	0	22.2	82	229		66	25	0	0	0	4.2	11	12.5	SE	27+	3	11	17	7.5	63
PONAPE R	37	1003.4	1008.6	31.1	22.2	26.7	0.2	32.2	27+	20.6	16	3	0	23.9	88	356	- 56	82	27	3	0	0	1.3	15	8.9	SW	26	2	3	26	8.4	49
TRUK MOEN ISLAND	2	1008.5	1008.8	30.6	23.3	26.9	-0.1	31.7	12	21.7	10	0	0	23.9	85	505	192	92	22	3	0	0	0.7	24	13.0	NE	24+	0	5	26	8.9	64
WAKE	3	1010.8	1011.1	30.0	25.0	27.4	-0.3	31.1	22+	21.7	24	0	0	23.3	77	268	151	107	24	3	0	0	3.7	10	16.5	SW	31	0	5	26	8.6	47
YAP R	19	1006.1	1007.9	30.0	23.9	27.1	-0.4	31.7	30+	22.2	23+	0	0	24.4	86	359	9	64	26	1	0	0	1.5	23	8.9	SW	23	0	0	31	9.9	50
PENNSYLVANIA																																
ALLENTOWN	118	1002.4	1016.0	28.3	16.7	22.6	-0.8	31.7	12+	12.2	6	0	0	16.1	72	149	26	47	16	10	0	0	1.1	24	10.3	16	28+	2	12	17	7.3	
ERIE	223	989.5	1015.8	25.0	16.1	20.4	-1.3	30.6	23	8.9	6	0	0	15.6	75	122	28	75	11	11	0	0	1.7	23	10.7	21	2	7	14	10	5.6	
HARRISBURG	103	1003.4	1015.9	28.9	18.3	23.4	-1.1	33.3	25	12.2	5	4	0	17.2	71	151	62	54	15	11	0	0	0.8	24	14.3	N	25	1	11	19	7.9	58
PHILADELPHIA	2	1014.9	1016.0	30.0	20.0	24.8	0.6	33.9	24	13.3	5	4	0	18.9	74	181	75	52	12	7	0	0	1.6	23	17.9	NW	31	1	10	20	7.7	54
PITTSBURGH	347	972.9	1016.3	27.8	16.1	21.9	-0.3	32.8	1	11.1	16+	2	0	15.0	68	115	17	37	11	8	0	0	1.0	24	9.4	25	27+	3	9	19	7.4	51
READING U	81			28.9	18.9	24.0	-0.9	32.8	27+	14.4	6+	4	0			126	18	35	16		0	0			14.8	W	25	2	17	12	7.0	51
SCRANTON	283	982.7	1016.5	27.2	17.2	22.1	-0.4	30.6	23+	11.1	6	0	0	17.8	79	92	- 30	21	18	10	0	0	1.0	22	9.8	SW	11	1	14	16	7.3	54
WILLIAMSPORT	160	997.3	1016.0	27.2	16.7	21.9	-1.2	31.1	1	10.6	6	0	0	18.3	84	153	47	42	13	9	0	0	0.9	25	12.5	24	4	1	14	16	7.3	
RHODE ISLAND																																
BLOCK ISLAND	34			23.9	18.3	21.1	0.2	27.8	10	14.4	1	0	0			104	36	57	13		0	0						3	9	19	7.7	
PROVIDENCE	16	1013.5	1015.9	26.7	18.3	22.7	0.4	31.7	10	13.3	7	0	0	17.8	79	100	26	34	12	6	0	0	2.3	19	10.3	27	12	1	10	20	7.7	35
SOUTH CAROLINA																																
CHARLESTON	12	1015.9	1017.5	31.7	21.7	26.6	-0.4	35.0	12	17.2	16	17	0	21.1	77	233	38	64	15	13	0	0	2.4	21	23.7Y	E	22	1	14	16	7.5	60

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1967

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							
SOUTH CAROLINA																																
CHARLESTON U	3			30.6	23.3	26.7	-0.8	34.4	12	21.1	16+	5	0			236	39	46	14		0	0			12.1	SW	14					
COLUMBIA	65	1009.5	1017.4	31.1	20.0	25.3	-2.2	33.3	12	15.0	16	7	0	20.0	79	185	30	90	10	13	0	0	1.6	23	13.0	25	29	3	15	13	6.6	68
GNVLE SPARTANBURG	292	983.4	1017.3	29.4	18.9	24.0	-2.1	32.8	12	14.4	5	3	0	18.9	77	98	-20	53	14	14	0	0	0.8	23	9.4	W	29	1	13	17	7.3	52
SOUTH DAKOTA																																
ABERDEEN	395	968.5	1014.8	28.9	12.2	20.7	-2.4	38.3	31	4.4	4	9	0	12.2	60	27	-37	25	5	6	0	0	0.5	17	13.4	30	9	19	8	4	3.5	
HURON	391	969.2	1014.9	29.4	13.3	21.4	-2.4	38.3	31	5.0	14+	11	0	14.4	67	18	-28	10	7	7	0	0	0.9	17	19.2	NW	9	20	6	5	3.5	82
RAPID CITY	964	906.2	1015.3	28.9	13.9	21.4	-1.8	35.0	29+	7.2	3+	9	0	11.1	57	27	-18	10	10	10	0	0	0.3	3	13.4	NW	31	15	12	4	4.1	76
SIOUX FALLS	432	965.1	1015.5	30.0	14.4	22.1	-1.4	40.0	22	3.3	4	10	0	13.3	61	13	-59	9	7	6	0	0	0.4	19	16.5	22	22	16	9	6	3.8	
TENNESSEE																																
BRISTOL	459	964.4	1017.9	26.1	15.6	21.0	-3.4	30.6	24	8.9	5	0	0	17.2	83	124	-17	53	17	7	0	0	0.7	26	9.4	28	29	2	11	18	7.6	
CHATTANOOGA	203	992.9	1017.2	27.8	17.8	22.7	-4.4	31.1	24	10.6	15	0	0	18.9	84	268	138	81	19	13	0	0	0.7	21	13.0	S	28	3	8	20	7.5	41
KNOXVILLE	299	982.4	1016.9	26.7	17.2	22.1	-3.7	30.6	24	11.1	15	0	0	18.3	85	256	134	76	19	12	0	0	0.8	26	13.4	N	28	4	7	20	7.7	48
MEMPHIS	79	1007.1	1017.3	30.0	20.6	25.4	-2.0	33.9	11	14.4	15	9	0	19.4	71	153	63	44	11	8	0	0	1.3	22	17.9	NW	11	4	12	15	7.0	58
NASHVILLE	180	995.3	1016.5	29.4	19.4	24.3	-2.5	32.8	24	13.3	14	4	0	19.4	79	189	95	51	15	12	0	0	1.3	23	10.7	NW	27+	3	13	15	6.9	67
OAK RIDGE R	276			27.2	17.2	22.3	-2.8	31.1	24	10.0	15	0	0			489	338	125	16		0	0			15.6Y		11	4	6	21	8.1	
TEXAS																																
ABILENE	537	954.3	1014.3	34.4	22.2	28.2	-0.2	39.4	11	18.3	14	22	0	17.2	55	34	-24	16	4	3	0	0	3.1	17	15.2	N	4	7	15	9	6.1	76
AMARILLO	1098	893.3	1013.6	31.1	18.9	25.1	-1.9	37.2	31	15.6	4	16	0	15.6	62	94	35	47	10	6	0	0	3.5	18	17.9	SE	11+	7	16	8	5.7	66
AUSTIN	182	994.2	1015.7	36.1	23.3	29.6	0.4	38.9	31+	17.8	16	28	0	18.3	57	29	-26	24	6	3	0	0	3.1	18	15.6	NW	2	5	17	9	6.0	78
BROWNSVILLE	6	1014.9	1015.4	34.4	25.0	29.6	0.7	35.6	31+	21.1	15+	30	0	22.2	69	15	-28	9	3	2	0	0	5.8	15	12.5	SE	28	12	14	5	4.8	82
CORPUS CHRISTI	12	1014.2	1015.7	34.4	24.4	29.2	0.3	36.7	31+	17.8	16	27	0	22.2	71	27	-32	19	5	1	0	0	5.9	15	14.3	SE	23	10	12	9	5.4	73
DALLAS	147	998.6	1015.6	33.9	23.9	28.8	-0.6	40.6	31	18.3	15	22	0	18.9	59	65	16	33	8	5	0	0	2.8	15	14.3	N	3	4	17	10	6.4	73
DEL RIO	313	978.3	1013.5	37.2	23.9	30.4	0.3	39.4	31	21.7	20+	31	0	16.7	47	3	-30	2	3	3	0	0	4.7	13	9.8	13	21	10	17	4	4.4	
EL PASO	1194	882.8	1011.1	34.4	22.2	28.3	0.6	36.7	31+	19.4	30+	30	0	13.3	42	21	-11	15	4	9	0	0	1.4	17	15.6	W	18+	8	13	10	5.6	82
FORT WORTH	164	995.6	1015.6	33.9	22.8	28.3	-1.4	40.0	31	15.0	15	22	0	18.9	61	56	11	32	7	5	0	0	2.2	17	10.3	2	3	3	16	12	6.8	
GALVESTON U	2			29.4	25.6	27.5	-0.9	31.1	11+	21.7	13	0	0			222	100	74	6		0	0			12.5	SW	23					62
HOUSTON U	12			32.8	23.3	28.1	-0.8	36.7	3	18.9	15	22	0			122	-9	48	12		0	0										
HOUSTON	15	1014.9	1016.9	33.3	22.8	27.8	-0.5	36.1	10+	17.8	16+	23	0	21.7	75	197	88	51	12	10	0	0	2.4	17	12.5	3	6	4	15	12	6.5	62
LUBBOCK	992	905.2	1014.2	31.1	18.9	25.0	-1.4	37.2	31	14.4	14	15	0	16.1	62	84	33	61	8	6	0	0	2.6	15	13.0	9	28	7	14	10	5.9	
MIDLAND	869	916.7	1012.7	33.9	20.0	27.1	-1.2	37.8	31	15.6	14+	25	0	14.4	51	42	-6	23	6	5	0	0	3.3	15	15.6	2	29	10	10	11	5.4	
PORT ARTHUR	5			32.8	22.2	27.6	-0.1	37.2	10	16.1	15	21	0	21.1	71	107	-46	52	10	11	0	0	1.8	18	14.3	SW	21	3	16	12	6.6	73
SAN ANGELO	580	948.5	1013.3	35.6	22.8	29.2	-0.2	40.0	31	16.7	14	27	0	16.1	50	15	-21	12	4	2	0	0	2.6	17	16.1	8	3	10	13	8	5.3	
SAN ANTONIO	240	988.2	1015.7	35.6	23.3	29.6	0.7	38.9	31	16.7	16	28	0	19.4	60	54	1	25	4	2	0	0	3.1	16	10.7	19	25	8	15	8	5.6	81
VICTORIA	32	1011.9	1016.0	35.0	23.9	29.2	0.8	37.2	3	16.7	16	29	0	21.7	69	32	-60	14	7	7	0	0	3.7	17	14.8Y	S	23	8	12	11	5.9	
WACO	153	997.6	1015.4	36.1	25.0	30.5	0.9	40.6	31+	17.8	15	27	0	18.3	54	40	-10	38	3	3	0	0	3.5	15	10.3	14	23	6	18	7	5.5	
WICHITA FALLS	303	979.0	1014.9	35.6	21.1	28.3	-1.4	42.8	31	16.7	15	22	0	18.3	60	81	31	33	8	8	0	0	2.5	15	17.4	4	28	4	13	14	7.1	
UTAH																																
MILFORD	1533	848.6		33.9	14.4	24.1	0.8	37.8	28	10.0	9+	22	0			36	18	31	6		0	0						7	13	11	6.1	
SALT LAKE CITY	1286	872.7	1013.1	35.0	16.7	25.8	0.8	38.3	21	12.2	28	28	0	8.9	39	29	14	25	6	6	0	0	1.3	14	17.9	NE	16	12	15	4	4.5	82
WENDOVER	1291			33.3	20.0	26.6	0.3	36.7	21	16.7	9+	22	0			16	8	10	5		0	0										
VERMONT																																
BURLINGTON	101	1002.0	1014.3	26.7	15.6	21.2	0.6	29.4	27+	8.9	7	0	0	15.6	73	117	19	52	12	8	0	0	1.6	19	11.6	S	24+	1	16	14	7.4	78
VIRGINIA																																
LYNCHBURG	279	983.7		28.3	17.2	22.7	-1.9	32.2	12	11.1	5	1	0	17.8	77	137	30	35	15	6	0	0	0.5	25	11.6	NW	20	5	10	16	7.0	53
NORFOLK	7	1015.6	1016.6	28.9	20.6	24.6	-1.4	34.4	12	15.6	6	4	0	19.4	76	183	33	73	16	8	0	0	1.9	19	13.4	N	21	2	9	20	7.7	66
RICHMOND	50	1010.5	1016.5	30.6	18.9	24.8	-0.8	34.4	12	11.1	5	12	0	20.0	81	127	-15	56	14	6	0	0	1.3	19	17.0	SW	20	3	9	19	7.4	62
ROANOKE	350	975.3	1016.7	28.3	17.2	23.0	-1.8	32.2	26+	11.7	5	4	0	16.1	68	103	-5	24	15	5	0	0	1.1	27	13.4	31	15	3	14	14	7.0	
WALLOPS ISLAND	3	1016.9	1017.4	25.6	18.9	22.1		32.2	12	13.3	5	1	0	20.0	90	64		16	12	7	0	0	2.1	19	16.5Y	NNW	4	4	10	17	7.2	
WASHINGTON																																
OLYMPIA	59	1011.5	1018.7	26.7	8.9	17.7	0.0	32.8	3	6.1	28+	1	0	11.7	71	1	-19	1	1	0	0	0	1.2	22	8.9	22	17	13	14	4	4.4	
QUILLAYUTE	55	1011.9	1019.6	21.1	10.6	15.6	0.2	32.8	1	5.6	10	1	0	11.1	78	28	-31	20	9	0	0	0	1.4	28	7.2	S	18+	9	7	15	6.0	57
SEATTLE TACOMA	122	1002.4	1018.6	25.0	13.3	19.2	0.9	30.6	3	10.0	9	0	0	11.1	63	T	-20	T	1	0	0	0	0.7	30	7.6	25	19+	11	13	7	4.7	71
SPOKANE	718	931.6	1013.9	30.0	12.8	21.4	0.1	39.4	12	7.2	9	11	0	4.4	35	2	-8	2	1	2	0	0	2.4	21	11.2	S	12	20	11	[illegible]	2.2	90
STAMPEDE PASS R	1206	882.8		19.4	8.9	14.1	0.7	28.9	2	3.9	9	0	0			8	-29	5	8		0	0						13	11	7	4.7	
WALLA WALLA U	289			32.8	18.3	25.4	1.0	39.4	12	13.3	22	17	0			T	-5	T	0		0	0			10.3	W	12	25	4	2	2.1	91
YAKIMA	321	976.6	1014.4	31.7	12.2	21.9	0.2	36.7	12+	6.7	9	18	0	7.8	41	T	-3	T	0	0	0	0	2.0	31	10.3	30	17	24	4	3	2.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
WEST INDIES																																
SAN JUAN P.R.	4	1015.6	1018.0	30.6	25.6	27.8	0.9	32.2	28	22.8	26	1	0	22.8	76	122	-37	26	25	3	0	0	5.2	9	13.4	E	5	2	23	6	6.5	62
SWAN ISLAND	9			31.1	25.0	27.9	-0.1	32.2	5	21.7	21	1	0			84	-23	34	15		0	0						6	15	10	6.1	
WEST VIRGINIA																																
BECKLEY	763	930.6	1017.3	24.4	13.9	19.2		28.9	1	7.2	5	0	0	15.6	81	194		30	20	14	0	0	1.6	23	11.2	12	6	1	11	19	7.8	
CHARLESTON	286	982.7	1016.5	27.2	16.7	21.7	-2.1	32.2	1	10.6	5	1	0	17.2	80	117	-27	37	16	12	0	0	1.1	23	9.8	31	2	1	15	15	7.5	
ELKINS	600	947.5	1017.8	25.0	13.3	19.3	-1.9	29.4	1	6.7	5	0	0	15.6	84	116	-24	22	17	12	0	0	0.8	24	16.1	26	4	1	12	18	7.8	
HUNTINGTON	252	987.1	1016.7	27.2	16.7	21.9	-2.1	32.8	1	8.3	5	1	0	17.2	78	148	34	41	13	8	0	0	1.1	20	7.6	24	4	2	16	13	6.9	
PARKERSBURG U	187			27.8	17.2	22.4	-1.9	31.7	27+	12.2	15+	0	0			106	1	58	8		0	0			10.7	W	20					51
WISCONSIN																																
GREEN BAY	208	989.5	1014.8	26.1	13.9	20.2	-1.2	32.2	22	7.8	6	1	0	13.9	70	50	-19	30	5	5	0	0	1.3	26	17.9	W	1	8	15	8	5.5	64
LA CROSSE	198	991.2	1015.3	28.9	15.0	21.8	-1.4	33.3	26+	6.7	4	12	0	13.9	65	4	-91	2	3	3	0	0	0.5	27	10.3	30	24+	11	14	6	5.1	
MADISON	262	984.8	1015.6	26.1	12.8	19.5	-2.2	32.2	23	3.9	6	1	0	13.9	71	64	-27	21	7	10	0	0	1.0	26	11.6	SW	21+	6	20	5	5.3	66
MILWAUKEE	205	990.9	1015.9	25.6	15.0	20.3	-0.1	32.8	22	7.8	5	3	0	14.4	72	34	-41	18	7	9	0	0	0.8	24	20.1	NW	23	14	9	8	4.9	70
WYOMING																																
CASPER	1627	840.8	1015.1	30.0	12.2	21.0	-1.1	35.0	29+	7.8	2	6	0	7.8	49	37	12	7	13	15	0	0	0.9	26	17.9	28	30	14	12	5	4.2	
CHEYENNE	1867	817.1	1016.6	27.2	12.2	19.6	-1.5	31.7	22	9.4	27+	0	0	10.0	59	43	-3	20	11	10	0	0	1.0	28	14.8	N	4	12	13	6	4.9	65
LANDER	1696	832.7	1015.2	28.3	12.8	20.6	-0.9	32.2	22+	9.4	27+	2	0	8.9	50	23	4	14	10	10	0	0	1.1	25	13.9	SW	8	9	16	6	4.6	78
SHERIDAN	1208	881.1	1015.8	28.3	10.0	19.2	-2.6	32.2	31	6.1	3+	1	0	9.4	54	6	-25	3	3	11	0	0	0.5	28	15.2	NW	31	12	14	5	4.6	80

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1 C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

JULY 1967

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	0
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	172	172	211
ANNETTE	214	214	242
BARROW	848	848	803
BARTER ISLAND	752	752	735
BETHEL	354	354	319
COLD BAY	369	369	474
FAIRBANKS	178	178	171
JUNEAU	340	340	301
KING SALMON	315	315	313
KOTZEBUE	373	373	381
MC GRATH	272	272	208
NOME	548	548	481
ST. PAUL ISLAND	511	511	605
SHEMYA	565	565	577
YAKUTAT	388	388	338
ARIZONA			
FLAGSTAFF	11	11	46
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	0	0	0
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	0
TEXARKANA	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	0	0	0
BLUE CANYON	0	0	34
EUREKA U	257	257	270
FRESNO	0	0	0
LONG BEACH	0	0	0
LOS ANGELES	1	1	19
LOS ANGELES U	0	0	0
MT SHASTA R	3	3	25
OAKLAND	54	54	53
RED BLUFF	0	0	0
SACRAMENTO	0	0	0
SANDBERG U	0	0	0
SAN DIEGO	0	0	6
SAN FRANCISCO	85	85	81
SAN FRANCISCO U	184	184	192
SANTA CATALINA	19	19	16
SANTA MARIA	40	40	99
STOCKTON	0	0	0
COLORADO			
ALAMOSA	23	23	65
COLORADO SPRINGS	6	6	9
DENVER	4	4	6
GRAND JUNCTION	0	0	0
PUEBLO	0	0	0
CONNECTICUT			
BRIDGEPORT	0	0	0
HARTFORD	0	0	0
NEW HAVEN	0	0	0
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASH NATL AP	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	0	0	0
IDAHO FALLS 46W R	0	0	16
LEWISTON	0	0	0
POCATELLO	0	0	0
ILLINOIS			
CAIRO U	0	0	0
CHICAGO O HARE	39	39	0
CHICAGO MIDWAY	26	26	0
MOLINE	21	21	0
PEORIA	10	10	0
ROCKFORD	42	42	6
SPRINGFIELD	9	9	0
INDIANA			
EVANSVILLE	1	1	0
FORT WAYNE	27	27	0
INDIANAPOLIS	3	3	0
SOUTH BEND	31	31	0
IOWA			
BURLINGTON	17	17	0
DES MOINES	14	14	0
DUBUQUE	39	39	12
SIOUX CITY	14	14	0
WATERLOO	47	47	12
KANSAS			
CONCORDIA	7	7	0
DODGE CITY	0	0	0
GOODLAND	10	10	0
TOPEKA	1	1	0
WICHITA	2	2	0
KENTUCKY			
COVINGTON	0	0	0
LEXINGTON	1	1	0
LOUISVILLE	0	0	0
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	14	14	78
PORTLAND	15	15	12
MARYLAND			
BALTIMORE	0	0	0
MASSACHUSETTS			
BLUE HILL OBS R	1	1	0
BOSTON	0	0	0
NANTUCKET	14	14	12
PITTSFIELD	13	13	25
WORCESTER	4	4	6
MICHIGAN			
ALPENA	84	84	68
DETROIT	34	34	0
DETROIT M WAYNE CO	32	32	0
DETROIT WILLOW RUN	29	29	0
FLINT	48	48	9
GRAND RAPIDS	38	38	8
HOUGHTON LAKE	69	69	54
LANSING	38	38	6
MARQUETTE U	85	85	59
MUSKEGON	16	16	12
SAULT STE MARIE	146	146	96
MINNESOTA			
DULUTH	80	80	71
INTERNATIONAL FALLS	76	76	71
MINNEAPOLIS	36	36	22
ROCHESTER	49	49	25
ST CLOUD	44	44	28
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
MISSOURI			
COLUMBIA	1	1	0
KANSAS CITY	0	0	0
ST JOSEPH	4	4	0
ST LOUIS	3	3	0
SPRINGFIELD	4	4	0
MONTANA			
BILLINGS	1	1	6
GLASGOW	19	19	31
GREAT FALLS	2	2	28
HAVRE	7	7	28
HELENA	0	0	31
KALISPELL	32	32	50
MILES CITY	5	5	6
MISSOULA	2	2	34
NEBRASKA			
GRAND ISLAND	4	4	0
LINCOLN U	2	2	0
NORFOLK	15	15	9
NORTH PLATTE	19	19	0
OMAHA	8	8	0
SCOTTSBLUFF	0	0	0
VALENTINE	26	26	9
NEVADA			
ELKO	0	0	9
ELY	3	3	28
LAS VEGAS	0	0	0
RENO	1	1	43
WINNEMUCCA	0	0	0
NEW HAMPSHIRE			
CONCORD	8	8	6
MT WASHINGTON OBS	456	456	493
NEW JERSEY			
ATLANTIC CITY	0	0	0
ATLANTIC CITY U	0	0	0
NEWARK	0	0	0
TRENTON U	0	0	0
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	0	0	0
RATON	2	2	9
ROSWELL	0	0	0
SILVER CITY	0	0	0
NEW YORK			
ALBANY	0	0	0
BINGHAMTON	26	26	22
BUFFALO	12	12	19
NEW YORK U	0	0	0
J.F. KENNEDY	0	0	0
NEW YORK LA GUARDIA	0	0	0
ROCHESTER	25	25	9
SYRACUSE	24	24	6
NORTH CAROLINA			
ASHEVILLE	7	7	0
CAPE HATTERAS R	0	0	0
CHARLOTTE	0	0	0
GREENSBORO	0	0	0
RALEIGH	0	0	0
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	55	55	34
FARGO	65	65	28
WILLISTON	44	44	31
OHIO			
AKRON	17	17	0
CINCINNATI OBS	3	3	0
CLEVELAND	21	21	0
COLUMBUS	7	7	0
DAYTON	3	3	0
MANSFIELD	21	21	9
TOLEDO	27	27	0
YOUNGSTOWN	34	34	6
OKLAHOMA			
OKLAHOMA CITY	0	0	0
TULSA	0	0	0
OREGON			
ASTORIA	118	118	146
BURNS U	1	1	12
EUGENE	5	5	34
MEACHAM	47	47	84
MEDFORD	0	0	0
PENDLETON	0	0	0
PORTLAND	3	3	25
SALEM	11	11	37
SEXTON SUMMIT R	73	73	81
PENNSYLVANIA			
ALLENTOWN	0	0	0
ERIE	25	25	0
HARRISBURG	0	0	0
PHILADELPHIA	0	0	0
PITTSBURGH	10	10	0
PITTSBURGH U	9	9	0
READING U	0	0	0
SCRANTON	5	5	0
WILLIAMSPORT	5	5	0
RHODE ISLAND			
BLOCK ISLAND	2	2	0
PROVIDENCE	0	0	0
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GNVLE-SPARTANBURG	0	0	0
SOUTH DAKOTA			
ABERDEEN	35	35	25
HURON	38	38	9
RAPID CITY	31	31	22
SIOUX FALLS	36	36	19
TENNESSEE			
BRISTOL	12	12	0
CHATTANOOGA	1	1	0
KNOXVILLE	1	1	0
MEMPHIS	0	0	0
NASHVILLE	0	0	0
OAK RIDGE R	2	2	0
TEXAS			
ABILENE	0	0	0
AMARILLO	0	0	0
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	0	0	0
DEL RIO	0	0	0
EL PASO	0	0	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON U	0	0	0
HOUSTON	0	0	0
LUBBOCK	0	0	0
MIDLAND	0	0	0
PORT ARTHUR	0	0	0
SAN ANGELO	0	0	0
SAN ANTONIO	0	0	0
VICTORIA	0	0	0
WACO	0	0	0
WICHITA FALLS	0	0	0
UTAH			
MILFORD	0	0	0
SALT LAKE CITY	0	0	0
WENDOVER	0	0	0
VERMONT			
BURLINGTON	11	11	28
VIRGINIA			
LYNCHBURG	0	0	0
NORFOLK	0	0	0
RICHMOND	0	0	0
ROANOKE	0	0	0
WALLOPS ISLAND	0	0	
WASHINGTON			
OLYMPIA	51	51	68
QUILLAYUTE	153	153	170
SEATTLE TACOMA	16	16	56
SPOKANE	8	8	9
STAMPEDE PASS R	244	244	273
WALLA WALLA U	0	0	0
YAKIMA	4	4	0
WEST VIRGINIA			
BECKLEY	37	37	11
CHARLESTON	4	4	0
ELKINS	33	33	9
HUNTINGTON	7	7	0
PARKERSBURG U	2	2	0
WISCONSIN			
GREEN BAY	40	40	28
LA CROSSE	21	21	12
MADISON	61	61	25
MILWAUKEE	46	46	43
WYOMING			
CASPER	6	6	6
CHEYENNE	12	12	19
LANDER	0	0	6
SHERIDAN	17	17	25

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	† DAMAGE	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS	DEATHS	INJURIES	† DAMAGE PROP-ERTY	CROPS
Alabama	1	1	0	0	2	0	0	3	0	0	0	3	0	0	0	4	0									0	0	4	0
Alaska *																													
Arizona	2	2	0	0	5	0	0	0	4	0	0	5	0	1	1	2	0									0	0	3	0
Arkansas	1	1	0	0	3					0	0	4	0	1	2	3	0												
California *																													
Colorado	4	2	0	0	2	0	0	6	6	0	0	4	4	1	2	4	0									1	0	5	4
Connecticut						0	0	0	5					0	1	0	0												
Delaware										0	0	4	0													0	0	4	0
Florida	1	1	0	0	3					0	0	3	0	4	8	4	0												
Georgia	4	3	0	3	4	0	0	0	4	0	0	4	0	1	6	4	0									1	0	4	5
Hawaii *																													
Idaho						0	0	0	6	0	0	4	0	1	1	0	0												
Illinois	1	1	0	0	4	0	0	4	6	0	0	5	5	0	0	?	0									0	0	5	6
Indiana	2	2	0	2	4	0	0	4	5	0	0	3	2	0	1	4	0									0	0	6	0
Iowa	1	1	0	0	0	0	0	5	6	0	5	5	6																
Kansas	2	2	0	0	4	0	1	6	6	0	7	7	7	0	4	4	0												
Kentucky	1	1	0	0	3	0	0	?	?	0	15	5	C	1	5	5	0									3	?	°6	C
Louisiana										0	0	4	C	0	2	°4	C									0	0	4	0
Maine						0	0	0	3	0	0	4	0	0	0	4	0												
Maryland	1	1	0	0	4	0	0	0	3	0	0	4	0	0	0	4	0									0	0	°4	C
Massachusetts						0	0	0	3	0	0	4	0	0	6	3	0									0	18	4	2
Michigan	2	2	0	0	4	0	0	4	5	0	0	4	0	1	1	5	0									0	0	7	0
Minnesota	6	3	1	12	6	0	0	4	6	0	1	5	5	0	2	5	0									0	0	3	4
Mississippi	2	1	0	0	2					0	0	5	4	1	1	0	0									0	0	5	5
Missouri	6	2	0	0	3																								
Montana						0	0	4	5					1	0	0	0												
Nebraska						0	0	5	7	0	0	5	0																
Nevada						0	0	2	4	0	0	2	3																
New Hampshire	1	1	0	5	4	0	0	0	2	0	0	4	0	0	0	4	0												
New Jersey						0	0	0	4	0	0	4	4	1	2	4	0												
New Mexico	3	1	0	0	0	0	0	°2	C	0	0	?	?	2	3	0	0									0	0	°4	C
New York	1	1	0	0	4	0	0	0	4	0	0	4	3	1	1	4	0									0	0	4	0
North Carolina	2	2	0	0	4	0	0	4	6	0	1	5	4	0	1	5	0									0	0	4	4
North Dakota	10	4	0	0	5	0	0	5	6	0	0	4	5	0	0	4	0									0	0	0	6
Ohio	2	1	0	4	5	0	0	0	6	0	1	3	C	0	1	5	0												
Oklahoma	4	1	0	1	4	0	0	5	5	0	2	4	5	0	1	4	0									0	0	4	0
Oregon *																													
Pacific *																													
Pennsylvania						0	0	0	4	0	0	5	0	1	2	5	0									0	0	5	0
Puerto Rico										0	0	3	0													10	0	0	0
Rhode Island *																													
South Carolina	1	1	0	0	4					0	0	4	0	1	2	5	0												
South Dakota	5	1	0	0	0	0	0	5	6	0	0	4	0	0	0	4	0												
Tennessee	2	2	0	0	4	0	0	3	C	1	1	5	C	0	1	5	0									2	4	°7	C
Texas	10	4	0	0	5	0	0	5	6	0	0	5	0	1	4	5	0												
Utah						0	0	2	2	0	0	3	2	0	0	0	3									0	0	4	4
Vermont										0	0	4	0	0	0	4	0												
U. S. Virgin Is.*																													
Virginia	1	1	0	5	4	0	0	0	5	0	0	3	3	1	0	4	0												
Washington *																													
West Virginia										0	0	3	0	0	0	4	0												
Wisconsin	6	3	0	11	5	0	0	5	6	0	5	6	5	0	1	5	0												
Wyoming	2	2	0	0	4																					0	0	5	0

C Crop damage
° Includes crop damage

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than \$50
2 \$50 to \$500
3 \$500 to \$5,000
4 \$5,000 to \$50,000
5 \$50,000 to \$500,000
6 \$500,000 to \$5,000,000
7 \$5,000,000 to \$50,000,000
8 \$50,000,000 to \$500,000,000
9 \$500,000,000 to \$5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JULY 1967

Elmer R. Nelson, Office of Hydrology

The remnants of the damaging floods which began in the lower Missouri Basin during June continued into July. There were no new major floods during July. Flash floods and severe local flooding were reported at scattered locations. Two deaths resulted from severe local flooding near Oliver Springs, Tenn., and two deaths from flash floods in southeastern Arizona.

ST. LAWRENCE DRAINAGE

Lake Erie and Ontario.--Heavy rains fell over much of southern Erie County, New York, on the 11th, with amounts of 3.5 to 4 inches reported in the Boston-Colden-Wales area. Creeks were near bankfull in the Boston Valley and many hillside secondary roads had shoulders and portions of pavement washed out. Some basements were also flooded.

Torrential rains on the 18th caused considerable damage to the Baltimore and Ohio Railroad's right-of-way in the Silver Lake area of Wyoming County, N. Y. Rainfall was estimated at least 2 inches in the period between 4:45 p.m. and 6:00 p.m. Most of the ballast along a mile of track along the lake was washed out. Ties and tracks in places hung 5 feet above the ground.

ATLANTIC SLOPE DRAINAGE

Heavy thundershowers over the Trenton, N. J., area and the Assunpink Creek drainage during the late afternoon of the 21st caused some overflow of Shabakunk Creek and Assunpink Creek. The total precipitation recorded at the Weather Bureau Office in Trenton was 1 inch in 30 minutes and 1.72 inches in 1 hour. Some of the suburban areas were hard hit. Damage was mostly confined to flooded basements, overtaxed storm sewers, and the overflow of Shabakunk Creek. A crest of 7.9 feet occurred on the Assunpink Creek at Trenton on the 22d. This was 2.9 feet above flood stage. Very little damage occurred except for minor rural overflow and erosion. Local flash flooding occurred in Feasterville and Bristol Borough in lower Bucks County, Pa., on the 14th from local heavy thundershowers. A flash flood on Poquessing Creek on the 18th caused damage to homes in lower Southampton Township and Andalusia in Pennsylvania. There was also some flooding in the Twin Oakes and Highland Park sections of Middletown Township. Some flooding occurred in Addington Township area near Philadelphia, Pa., on the 10th when 3.2 inches of rain fell at Lansdale and 2.4 inches at Mayfair. Other reports of flooding were received from northeast Philadelphia on the 2d and 18th. Most of the damage resulted from local drainage problems.

A flash flood occurred on Towanda Creek in Pennsylvania on the evening of the 9th. A number of livestock were killed and some farm equipment destroyed. Considerable damage resulted to highways and bridges.

Some flash flooding occurred in Conococheague Basin in the Greencastle, Pa., area, on the 11th. More than 3.5 inches of precipitation was reported during the evening of the 10th.

Minor flooding occurred on the Lumber River at Lumberton, N. C., on the 22d. This overflow was due to a heavy local thundershower on the 20th, which exceeded 2 inches. No damage was reported.

Very little damage resulted from the flooding on the Broad River at Gaffney and Blair, S. C., between the 7th and 10th. Some farmland was flooded in the Blair area, where the crest was 6.6 feet above flood stage on the 9th.

The Savannah River at Clyo, Ga., continued above flood stage from June 13 to July 2. Flood damage was mostly agricultural and ranged from light to locally moderate. Little or no damage resulted from the minor flooding at Clyo on the 19th-22d.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--The Salt River at New London, Mo., exceeded flood stage on two occasions during the month. The first occurred on the 10th-12th, with a crest of 6.1 feet above flood stage on the 12th. The second overflow on the 26th was comparatively minor.

Intense thunderstorms on the 26th and 27th in the Kickapoo Creek drainage, northwest of Peoria, Ill., produced rainfall in excess of 6 inches at several points. Near record flooding resulted. The greatest flood damage occurred at Edwards, Ill., where the flood water was 4 to 4-1/2 feet deep in some places. A record flood in this area in 1951 caused property damage in excess of $1 million. The damage in the current flood was estimated at near $0.6 million.

The Big Muddy River at Murphysboro, Ill., continued in flood from June 23 to July 6. It crested 1.3 feet above flood stage on July 2.

A rise was in progress at the close of June on the Mississippi River from Alton, Ill., to Cape Girardeau, Miss. The flooding, which began at Chester, Ill., on June 19, continued to July 7 at Cape Girardeau, Mo. The crests on July 1-3 ranged from 0.4 foot above flood stage at St. Louis, Mo., to 3.3 feet above flood stage at Chester, Ill. Flood damage was minor.

Missouri Basin.--During the first 3 weeks of July, excessive inflow and outflow of the Yellowtail Reservoir on the Big Horn River in south-central Montana produced flooding at the south end of the reservoir and on the Big Horn River from its mouth to the Dam.

Minor flooding occurred on Frenchman Creek at Palisade, Nebr., on the 8th. Light to moderate overflows occurred along the lower portions of the North and South Forks and along the upper portion of the Solomon River in Kansas during the latter part of July. This flooding was due to heavy rain (2 to 4 inches) on the 27th-28th. Release of June water impoundments from most reservoirs contributed to larger than normal flows on the Smoky Hill, Republican, and Kansas Rivers.

The remnants of the severe flooding in Missouri in June continued into July and kept the Missouri River above flood stage downstream from Kansas City, Mo., until the 6th. All streams were falling in the beginning of July except the Osage, which crested at Schell City and Osceola, Mo., on the 1st, 10.3 and 7.5 feet above flood stage, respectively. Crests downstream on the 3d and 4th were considerably lower, ranging from 0.5 foot above flood stage at St. Thomas to 2.4 feet above flood stage at Warsaw, Mo.

General moderate to heavy rains on the 9th and 10th caused minor rises on the Missouri and slight overflow on the Grand River at Chillicothe and Sumner, Mo., on the 9th-11th.

General rains on the 25th and again on the 27th and 28th caused minor rises on the Missouri, and minor flooding on the Little Blue at Lake City, Mo., and Big Creek at Blairstown, Mo. The Blackwater River at Valley City, Mo., crested nearly 6 feet above flood stage at Valley City, Mo., on the 28th, and less than a foot above flood stage at Blue Lick, Mo., on the 31st. Flood damage in the Missouri Basin during July was comparatively minor.

Ohio Basin.--Heavy rain in the Rolling Fork Basin

of the Salt River on the 6th-8th and 10th-11th produced a crest stage of 38.2 feet at Boston, Ky., on the 12th. This was 1.8 feet below flood stage. No flooding was reported at Boston, however, nearby locations in Hardin County had considerable overflow and flooding of basements, lowland croplands, and inundation of roads. The total rainfall at Louisville, Ky., during July was 7.33 inches. This tied the previous record as the 6th wettest July since 1872.

General heavy rains (up to 3.5 inches) on the 6th caused minor flooding in the upper reaches of the Green River in Kentucky on the 8th and 11th. Additional scattered heavy rains on the 7th contributed to the flooding. Locally heavy rains in southeastern Illinois on the 10th and 11th caused minor flooding on the Skillet Fork at Wayne City, Ill., on the 11th and 12th. No damages resulted from the minor flooding.

Heavy rain (2 to 5 inches) during an 18-hour period on the 6th and 9th caused a 1-foot overflow at Rosman, N. C., on the 7th. No appreciable damage resulted from the flooding.

Extremely heavy local rains caused severe local flooding on Cow Creek in and near Oliver Springs, Tenn., on the 5th-6th. Damages were estimated at $0.7 million. There were 2 drownings as a result of this flood. South Chickamauga Creek near Chickamauga, Tenn., was out of its banks on the 7th-9th. The crest on the 8th was 4.6 feet above flood stage.

White Basin.--Locally heavy rain (7.73 inches) on June 30, caused the normally sluggish Cache River to rise above flood stage at Patterson, Ark., on June 30. Additional heavy rains during July caused the Cache to remain above flood state until the 20th. The crest on the 8th was 2 feet above flood stage.

Arkansas Basin.--Some lowland flooding occurred on the Purgatoire River upstream from Trinidad, Colo., on the 7th. The flooding was brief, lasting 1 to 3 hours. No significant damage was reported. Minor lowland flooding occurred near the junction of the Cucharas and Huerfano Rivers, about 25 miles south of Pueblo, Colo., during the evening of the 9th. No significant damage was reported.

Some flooding occurred along Sand Creek, tributary to the Fountain River, in the Colorado Springs, Colo., area, on the 11th. Some lowland overflow also resulted along the lower portion of the Fountain River in Colorado Springs, as well as downstream from the confluence of Sand Creek with the Fountain River. Considerable localized damage was reported to the Hancock Expressway, 6 miles south of Colorado Springs, and to some small retention dams.

Heavy thundershowers on the 17th caused some flooding on Clay Creek, tributary to the Arkansas River, near Lamar, Colo. U. S. Highway 287, was closed for about an hour during late evening or early night, due to high water. One automobile was hit by a "wall of water" about 11 miles south of Lamar. A pickup truck was swept into Clay Creek about 5 miles east of Lamar. No deaths or major injuries were reported. Dry Creek in the vicinity of Florence, Colo., overflowed its banks on the 17th. Basements in a 10-block area were flooded. Some damage occurred in the Rainbow Park area, east of Florence. Road from Florence to Coal Creek was inundated at some points.

Heavy rains in southeastern Kansas caused light flooding on the Neosho River at Oswego, Kans. and Commerce, Okla., on the 5th-8th. Damages were negligible, as flooding was largely confined to lowlands. Flash flooding was experienced at Ponca City and Stillwater, Okla., on the night of the 24th, and the morning of the 25th. Up to 6 inches of rain fell over Stillwater in a period of 3 hours. Five families were evacuated by Civil Defense, as water from flash flooding of Stillwater Creek endangered their homes in the south and east sections. An additional 11 families evacuated homes on their own and many more made preparation for evacuation. Water in some locations was 3 to 4 feet deep. In the Ponca City, Okla., area, rainfall in a 6-hour period ranged from 5.45 inches to as high as 8 inches. The highest previous 24-hour rainfall amount at Lake Ponca was 5.6 inches in July 1945, compared to 6.39 inches during this 6-hour storm. At least 3 bridges were washed out on county roads and roads were badly damaged in many places. Lake Ponca reached an alltime high level when water was running 40 inches over the spillway. The previous record was 36 inches over the spillways. Almost all boats moored in the marina sank when the water rose. Bois d'Arc Creek, west of Ponca City, rose rapidly out of its banks. The Arkansas River, near Ponca City, crested near bankfull stage. Nearly 2 feet of flooding occurred on Bird Creek at Sperry, Okla., on the 26th-27th. A few homes were flooded briefly.

Red Basin.--The Sulphur River at Hagansport, Tex., rose 5.4 feet above flood stage on the 6th and receded within its banks on the 7th. Another rise on the 13th resulted in a crest of 1.6 feet above flood stage. Both rises resulted from rainfall generally less than an inch over the basin. No damage was reported from either overflow.

WEST OF GULF OF MEXICO DRAINAGE

Heavy rains on the 18th-21st caused local flooding along Palo Pinto Creek and the Brazos River above Possum Kingdom Reservoir from Graham to Seymour, Tex. Some local flooding was reported near Plainview, Tex., on the High Plains. During this period more than 8 inches of rain was reported at Strawn, Tex., with unofficial reports of more than 11 inches at Elbert, Tex.

High intensity rains up to 8 inches during the night of the 13th resulted in flash flooding on the extreme upper Frio and associated tributaries on the morning of the 14th. About 400 persons, mostly campers, along the upper Frio were forced to evacuate. Low water crossings were closed on the extreme upper Frio and Dry Frio. Damages were limited largely to fences and highway shoulder washing.

GULF OF CALIFORNIA DRAINAGE

Colorado Basin.--Flash floods were reported in the Gila River Basin in southeastern Arizona, on the 12th, 15th, and 17th. A soldier was drowned on the 12th when his car was swept off the road 7 miles east of Fort Huachuca, Ariz. A boy was drowned on the 15th in a water-filled arroyo in Nogales City, Ariz. Underpasses and county roads were flooded in the Tucson, Ariz., area on the 17th. Damage from the flash floods was light.

PACIFIC SLOPE DRAINAGE

Columbia Basin.--Backwater from the Columbia River caused the Willamette River at Portland, Oreg., to exceed flood stage by 2.4 feet during the period from June 8 to July 3. The Columbia River at Priest Rapids, Wash., continued above flood stage from June 6 to July 4. At Vancouver, Wash., the river was out of its banks from June 4 to July 8. Warm, dry weather during July caused the rivers to recede to base flow levels about midmonth. Flood damages from the spring rise in the lower Columbia Basin were estimated at nearly $1 million.

FLOOD STAGE DATA

River and station	Flood stage	Above flood stages -dates From—	To—	Crest* Stage	Crest* Date
ATLANTIC SLOPE DRAINAGE	*Ft.*			*Ft.*	
Assunpink Creek: Trenton, N. J.	5	21	22	7.9	22
Lumber: Lumberton, N. C.	8	22	22	8.1	22
Broad: Gaffney, S. C.	10	7	9	12.9	8
Blair, S. C.	14	8	10	20.6	9
Savannah: Clyo, Ga.	11	Jun. 13 19	2 22	13.7 11 2	Jun. 22-24 20-21
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Salt: New London, Mo.	19	(10 (26	12 26	25.1 20.1	12 16
Big Muddy: Murphysboro, Ill.	16	Jun. 23	6	17.3	2
Mississippi: Alton, Ill.	21	Jun. 20	4	23.2	1
St. Louis, Miss.	30	Jun. 30	2	30.4	2
Chester, Ill.	27	Jun. 19	6	30.3	1
Cape Girardeau, Mo.	32	Jun. 23	7	34.1	2,3
Missouri Basin					
Boulder: Big Timber, Mont.	7	Jun. 20	Jun. 23	7.4	Jun. 22
Stillwater: Absarokee, Mont.	6.5	Jun. 15	Jun. 15	7.2	Jun. 15
Big Horn: Riverton, Wyo.	9.5	Jun. 11	Jun. 13	10.2	Jun. 12
Worland, Wyo.	13	Jun. 23	Jun. 23	13.7	Jun. 23
Yellowstone: Billings, Mont.	10	Jun 16 Jun. 24	Jun. 17 Jun. 24	10 4 10.3	Jun. 16 Jun. 24
Miles City, Mont.	13	Jun. 18 Jun. 22	Jun. 19 Jun. 26	13.7 13.5	Jun 18 Jun. 26
Glendive, Mont.	53	Jun. 19	Jun. 19	53 6	Jun. 19
Frenchman Creek: Palisade, Nebr.	7	8	8	7.6	8
North Fork: Portis, Kans.	18	29	29	20.1	29
South Fork: Osborne, Kans.	14	28	29	17.6	29
Solomon: Glen Elder, Kans.	24	29	30	26.9	30
Beloit, Kans.	20	29	31	22.3	31
Glasco, Kans.	22	31	Aug. 1	22.2	31
Little Blue: Lake City, Mo.	18	26	27	20 6	27
Grand River: Chillicothe, Mo.	24	9	10	26.4	9
Sumner, Mo.	26	Jun. 28 9	2 11	#31.7 29.6	Jun. 29 10
Brunswick, Mo.	12	Jun. 11	4	24.5	Jun. 18
Blackwater: Valley City, Mo.	20	28	29	25 95	28
Blue Lick, Mo.	25	Jun. 23 30	2 31	31 6 25.75	Jun. 25 31
Marmaton: Nevada, Mo.	22	Jun. 21	3	#28 9	Jun. 26
Little Osage: Horton, Mo.	23	Jun. 22	2	#26 1	Jun. 26
Big Creek: Blairstown, Mo.	20	28	28	21 55	8
South Grand: Brownington, Mo.	19	Jun 22	2	28 9	Jun. 25

River and station	Flood stage	Above flood stages -dates From—	To—	Crest* Stage	Crest* Date
MISSISSIPPI SYSTEM	*Ft*			*Ft*	
Missouri Basin					
Osage: Schell City, Mo.	25	Jun. 13	7	35 3	1
Osceola, Mo.	22	Jun. 27	5	29.5	1
Lakeside, Mo. (Bagnell Dam)	60	Jun. 23	9	61 4	4
St. Thomas, Mo.	23	Jun. 29	6	23 5	3
Warsaw, Mo.	31	Jun. 25	6	33.4	3
Missouri: Lexington, Mo.	22	Jun. 10	2	(30.1 (31.15	Jun. 14 Jun. 22
Waverly, Mo.	18	Jun. 10	4	(27 0 (27 6	Jun. 14 Jun. 23
Glasgow, Mo.	25	Jun. 13	2	31 2	Jun 24
Boonville, Mo.	21	Jun. 12	3	28.1	Jun. 2[illegible]
Jefferson City, Mo.	23	Jun. 13	3	28 0	Jun. 27
Hermann, Mo.	21	Jun. 14	6	29.8	Jun. 29
St. Charles, Mo.	25	Jun. 14	6	33 6	Jun. 30
Ohio Basin					
Green: Munfordville, Ky.	28	8	8	28.7	8
Brownsville, Ky., Lock 6	18	11	11	18.2	11
Skillet Fork: Wayne City, Ill.	15	11	12	18.0	12
French Broad: Rosman, N. C.	8	7	7	9.05	7
South Chickamauga Creek: Chickamauga, Tenn.	10	7	9	14.6	8
White Basin					
Cache: Patterson, Ark.	7	Jun. 30	20	9.0	8
Arkansas Basin					
Bird Creek: Sperry, Okla.	21	26	27	22.9	26
Neosho: Oswego, Kans.	17	6	7	19.6	6
Commerce, Okla.	15	5	8	18.1	7
Red Basin					
Sulphur: Hagansport, Texas	38	6 13	7 14	43.4 39.6	6 13
PACIFIC SLOPE DRAINAGE					
Willamette Portland, Oreg.	18	Jun. 8	3	20.4	Jun. 23-27
Columbia: Priest Rapids, Wash.	422	Jun. 6	4	425.8	Jun. 26
Vancouver, Wash.	16	Jun. 4	8	21.5	Jun. 24-26

* Provisional

\# Highest Stage Observed

RAWINSONDE DATA

Average monthly values

JULY 1967

ALBANY, N. Y. 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	18.4	17.0	21	1.2
1000	31	137			23	1.3
950	31	579	17.4	12.9	27	3.1
900	31	1,039	15.2	10.3	28	4.1
850	31	1,522	12.3	7.8	27	4.2
800	31	2,029	9.4	3.5	26	5.7
750	31	2,558	6.3	-.7	25	7.1
700	31	3,126	3.4	-4.8	25	8.3
650	31	3,722	.4	-10.4	25	9.6
600	31	4,363	-2.9	-14.9	25	11.0
550	31	5,042	-6.5	-21.4	25	11.8
500	31	5,787	-11.3	-26.7	24	12.6
450	31	6,585	-16.7	-32.5	24	14.2
400	31	7,463	-22.9	-36.8	24	16.0
350	31	8,430	-29.6	-42.6	24	18.8
300	31	9,512	-37.6	-48.9	24	22.0
250	31	10,746	-46.4		24	24.0
200	31	12,199	-54.4		24	24.7
175	31	13,050	-56.5		25	23.4
150	31	14,025	-57.8		25	18.8
125	31	15,173	-58.7		24	15.2
100	31	16,573	-58.7		25	9.2
80	31	17,980	-56.4		24	2.5
70	31	18,828	-55.5		15	1.6
60	31	19,815	-54.1		10	3.4
50	31	20,989	-52.5		10	4.9
40	31	22,437	-50.5		09	7.2
30	31	24,324	-47.8		09	9.5
25	31	25,531	-46.1		09	10.2
20	26	27,027	-43.5		09	12.3
15	24	28,982	-40.1		09	14.3
10	13	31,786	-36.1		10	17.6
7	9	34,293	-32.0			
5						
4						

ALBUQUERQUE, N. MEX. 842 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	20.6	10.0	09	2.5
1000	31	97				
950	31	547				
900	31	1,028				
850	31	1,533				
800	31	2,056	19.0	8.5	14	1.1
750	31	2,602	15.6	5.4	25	1.3
700	31	3,190	11.7	2.6	26	1.6
650	31	3,797	7.5	-.7	28	2.6
600	31	4,460	2.8	-4.5	27	1.6
550	31	5,146	-2.3	-8.8	28	1.8
500	31	5,910	-7.0	-14.0	28	2.6
450	31	6,716	-11.9	-20.4	28	2.9
400	31	7,618	-16.9	-28.5	30	3.9
350	31	8,607	-23.9	-34.2	29	4.0
300	31	9,713	-32.5	-41.7	29	4.0
250	31	10,970	-42.8		29	4.5
200	31	12,437	-54.7		29	6.4
175	30	13,278	-61.0		28	6.4
150	30	14,221	-67.6		30	6.2
125	30	15,303	-72.7		31	4.7
100	30	16,613	-71.5		05	2.6
80	30	17,949	-65.9		07	3.4
70	30	18,764	-62.9		09	5.4
60	30	19,720	-59.9		09	7.8
50	29	20,865	-57.0		09	9.3
40	29	22,285	-54.4		09	10.7
30	25	24,141	-50.8		09	13.0
25	25	25,333	-48.6		09	12.6
20	25	26,805	-46.7		09	12.7
15	25	28,725	-43.6		09	15.9
10	20	31,482	-38.4		09	18.4

AMARILLO, TEXAS 894 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	19.1	15.8	19	2.2
1000	31	119				
950	31	568				
900	31	1,043				
850	31	1,532	19.8	12.7	22	6.7
800	31	2,053	17.3	9.2	24	6.1
750	31	2,600	13.7	5.9	26	5.1
700	31	3,180	9.7	3.1	29	3.1
650	31	3,790	5.6	-2.0	33	1.3
600	30	4,444	1.8	-8.7	34	1.6
550	30	5,132	-2.1	-14.5	33	2.2
500	30	5,892	-6.5	-19.1	33	3.2
450	30	6,703	-11.4	-26.3	32	4.1
400	30	7,603	-17.4	-30.2	32	5.3
350	30	8,591	-24.5	-36.3	32	6.8
300	30	9,695	-32.8	-43.4	33	9.2
250	30	10,953	-42.8		33	11.3
200	30	12,420	-54.4		33	13.1
175	30	13,264	-60.6		33	13.6
150	30	14,209	-66.5		33	11.7
125	30	15,299	-71.5		35	7.9
100	30	16,617	-69.6		02	4.2
80	30	17,963	-64.5		06	4.0
70	29	18,782	-62.1		07	6.1
60	29	19,741	-59.3		08	7.7
50	29	20,888	-56.9		09	9.0
40	29	22,308	-54.0		09	11.0
30	28	24,168	-50.5		09	12.1
25	28	25,362	-48.2		09	12.3
20	26	26,836	-46.1		09	13.0
15	21	28,755	-43.5		08	16.3
10	10	31,527	-39.3			
7	5	34,020	-35.1			

ANCHORAGE, ALASKA 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	13.0	8.4	17	3.3
1000	31	120	13.9	8.8	17	4.0
950	31	550	12.1	6.5	19	4.5
900	31	1,003	9.3	5.0	21	3.5
850	31	1,475	6.5	3.1	20	2.2
800	31	1,970	3.5	.2	20	1.1
750	31	2,491	.5	-3.5	23	1.2
700	31	3,043	-2.6	-8.5	27	2.0
650	31	3,626	-5.9	-12.7	29	3.0
600	31	4,251	-9.4	-17.5	28	3.7
550	31	4,918	-13.3	-21.7	29	4.7
500	31	5,638	-18.2	-26.9	29	4.6
450	31	6,413	-23.3	-32.9	29	6.1
400	31	7,269	-29.3	-38.0	30	7.1
350	31	8,208	-36.5	-42.4	29	8.0
300	31	9,258	-44.5		29	8.1
250	31	10,457	-51.3		30	10.5
200	31	11,899	-52.4		30	11.7
175	31	12,765	-50.9		30	10.0
150	31	13,769	-50.6		30	8.0
125	31	14,958	-50.3		30	6.3
100	31	16,414	-50.2		30	4.7
80	31	17,873	-49.4		32	3.3
70	31	18,749	-48.8		35	2.3
60	30	19,765	-48.0		02	2.1
50	30	20,969	-47.2		04	2.6
40	28	22,448	-46.0		06	3.3
30	27	24,365	-44.2		07	4.8
25	25	25,594	-42.6		08	5.8
20	24	27,107	-40.6		08	7.0
15	18	29,072	-38.0		08	6.7
10	11	31,881	-34.2			

*** ANNETTE, ALASKA 1014 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	11.9	9.7	12	1.2
1000	31	148	11.4	9.1	14	1.6
950	31	577	9.1	6.6	16	2.8
900	31	1,023	6.5	4.2	18	3.8
850	31	1,490	3.8	1.5	19	3.9
800	31	1,981	1.2	-1.8	20	3.7
750	31	2,500	-1.4	-6.0	20	4.3
700	31	3,046	-4.0	-12.2	22	4.1
650	31	3,628	-7.0	-15.7	22	4.5
600	31	4,250	-10.7	-21.4	24	5.8
550	31	4,910	-14.9	-26.5	24	6.3
500	31	5,630	-19.8	-29.6	23	7.6
450	31	6,399	-25.4	-34.0	24	8.8
400	31	7,249	-31.8	-40.4	24	10.2
350	31	8,180	-38.3	-44.5	25	12.1
300	31	9,227	-44.4		25	13.5
250	31	10,435	-49.1		26	12.5
200	31	11,893	-50.3		26	10.0
175	31	12,767	-49.5		26	7.6
150	31	13,776	-49.7		26	7.0
125	31	14,968	-50.2		26	5.8
100	31	16,422	-51.0		25	3.9
80	31	17,874	-50.8		24	2.6
70	31	18,743	-50.5		22	1.5
60	31	19,749	-50.0		19	.7
50	31	20,943	-49.1		10	1.6
40	31	22,411	-47.7		09	3.3
30	30	24,319	-45.9		09	5.3
25	30	25,535	-44.5		09	6.8
20	29	27,036	-42.6		09	7.5
15	28	28,994	-39.3		08	9.4
10	26	31,796	-34.3		09	12.8
7	22	34,313	-30.2		09	14.5
5	16	36,723	-26.4		09	15.5
4	5	38,346	-25.8			

ATHENS, GEORGIA 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	19.7	18.4	27	1.6
1000	31	152				
950	31	592	20.9	16.8	28	4.9
900	31	1,063	18.6	13.8	27	5.9
850	31	1,552	15.6	10.1	27	6.1
800	31	2,064	12.5	6.0	26	6.1
750	31	2,601	9.7	.9	26	6.8
700	31	3,175	6.4	-2.7	26	7.5
650	31	3,776	3.0	-5.9	26	8.4
600	31	4,425	-.6	-9.8	26	8.9
550	31	5,111	-4.1	-17.5	26	8.2
500	31	5,864	-8.3	-22.0	26	8.5
450	31	6,669	-13.3	-26.7	26	9.2
400	31	7,564	-19.2	-32.7	26	9.1
350	31	8,544	-26.1	-39.3	26	10.3
300	31	9,642	-34.2	-46.4	25	12.1
250	31	10,893	-44.1		25	12.1
200	30	12,351	-54.9		26	12.8
175	30	13,195	-59.7		26	11.7
150	30	14,150	-63.4		27	9.6
125	30	15,263	-65.8		28	5.9
100	30	16,616	-65.4		25	1.7
80	30	17,981	-62.7		06	2.6
70	30	18,808	-60.6		08	5.1
60	30	19,773	-58.2		09	7.8
50	30	20,927	-55.6		09	10.2
40	28	22,356	-53.2		09	10.8
30	27	24,222	-49.8		09	12.3
25	26	25,418	-48.1		09	12.8
20	26	26,893	-46.3		09	14.6
15	26	28,817	-43.1		08	15.8
10	23	31,564	-38.1		09	18.5
7	15	34,042	-34.1			
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*** BARROW, ALASKA 1009 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	1.7	1.3	25	.4
1000	31	81				1.7
950	31	498	2.6	-.1	25	4.3
900	31	934	1.9	-2.5	26	5.2
850	31	1,394	.2	-4.1	26	5.3
800	31	1,879	-1.9	-6.6	26	6.6
750	31	2,391	-4.1	-11.4	26	6.5
700	31	2,933	-6.6	-13.5	26	7.6
650	31	3,505	-9.5	-16.4	26	7.9
600	31	4,125	-13.2	-21.1	26	8.0
550	31	4,780	-17.1	-24.6	27	8.2
500	31	5,494	-21.8	-29.5	26	8.9
450	31	6,257	-27.2	-35.9	27	9.5
400	31	7,102	-33.5	-42.6	27	9.4
350	31	8,027	-40.5	-45.0	28	10.6
300	31	9,061	-47.5		28	10.8
250	31	10,258	-49.3		28	11.8
200	31	11,735	-45.6		28	10.2
175	31	12,626	-45.1		28	8.9
150	31	13,655	-45.2		28	7.5
125	31	14,872	-45.4		29	5.6
100	31	16,360	-45.4		29	4.5
80	30	17,853	-44.7		31	3.2
70	30	18,747	-44.2		33	3.1
60	28	19,781	-43.5		35	2.2
50	27	21,010	-43.0		03	2.4
40	26	22,517	-42.5		04	2.2
30	25	24,461	-41.5		05	3.9
25	24	25,700	-40.4		06	3.8
20	21	27,230	-38.7		07	4.6
15	13	29,214	-35.7		07	4.4

BARTER IS., ALASKA 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	3.0	1.1	18	.6
1000	31	88			25	1.5
950	31	507	6.3	1.5	27	4.6
900	31	950	4.6	-1.6	27	6.2
850	31	1,415	2.3	-4.1	27	7.6
800	31	1,903	-.2	-6.8	27	8.9
750	31	2,413	-3.0	-10.9	27	9.6
700	31	2,962	-6.1	-12.9	27	9.7
650	31	3,533	-9.3	-17.5	27	9.7
600	31	4,154	-13.1	-20.8	27	10.6
550	31	4,806	-17.0	-25.8	27	10.7
500	31	5,522	-21.6	-30.5	27	11.6
450	31	6,282	-27.0	-36.6	27	11.9
400	31	7,130	-33.2	-43.3	27	11.5
350	31	8,055	-40.2	-46.9	27	12.7
300	31	9,092	-46.4		27	13.8
250	31	10,291	-49.7		28	12.1
200	31	11,761	-46.6		28	10.3
175	31	12,649	-45.7		28	8.7
150	30	13,678	-45.7		28	6.9
125	30	14,892	-45.7		29	5.6
100	30	16,379	-45.4		29	4.2
80	30	17,870	-44.6		29	2.8
70	30	18,763	-44.1		31	2.3
60	30	19,798	-43.5		01	1.7
50	30	21,026	-42.9		02	1.8
40	30	22,533	-42.1		05	2.6
30	30	24,484	-41.0		07	3.6
25	30	25,726	-40.1		07	4.2
20	30	27,254	-38.6		08	4.8
15	30	29,240	-35.8		08	5.5
10	30	32,085	-31.0		08	6.2
7	30	34,632	-27.5		07	4.6
5	16	37,063	-24.9			

BETHEL, ALASKA 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	10.1	8.9	24	3.2
1000	31	127	10.5	8.0	24	3.5
950	31	553	8.8	5.2	24	5.5
900	31	1,000	7.0	3.1	23	5.8
850	31	1,468	5.2	-1.3	24	6.2
800	31	1,963	3.3	-3.7	25	6.2
750	31	2,482	.9	-7.7	25	6.8
700	31	3,036	-1.8	-11.4	26	6.8
650	31	3,620	-4.9	-14.9	27	7.1
600	31	4,249	-8.5	-19.8	27	8.4
550	31	4,913	-12.4	-22.5	27	10.2
500	31	5,642	-16.7	-28.3	27	12.3
450	31	6,416	-21.9	-32.4	27	12.8
400	31	7,282	-28.0	-37.0	27	14.2
350	31	8,227	-34.9	-42.7	27	16.2
300	31	9,286	-42.6	-46.4	27	17.4
250	31	10,495	-50.0		28	18.4
200	31	11,940	-52.5		28	16.6
175	31	12,805	-51.3		28	15.1
150	31	13,808	-51.1		28	12.5
125	30	14,993	-51.4		29	9.2
100	30	16,442	-51.5		29	6.2
80	30	17,894	-50.3		30	3.2
70	30	18,765	-49.8		32	2.4
60	30	19,774	-49.0		02	1.8
50	30	20,973	-48.1		05	2.1
40	30	22,447	-47.1		07	3.3
30	29	24,361	-45.4		07	5.4
25	29	25,580	-44.1		07	6.3
20	27	27,081	-42.4		07	6.8
15	25	29,034	-39.8		09	8.5
10	18	31,839	-35.5		07	8.8
7	10	34,338	-32.0			

BISMARCK, N. DAK. 957 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	505	12.2	8.9	16	1.0
1000	31	128				
950	31	567	14.8	9.5	17	1.4
900	31	1,024	18.1	7.7	23	3.1
850	31	1,512	15.5	3.5	27	4.2
800	31	2,024	12.1	-.5	29	6.1
750	31	2,557	8.9	-5.2	30	7.9
700	31	3,129	5.2	-8.8	30	9.2
650	31	3,725	1.2	-11.6	30	10.6
600	31	4,370	-2.9	-15.6	29	11.6
550	31	5,047	-7.2	-21.0	30	13.2
500	31	5,792	-11.7	-26.2	30	14.6
450	31	6,590	-17.2	-31.7	30	16.0
400	31	7,465	-23.3	-36.5	30	18.5
350	31	8,428	-30.6	-43.3	30	22.4
300	31	9,505	-38.8	-49.7	30	24.3
250	31	10,733	-47.7		29	28.0
200	31	12,180	-53.9		29	31.6
175	31	13,034	-55.3		30	29.9
150	31	14,016	-56.3		29	25.0
125	31	15,167	-58.4		29	17.3
100	31	16,571	-58.3		30	11.1
80	30	17,979	-56.9		31	4.5
70	29	18,827	-55.6		33	3.1
60	29	19,813	-53.9		03	2.3
50	29	20,988	-52.1		07	3.8
40	29	22,439	-50.0		08	5.6
30	28	24,330	-47.0		08	7.1
25	27	25,543	-45.5		08	8.6
20	25	27,036	-43.3		08	10.4
15	21	28,977	-40.6		09	12.7
10	17	31,761	-35.6		09	15.2
7	15	34,268	-31.1		08	14.7
5	8	36,664	-27.5			

BOISE, IDAHO 916 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	868	18.8	7.7	16	1.5
1000	31	99				
950	31	545				
900	31	1,016	21.4	6.5	17	.7
850	31	1,513	22.0	3.3	26	.6
800	31	2,036	18.7	.8	26	2.0
750	31	2,584	14.6	-1.2	24	3.0
700	31	3,165	10.0	-3.6	24	4.5
650	31	3,775	5.0	-6.4	25	6.8
600	31	4,423	-.1	-10.7	25	9.3
550	31	5,110	-5.1	-17.5	25	10.5
500	31	5,856	-10.2	-22.6	25	11.5
450	31	6,655	-15.6	-28.4	25	12.2
400	31	7,540	-21.9	-35.6	25	14.0
350	31	8,509	-29.3	-41.8	25	16.0
300	31	9,591	-37.7	-48.5	25	20.7
250	31	10,826	-46.6		25	24.8
200	31	12,277	-55.2		25	28.3
175	31	13,124	-58.2		25	25.9
150	30	14,086	-61.1		25	21.9
125	29	15,212	-63.4		25	14.7
100	27	16,583	-63.5		25	9.2
80	25	17,961	-61.1		24	3.2
70	24	18,793	-58.7		16	1.0
60	24	19,765	-56.5		10	2.1
50	23	20,930	-54.4		08	3.4
40	22	22,369	-52.1		09	6.3
30	20	24,243	-49.2		09	8.9
25	20	25,444	-47.2		09	10.6
20	19	26,931	-44.7		09	11.4
15	18	28,875	-41.2		09	13.6
10	15	31,658	-36.8		09	16.2
7	8	34,152	-31.8			
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*** BOOTHVILLE, LA. 1017 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	24.6	22.7	10	.2
1000	31	153	25.0	21.7	18	.8
950	31	602	21.8	18.7	21	3.4
900	31	1,071	19.3	13.4	21	2.8
850	31	1,561	16.6	9.0	22	3.3
800	31	2,075	13.5	6.1	24	3.1
750	31	2,615	10.2	2.2	25	3.5
700	31	3,187	6.9	-.9	26	3.5
650	31	3,791	3.3	-4.1	27	3.8
600	31	4,438	-.6	-8.3	27	3.9
550	31	5,123	-4.4	-12.5	28	4.1
500	31	5,875	-8.1	-20.2	29	3.6
450	31	6,683	-13.1	-23.8	30	3.7
400	31	7,574	-19.0	-30.7	32	3.9
350	31	8,554	-26.3	-36.6	32	4.4
300	31	9,650	-34.7	-45.2	34	3.9
250	31	10,897	-44.5		35	3.7
200	31	12,355	-55.5		01	5.6
175	31	13,195	-61.2		02	6.7
150	31	14,139	-66.3		02	7.7
125	31	15,235	-69.4		03	6.7
100	31	16,566	-68.5		06	6.0
80	31	17,912	-65.4		08	6.8
70	31	18,727	-63.4		09	8.5
60	31	19,679	-60.5		09	10.8
50	31	20,823	-57.2		09	12.8
40	30	22,245	-54.0		09	13.7
30	30	24,102	-51.0		08	14.4
25	30	25,293	-48.9		09	15.4
20	30	26,765	-46.7		09	14.4
15	30	28,682	-44.3		09	15.5
10	28	31,424	-39.5		09	19.2
7	26	33,889	-34.3		09	21.5
5	12	36,249	-30.7			

*** BROWNSVILLE, TEXAS 1015 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	25.3	23.1	15	3.0
1000	31	134	25.1	23.5	16	7.0
950	31	587	22.1	20.5	17	12.7
900	31	1,055	20.3	13.4	17	12.9
850	31	1,547	17.9	8.1	17	11.6
800	31	2,064	15.2	3.5	17	8.4
750	31	2,603	12.0	.2	16	6.1
700	31	3,183	8.6	-4.0	14	5.2
650	31	3,787	4.8	-8.2	12	3.6
600	31	4,441	1.1	-14.2	12	3.4
550	31	5,132	-2.9	-18.9	11	2.5
500	31	5,886	-7.7	-19.8	07	1.4
450	31	6,693	-13.1	-23.8	05	1.9
400	31	7,586	-19.1	-29.8	05	3.9
350	31	8,566	-26.2	-36.9	05	4.7
300	31	9,662	-34.6	-45.7	05	5.6
250	31	10,910	-44.6		05	7.2
200	31	12,366	-55.9		05	11.0
175	31	13,204	-61.8		05	12.2
150	31	14,145	-67.5		06	12.0
125	31	15,230	-72.0		06	11.4
100	30	16,541	-71.0		07	10.4
80	30	17,875	-67.0		09	10.8
70	30	18,686	-64.2		09	11.2
60	29	19,637	-61.4		08	13.0
50	29	20,774	-59.0		08	15.5
40	29	22,185	-55.5		09	18.1
30	28	24,037	-51.8		09	19.0
25	27	25,224	-49.2		09	18.7
20	27	26,696	-46.7		09	19.2
15	26	28,617	-43.6		09	18.4
10	25	31,360	-39.6		09	19.5
7	20	33,814	-35.7		09	20.8
5	7	36,174	-31.2			

BUFFALO, N. Y. 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	17.9	15.0	20	2.1
1000	31	132				
950	31	573	17.5	12.3	25	4.8
900	31	1,033	15.0	9.8	26	5.9
850	31	1,515	11.7	6.6	25	6.8
800	31	2,020	8.7	2.6	25	8.1
750	31	2,555	5.7	-2.2	25	7.5
700	31	3,114	2.8	-7.3	26	7.7
650	31	3,713	-.3	-12.8	26	8.3
600	31	4,349	-3.5	-17.4	25	9.7
550	31	5,029	-7.7	-21.7	25	9.9
500	31	5,767	-12.4	-27.0	25	11.4
450	31	6,559	-17.7	-32.8	25	12.8
400	31	7,437	-23.8	-38.4	25	12.8
350	31	8,397	-31.2	-44.6	25	13.9
300	31	9,472	-39.2	-51.0	24	15.9
250	31	10,699	-47.4		24	19.0
200	31	12,151	-53.2		25	22.5
175	31	13,010	-53.8		26	18.4
150	31	13,997	-55.4		26	13.4
125	31	15,154	-57.5		25	13.4
100	31	16,560	-57.8		26	9.1
80	31	17,972	-56.3		27	2.7
70	31	18,821	-55.1		11	.3
60	31	19,807	-53.9		08	1.4
50	31	20,981	-52.5		09	4.7
40	28	22,430	-50.6		09	6.5
30	28	24,316	-47.8		09	8.8
25	27	25,522	-46.2		09	9.3
20	26	27,014	-44.0		09	11.2
15	21	28,959	-40.8		09	13.7
10	13	31,736	-36.5			

*** CANTON IS. PACIFIC AREA + 1009 MB**

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	30.6	23.9	10	6.2
1000	31	83	28.3	21.5	10	6.9
950	31	531	23.0	17.8	10	[illegible]
900	31	1,005	19.9	13.8	10	9.1
850	31	1,497	17.7	8.5	10	9.3
800	31	2,014	15.8	3.1	10	8.8
750	31	2,556	13.4	-2.5	09	8.6
700	31	3,138	10.3	-4.8	09	7.9
650	31	3,746	7.1	-9.7	09	7.6
600	31	4,405	3.3	-13.5	09	8.0
550	31	5,101	-.5	-17.9	09	8.1
500	31	5,861	-5.0	-23.5	09	7.6
450	31	6,675	-9.7	-26.9	08	7.8
400	31	7,583	-15.2	-33.3	10	6.8
350	31	8,579	-22.0	-39.2	11	4.6
300	31	9,693	-30.7	-46.4	11	3.7
250	31	10,960	-41.2	-54.5	10	2.1
200	31	12,435	-53.6		29	.4
175	31	13,280	-60.5		25	1.8
150	31	14,224	-67.9		24	3.3
125	30	15,298	-75.1		26	3.7
100	30	16,581	-77.0		30	2.6
80	30	17,887	-69.9		28	10.7
70	30	18,688	-66.4		27	15.7
60	30	19,629	-62.8		27	19.1
50	29	20,760	-60.2		27	18.3
40	29	22,160	-58.2		27	10.9
30	28	23,983	-54.9		09	17.4
25	28	25,158	-51.6		09	25.1
20	28	26,619	-47.8		09	26.6
15	23	28,539	-43.5		09	28.8
10	17	31,285	-38.6		09	32.8
7	7	33,769	-32.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1967

* CAPE HATTERAS, N. C. 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	23.6	22.1	22	2.8
1000	31	145	23.4	20.9	23	4.5
950	31	586	21.1	17.0	24	6.5
900	31	1,060	18.6	13.3	25	6.8
850	31	1,549	15.6	9.9	25	7.4
800	31	2,062	12.5	6.6	24	8.4
750	31	2,599	9.5	3.0	24	9.9
700	31	3,171	6.3	-.4	24	10.6
650	31	3,772	3.1	-5.1	24	11.4
600	31	4,421	-.4	-9.3	24	11.6
550	31	5,106	-3.9	-14.2	24	11.7
500	31	5,861	-7.7	-19.8	24	11.1
450	31	6,667	-12.6	-24.7	24	11.3
400	31	7,563	-18.7	-30.7	24	11.3
350	31	8,546	-25.4	-37.5	24	12.0
300	31	9,646	-33.8	-45.6	24	12.4
250	31	10,898	-43.8		25	12.9
200	30	12,356	-55.6		26	12.9
175	29	13,193	-61.1		26	11.1
150	29	14,141	-64.7		27	8.6
125	28	15,250	-65.9		25	5.0
100	28	16,608	-64.5		24	2.1
80	28	17,982	-61.7		10	2.7
70	28	18,812	-60.0		09	5.3
60	27	19,777	-57.8		09	7.0
50	27	20,934	-55.4		09	9.4
40	27	22,365	-52.8		09	11.0
30	27	24,235	-49.6		09	12.7
25	27	25,433	-47.7		09	13.3
20	26	26,912	-45.5		09	15.1
15	24	28,849	-42.2		09	15.7
10	22	31,622	-37.4		09	19.9
7	17	34,102	-32.8		09	22.4
5	7	36,496	-29.5			
4						

* CARIBOU, MAINE 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	17.2	15.5	22	1.5
1000	30	120				
950	30	555	16.9	11.5	24	3.9
900	30	1,018	14.9	8.0	26	4.9
850	30	1,500	11.8	4.8	25	6.1
800	30	2,005	8.6	1.4	25	7.9
750	30	2,533	5.3	-2.6	25	9.1
700	30	3,097	2.2	-7.0	25	10.7
650	30	3,688	-.5	-13.9	25	11.8
600	30	4,330	-3.6	-19.2	25	12.4
550	30	5,007	-7.6	-23.4	25	14.1
500	30	5,748	-12.2	-28.4	24	15.7
450	30	6,535	-17.6	-32.5	24	18.1
400	30	7,418	-23.6	-37.5	24	19.8
350	30	8,380	-30.7	-43.3	24	22.6
300	30	9,457	-38.8	-50.3	24	24.6
250	30	10,684	-47.9		24	29.2
200	29	12,126	-54.8		24	28.1
175	29	12,978	-55.4		24	23.2
150	29	13,962	-55.4		24	19.7
125	28	15,124	-56.0		25	15.5
100	28	16,541	-55.9		24	8.1
80	28	17,964	-54.5		24	4.3
70	28	18,820	-53.6		22	3.3
60	28	19,815	-52.2		17	1.9
50	28	20,998	-50.9		10	3.1
40	27	22,457	-49.3		11	5.2
30	26	24,349	-47.5		09	7.4
25	25	25,554	-46.1		09	9.6
20	25	27,045	-43.5		08	11.1
15	21	28,995	-39.8		09	13.0
10	15	31,801	-34.5		10	14.4
7	8	34,327	-29.6			

CHARLESTON, S. C. 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	22.5	20.7	24	2.0
1000	31	152	22.8	19.8	24	3.8
950	31	597	21.8	16.6	26	7.0
900	31	1,068	18.9	13.4	26	7.0
850	31	1,558	15.9	10.1	25	7.6
800	31	2,071	13.0	5.9	24	8.2
750	31	2,609	9.8	2.7	25	8.7
700	31	3,182	6.5	-1.2	25	9.3
650	31	3,785	3.2	-6.0	25	9.5
600	31	4,433	-.2	-10.7	24	9.5
550	31	5,119	-3.9	-16.1	24	9.3
500	31	5,873	-8.1	-20.9	25	8.9
450	31	6,681	-13.0	-26.1	25	[illegible]
400	31	7,575	-18.9	-32.5	24	9.6
350	31	8,555	-25.8	-38.8	24	9.6
300	31	9,654	-34.1	-46.9	23	10.0
250	31	10,905	-44.0		23	10.5
200	30	12,361	-55.9		25	[illegible]
175	30	13,200	-61.5		26	7.8
150	30	14,145	-65.5		27	5.1
125	30	15,246	-67.8		26	2.3
100	30	16,593	-66.3		20	.9
80	30	17,954	-63.4		09	3.7
70	30	18,777	-61.6		09	5.6
60	30	19,737	-59.1		09	8.6
50	30	20,887	-56.4		09	11.3
40	30	22,312	-53.4		09	12.1
30	30	24,176	-50.2		09	12.4
25	30	25,371	-48.1		09	13.4
20	30	26,848	-46.1		09	14.1
15	29	28,766	-43.6		09	16.1
10	23	31,520	-37.7		09	19.5
7	16	34,001	-34.0		09	20.5

CHIHUAHUA, MEXICO 859 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	19.7	14.5	27	.6
1000	31	95				
950	31	539				
900	31	1,017				
850	31	1,518	19.7	13.9	30	.8
800	31	2,041	18.4	9.1	31	1.0
750	31	2,588	14.9	6.0	13	.8
700	31	3,172	10.5	3.5	13	1.3
650	31	3,781	6.1	-.4	11	2.4
600	31	4,436	1.7	-5.6	08	4.5
550	31	5,126	-2.7	-11.4	08	5.2
500	31	5,883	-6.9	-17.7	09	5.0
450	31	6,690	-11.7	-25.3	10	5.1
400	31	7,592	-17.2	-31.2	10	5.5
350	31	8,579	-24.3	-37.9	09	6.2
300	31	9,683	-32.6	-45.6	07	6.5
250	31	10,941	-42.6		06	8.1
200	31	12,408	[illegible]		06	11.4
175	31	13,251	-60.8		07	12.5
150	30	14,195	-67.3		07	13.7
125	30	15,276	-73.2		07	13.0
100	24	16,583	-71.3		08	[illegible]
80	23	17,913	-67.9		07	6.7
70	23	18,721	-65.5		08	8.4
60	22	19,665	-62.6		09	12.2
50	22	20,800	-58.6		09	13.9
40	21	22,214	-55.1		09	15.7
30	20	24,066	-51.4		09	14.6
25	19	25,254	-49.7		09	15.2
20	16	26,720	-47.8		09	16.2
15	13	28,633	-45.5		08	16.3
10	5	31,309	[illegible]			

* COLD BAY, ALASKA 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	[illegible]	8.0	26	3.1
1000	31	172	10.2	7.7	27	4.1
950	31	598	9.6	6.3	28	6.4
900	31	1,048	8.9	3.3	28	8.1
850	31	1,521	7.7	1.8	27	9.6
800	31	2,020	6.0	-1.8	27	10.3
750	31	2,545	3.7	-5.4	27	11.6
700	31	3,106	1.3	-8.0	27	12.5
650	31	3,696	-1.7	-10.8	27	13.5
600	31	4,334	-4.9	-15.5	28	13.8
550	31	5,005	-8.8	-19.8	28	13.9
500	31	5,746	-13.4	-25.4	28	15.3
450	31	6,532	-18.8	-29.0	28	16.0
400	31	7,408	-24.7	-35.2	29	17.0
350	31	8,366	-31.8	-40.2	29	16.6
300	31	9,440	-39.6	-46.9	29	19.6
250	31	10,664	-48.6		29	19.7
200	31	12,100	[illegible]		30	17.6
175	31	12,945	-56.8		30	15.4
150	31	13,926	-55.5		30	11.8
125	31	15,089	-55.3		30	8.7
100	30	16,516	-54.9		31	4.7
80	30	17,946	-53.6		32	2.3
70	30	18,805	-52.7		35	1.8
60	30	19,802	-51.6		04	1.6
50	30	20,988	-50.4		07	2.0
40	30	22,448	-49.0		07	2.7
30	30	24,346	[illegible]		08	4.9
25	30	25,558	-45.4		09	6.4
20	30	27,050	-43.5		08	7.8
15	28	28,996	-41.1		08	10.5
10	25	31,786	-36.6		[illegible]	11.4
7	19	34,293	[illegible]		08	14.1
5	13	36,632	-30.5		08	15.8
4	[illegible]	38,228	-29.0			

COLUMBIA, MO. 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	238	18.5	16.6	19	1.1
1000	31	138				
950	31	581	20.3	13.6	26	2.2
900	31	1,047	17.8	10.9	28	4.7
850	31	1,534	14.7	7.9	28	5.5
800	31	2,044	12.0	2.0	29	6.3
750	31	2,582	9.2	-3.0	30	7.2
700	31	3,152	6.1	-7.0	31	7.6
650	31	3,750	2.3	-10.7	31	[illegible]
600	30	4,400	-1.1	-17.0	31	9.2
550	30	5,081	-4.8	-21.5	31	9.7
500	30	5,834	-9.3	-25.6	31	11.1
450	30	6,636	-14.6	-30.1	31	12.3
400	30	7,524	-20.8	-35.5	32	14.6
350	30	8,498	-27.7	-40.4	32	17.1
300	30	9,588	-35.8	-47.6	32	19.6
250	30	10,832	-44.9		32	23.0
200	30	12,293	-54.2		32	24.4
175	30	13,142	-58.0		32	23.2
150	30	14,105	-61.8		32	20.5
125	30	15,228	-63.6		32	13.7
100	30	16,595	-63.7		32	6.9
80	30	17,974	-60.8		35	4.6
70	30	18,808	-58.8		03	4.2
60	30	19,779	-56.8		07	5.1
50	30	20,941	-54.7		09	6.7
40	29	22,378	-52.4		09	8.0
30	28	24,249	-49.9		09	10.1
25	28	25,445	-48.2		09	12.0
20	28	26,923	-45.8		08	12.8
15	25	28,856	-41.9		08	14.3
10	12	31,645	-38.2			
7						
5						

DAYTON, OHIO 982 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	297	17.1	15.7	22	.4
1000	31	138				
950	31	577	18.5	13.9	25	3.0
900	31	1,042	16.0	10.2	27	4.0
850	31	1,525	12.8	7.0	27	4.9
800	31	2,032	9.5	3.0	27	5.9
750	31	2,563	6.5	-2.1	27	6.6
700	31	3,129	3.5	-7.5	27	6.7
650	31	3,724	.4	-12.0	27	7.4
600	31	4,366	-2.8	-15.8	28	7.9
550	31	5,041	-6.8	-21.2	27	7.9
500	31	5,788	-11.7	-26.6	27	8.7
450	31	6,581	-17.0	-31.4	27	10.0
400	31	7,461	-23.4	-37.2	27	12.2
350	31	8,425	-30.1	-43.9	28	14.8
300	31	9,505	-37.8	-48.9	28	17.3
250	31	10,738	-46.1		28	20.0
200	31	12,196	-53.3		28	21.1
175	31	13,051	-55.8		28	19.5
150	31	14,027	-58.2		29	15.2
125	31	15,166	-60.7		28	11.5
100	31	16,550	-61.3		28	7.5
80	31	17,941	-59.0		30	2.1
70	31	18,781	-57.2		05	1.8
60	31	19,759	-55.3		08	4.9
50	31	20,927	-53.5		09	6.7
40	31	22,369	-51.6		09	7.5
30	30	24,250	-48.7		09	9.4
25	30	25,453	-47.2		09	11.6
20	29	26,937	-44.9		09	12.7
15	28	28,872	-42.0		09	14.6
10	22	31,648	-37.8		09	16.4
7	7	34,105	-35.1			

DEL RIO, TEXAS 979 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	25.2	18.4	12	4.2
1000	31	127				
950	31	584	23.7	17.8	13	7.8
900	31	1,049	20.9	16.1	16	[illegible]
850	31	1,544	19.6	12.7	17	9.0
800	31	2,064	16.2	8.9	16	6.7
750	31	2,606	13.1	3.4	15	3.7
700	31	3,189	10.0	-2.0	11	[illegible]
650	31	3,798	5.9	-5.6	11	2.2
600	31	4,452	1.8	-10.7	11	1.8
550	31	5,140	-2.4	-16.4	08	2.6
500	31	5,900	-6.8	-21.8	08	3.2
450	31	6,708	-12.1	-26.9	07	4.0
400	31	7,607	-17.9	-32.0	06	5.4
350	31	8,591	-25.1	-37.2	06	7.1
300	31	9,693	-33.4	-45.4	05	9.5
250	31	10,948	-43.1		05	11.8
200	31	12,415	-54.7		05	14.5
175	31	13,256	-61.1		05	15.8
150	31	14,200	-67.1		05	14.7
125	30	15,285	-72.1		05	12.0
100	30	16,596	-71.9		07	8.7
80	30	17,927	-66.9		08	7.8
70	30	18,738	-64.3		08	8.1
60	30	19,687	-61.4		08	10.2
50	30	20,825	-58.6		09	12.7
40	30	22,237	-55.3		09	14.8
30	29	24,088	-51.3		09	15.5
25	28	25,276	-49.1		09	15.6
20	26	26,748	-47.0		09	14.9
15	26	28,667	-43.5		09	15.8
10	20	31,423	-39.3		09	17.1
7	[illegible]	33,864	-32.7			

DENVER, COLO. 841 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	[illegible]	11.7	21	1.6
1000	31	118				
950	31	562				
900	31	1,032				
850	31	1,523				
800	31	2,041	18.1	7.3	26	2.2
750	31	2,591	16.2	3.2	28	2.6
700	31	3,175	12.1	-.3	30	2.8
650	31	3,786	7.5	-4.6	31	3.7
600	31	4,445	2.4	-8.0	31	4.9
550	31	5,132	-2.8	-12.8	31	6.1
500	31	5,890	-7.9	-19.5	30	7.4
450	31	6,697	-12.8	-24.8	29	8.9
400	31	7,591	-18.5	-31.2	29	11.2
350	31	8,574	-25.3	-38.8	29	14.2
300	31	9,675	-33.5	-45.5	29	17.2
250	31	10,929	-43.4		29	21.2
200	31	12,394	-54.4		29	23.8
175	31	13,239	-60.0		28	23.5
150	31	14,188	-65.4		29	19.9
125	31	15,286	-69.0		29	13.7
100	31	16,622	-67.0		29	5.6
80	30	17,984	-63.1		01	1.4
70	30	18,811	-60.1		06	2.6
60	30	19,779	-57.7		07	4.9
50	30	20,937	-54.9		08	6.2
40	30	22,372	-52.3		08	8.0
30	29	24,242	-49.4		09	10.6
25	29	25,443	-47.1		09	11.0
20	28	26,930	-45.4		08	11.6
15	28	28,862	-42.3		08	13.7
10	23	31,633	-37.6		08	18.2
7	15	34,094	-33.8		[illegible]	19.2
5	9	36,483	[illegible]			

DODGE CITY, KANS. 926 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	18.5	16.0	17	2.7
1000	31	125				
950	31	571				
900	31	1,037	19.6	14.7	19	7.1
850	31	1,530	19.0	11.4	21	7.3
800	31	2,049	16.2	9.2	23	5.5
750	31	2,594	13.0	5.1	25	3.7
700	31	3,173	9.4	-.4	28	2.5
650	31	3,780	5.4	-5.2	31	2.2
600	31	4,435	1.4	-11.2	32	3.5
550	31	5,121	-2.6	-15.9	32	5.9
500	31	5,881	-7.1	-21.1	32	6.9
450	31	6,687	-12.2	-26.5	31	7.8
400	31	7,586	-18.1	-33.6	31	10.0
350	31	8,571	-25.1	-38.1	31	11.9
300	31	9,672	-33.5	-44.6	31	14.2
250	31	10,927	-43.2		31	17.8
200	31	12,393	-54.4		31	20.1
175	31	13,238	-60.0		31	19.6
150	31	14,188	-65.4		31	19.7
125	31	15,285	-69.3		32	13.5
100	31	16,618	-68.1		33	6.2
80	31	17,974	-63.3		02	3.7
70	31	18,800	-60.5		05	4.3
60	31	19,763	-58.5		07	5.6
50	31	20,916	-55.9		09	8.0
40	31	22,345	-53.1		09	8.7
30	30	24,213	-50.0		09	10.6
25	30	25,408	-48.2		09	12.1
20	30	26,884	-46.0		09	12.9
15	29	28,811	-43.0		08	14.3
10	28	31,572	-38.0		[illegible]	18.2
7	20	34,044	-33.9			
5	7	36,389	-31.3			

EL PASO, TEXAS 884 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	22.7	14.3	12	.2
1000	31	98				
950	31	555				
900	31	1,035				
850	31	1,531	22.1	12.0	13	1.0
800	31	2,056	19.2	9.3	17	1.6
750	31	2,606	15.6	6.7	19	1.4
700	31	3,190	11.4	4.3	18	1.3
650	31	3,801	6.9	.8	12	.9
600	31	4,459	2.2	-4.5	08	2.5
550	31	5,153	-2.5	-10.1	07	3.7
500	31	5,907	-7.0	-16.5	07	4.3
450	31	6,721	-11.3	-22.6	08	3.7
400	31	7,618	-16.9	-30.2	08	2.7
350	31	8,606	-24.2	-37.5	08	3.0
300	31	9,712	-32.4	-44.1	06	4.6
250	31	10,971	-42.3		06	5.3
200	31	12,441	-54.2		06	6.1
175	31	13,284	-60.9		06	6.3
150	31	14,226	-67.8		06	5.9
125	31	15,305	-73.2		06	5.9
100	28	16,615	-71.4		07	5.7
80	27	17,948	-66.9		08	5.5
70	27	18,759	-64.2		09	7.7
60	27	19,708	-61.3		09	9.8
50	27	20,847	-58.2		09	11.7
40	27	22,264	-54.6		09	13.2
30	27	24,120	-51.1		09	14.0
25	27	25,311	-49.2		09	13.4
20	27	26,783	-46.7		09	12.9
15	27	28,702	-44.2		08	15.9
10	24	31,459	-39.0		09	17.4
7	7	33,917	-35.2			
5						

ELY, NEV. 813 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	11.7	6.0	19	3.2
1000	31	134				
950	31	581				
900	31	1,041				
850	31	1,532				
800	31	2,046	16.8	5.8	19	3.4
750	31	2,597	16.3	1.1	19	3.0
700	31	3,180	12.2	-2.1	23	3.7
650	31	3,793	7.3	-4.9	23	3.8
600	31	4,449	1.8	-8.0	24	3.7
550	31	5,137	-3.9	-11.6	25	4.5
500	31	5,890	-9.0	-18.7	25	6.1
450	31	6,695	-13.8	-26.4	25	7.3
400	31	7,585	-20.0	-33.5	25	9.7
350	31	8,562	-26.9	-39.2	25	11.8
300	31	9,655	-35.1	-46.7	24	[illegible]
250	31	10,903	-44.4		24	20.4
200	30	12,363	-54.8		24	25.6
175	30	13,206	-60.3		24	25.6
150	30	14,154	-65.5		24	21.7
125	30	15,251	-68.9		25	13.8
100	30	16,587	-68.1		23	3.9
80	30	17,940	-63.7		12	1.7
70	30	18,764	-61.2		11	3.4
60	29	19,728	-58.7		10	4.7
50	29	20,879	-56.2		09	6.6
40	29	22,306	-53.3		09	8.7
30	28	24,172	-50.3		09	10.8
25	28	25,367	-48.2		09	12.0
20	27	26,845	-45.8		09	13.3
15	26	28,777	-42.5		09	14.9
10	24	31,550	-37.0		08	18.1
7	19	34,033	-32.2		09	19.6
5	9	36,407	-27.8			

EMPALME, MEXICO 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	27.0	23.4	04	1.1
1000	30	119	26.9	22.5	09	1.2
950	30	568	25.3	18.0	14	3.2
900	30	1,048	23.5	14.9	15	2.4
850	30	1,546	20.7	12.8	13	1.6
800	30	2,067	17.2	10.9	09	1.9
750	30	2,617	13.7	7.7	08	3.3
700	30	3,195	10.0	4.1	09	3.5
650	30	3,808	6.0	-.1	09	3.2
600	30	4,458	1.6	-3.9	10	4.2
550	30	5,150	-2.8	-8.8	11	4.9
500	30	5,904	-7.3	-11.5	10	5.5
450	30	6,715	-11.9	-17.6	11	5.4
400	30	7,612	-17.3	-23.5	11	6.1
350	29	8,599	-24.3	-31.8	11	6.2
300	29	9,704	-32.4	-41.8	11	8.4
250	29	10,963	-42.7		10	8.9
200	28	12,428	-55.0		09	11.8
175	28	13,267	-61.5		09	12.8
150	28	14,207	-67.8		10	14.7
125	27	15,287	-73.2		11	11.8
100	24	16,598	-72.2		10	8.6
80	24	17,927	-67.0		08	7.5
70	24	18,738	-65.0		08	9.2
60	24	19,682	-62.2		09	12.2
50	24	20,817	-58.5		09	14.1
40	24	22,230	-54.9		10	14.7
30	24	24,082	-51.3		09	15.6
25	24	25,270	-49.2		09	16.1
20	21	26,733	-47.0		09	17.6
15	18	28,651	-43.8		09	[illegible]
10	7	31,362	-40.1			

* FAIRBANKS, ALASKA 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	135	12.2	8.9	32	.8
1000	31	101			34	1.8
950	31	529	11.7	6.2	27	3.4
900	31	982	9.0	3.6	27	4.8
850	31	1,453	5.6	1.1	26	5.7
800	31	1,947	2.2	-1.1	25	6.3
750	31	2,463	-1.0	-3.9	25	6.7
700	31	3,014	-4.4	-9.1	25	7.2
650	31	3,589	-7.5	-12.6	25	7.2
600	31	4,215	-11.2	-17.1	26	7.1
550	31	4,872	-15.3	-21.3	26	7.6
500	31	5,593	-19.8	-26.9	26	9.0
450	31	6,364	-25.1	-32.4	26	10.3
400	31	7,215	-31.1	-38.5	26	10.7
350	31	8,148	-38.2	-44.0	27	11.7
300	31	9,191	-46.0		27	12.2
250	31	10,384	-52.6		28	11.8
200	31	11,827	-50.6		28	10.5
175	31	12,701	-49.2		29	8.1
150	31	13,712	-48.9		29	7.6
125	31	14,909	-48.6		29	5.7
100	31	16,378	-48.4		29	4.6
80	31	17,849	-47.6		31	2.4
70	31	18,731	-46.9		33	1.8
60	31	19,754	-46.3		01	1.6
50	31	20,967	-45.4		03	1.8
40	31	22,458	-44.5		07	3.7
30	31	24,390	-43.1		07	[illegible]
25	31	25,621	-41.9		08	6.4
20	29	27,138	-40.0		08	7.3
15	24	29,126	-37.0		08	7.9
10	23	31,965	-31.8		08	9.9
7	20	34,510	-27.3		08	10.5
5	5	36,959	-22.5			

FLINT, MICH. 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	234	15.9	13.3	24	1.5
1000	31	126				
950	31	561	17.0	11.5	26	4.2
900	31	1,024	14.4	9.5	28	4.8
850	31	1,505	11.1	6.5	28	5.8
800	31	2,010	8.2	1.6	27	7.1
750	31	2,537	5.4	-3.2	27	8.0
700	31	3,102	2.8	-7.6	27	7.9
650	31	3,694	-.5	[illegible]	28	8.3
600	31	4,333	-4.0	-19.3	28	8.9
550	30	5,006	-8.2	-23.8	28	10.3
500	30	5,747	-12.6	-28.0	28	11.7
450	30	6,534	-18.2	-32.8	28	12.2
400	30	7,412	-24.6	-39.2	28	12.8
350	30	8,370	-31.6	-44.5	28	13.7
300	30	9,442	-39.6	-49.8	28	15.9
250	30	10,666	-47.8		29	16.3
200	30	12,123	-51.7		28	18.7
175	30	12,985	-53.3		28	18.0
150	30	13,973	-55.2		28	14.7
125	30	15,130	-57.3		28	11.1
100	30	16,536	-58.0		28	7.3
80	30	17,943	-56.7		28	3.2
70	30	18,790	-55.4		36	1.0
60	30	19,776	-54.0		08	2.2
50	30	20,950	-52.4		09	4.8
40	30	22,398	-50.5		09	7.3
30	30	24,282	-48.1		09	9.3
25	29	25,491	-46.6		09	10.7
20	29	26,979	-44.1		09	12.6
15	29	28,922	-40.7		09	14.0
10	22	31,716	-35.2		09	17.7
7	7	34,235	-32.0			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1967

FORT WORTH, TEXAS — 996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	180	23.2	19.9	18	1.8
1000	31	142				
950	31	593	22.6	17.3	20	7.0
900	31	1,061	21.5	14.6	22	7.3
850	31	1,556	18.8	11.2	22	5.1
800	31	2,074	15.5	8.3	25	2.7
750	31	2,613	11.8	5.9	30	2.5
700	31	3,194	8.1	.9	32	2.8
650	31	3,799	4.2	-3.9	34	2.3
600	31	4,450	.6	-8.8	34	2.0
550	31	5,136	-3.0	-13.4	34	2.4
500	31	5,894	-6.9	-19.5	36	3.0
450	31	6,705	-11.9	-26.1	35	4.2
400	31	7,601	-18.1	-31.4	36	5.5
350	31	8,585	-25.2	-37.3	36	7.4
300	31	9,685	-33.8	-44.7	36	9.9
250	31	10,937	-43.7		36	12.7
200	31	12,400	-54.9		36	15.3
175	31	13,242	-61.0		36	14.6
150	31	14,187	-66.4		01	12.3
125	30	15,280	-70.9		02	9.5
100	30	16,603	-69.3		04	5.4
80	30	17,951	-64.8		07	6.0
70	30	18,770	-62.3		08	7.0
60	30	19,729	-59.6		09	8.3
50	30	20,874	-57.4		09	10.0
40	30	22,293	-54.5		09	11.4
30	30	24,152	-50.5		09	13.2
25	29	25,348	-48.2		09	13.5
20	25	26,832	-45.9		09	13.8
15	23	28,757	-44.1		09	16.0
10	18	31,508	-39.1		09	19.7
7	11	33,955	-36.1			

GLASGOW, MONT. — 934 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	696	13.9	7.1	06	2.0
1000	31	115				
950	31	556				
900	31	1,015	17.9	4.8	08	.4
850	31	1,503	16.6	1.0	29	3.1
800	31	2,016	13.6	-1.0	28	5.6
750	31	2,554	9.9	-3.2	29	7.2
700	31	3,126	5.6	-6.1	29	8.8
650	31	3,724	1.1	-9.1	28	10.4
600	31	4,366	-3.5	-13.9	28	13.5
550	31	5,043	-7.6	-21.2	28	15.0
500	31	5,785	-12.4	-25.8	28	15.4
450	31	6,575	-17.8	-31.2	28	16.7
400	31	7,452	-24.2	-38.1	28	17.7
350	31	8,412	-31.3	-45.1	28	20.8
300	31	9,485	-39.6	-52.2	28	23.3
250	31	10,708	-48.5		28	26.3
200	31	12,149	-55.5		28	30.2
175	31	12,998	-56.0		28	29.0
150	31	13,978	-56.5		28	24.2
125	31	15,130	-58.1		28	17.0
100	31	16,533	-58.4		28	10.4
80	31	17,941	-56.8		30	5.1
70	31	18,788	-55.5		32	2.0
60	31	19,773	-53.9		03	1.3
50	31	20,951	-51.4		07	2.7
40	31	22,404	-49.9		09	4.2
30	31	24,296	-47.2		09	6.8
25	31	25,506	-45.6		09	7.2
20	31	27,001	-43.2		09	9.0
15	30	28,953	-40.5		09	10.6
10	17	31,737	-36.5		09	12.9
7	7	34,200	-33.1			

* GRAND JUNCTION, COLO. — 854 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	1,474	19.2	9.1	12	2.9
1000	31	92				
950	31	541				
900	31	1,019				
850	31	1,518	20.2	8.8	12	3.1
800	31	2,042	19.9	5.4	12	3.5
750	31	2,590	16.8	2.8	12	1.0
700	31	3,180	12.6	.0	26	1.4
650	31	3,793	7.8	-2.8	27	2.8
600	31	4,451	2.6	-5.8	28	4.4
550	31	5,140	-2.8	-9.9	28	5.6
500	31	5,898	-7.7	-18.2	28	6.3
450	31	6,705	-12.6	-23.8	28	7.4
400	31	7,601	-18.2	-29.8	27	9.7
350	31	8,585	-25.1	-36.6	27	12.2
300	31	9,687	-33.3	-43.9	26	15.6
250	31	10,941	-43.2		26	20.1
200	31	12,406	-54.6		26	22.5
175	31	13,249	-60.5		27	23.4
150	31	14,195	-66.2		27	20.5
125	31	15,288	-69.8		28	11.3
100	30	16,615	-69.2		27	3.5
80	30	17,965	-63.8		07	.9
70	30	18,788	-61.0		08	2.6
60	30	19,751	-58.4		08	5.2
50	29	20,901	-56.0		09	7.8
40	29	22,329	-53.0		08	9.8
30	28	24,193	-49.8		09	10.2
25	28	25,388	-48.2		09	11.2
20	28	26,865	-45.9		09	12.4
15	27	28,793	-42.1		0[illegible]	15.0
10	26	31,566	-36.8		09	17.2
7	18	34,048	-32.1		09	18.8

* GREAT FALLS, MONT. — 889 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	30	1,123	15.8	3.1	24	2.1
1000	30	106				
950	30	547				
900	30	1,015				
850	30	1,507	18.2	3.3	24	4.9
800	30	2,023	14.8	.7	26	4.9
750	30	2,558	10.6	-2.1	26	6.1
700	30	3,137	6.7	-6.0	27	8.1
650	30	3,737	2.3	-9.7	27	10.7
600	30	4,382	-2.5	-13.4	27	12.1
550	30	5,058	-6.9	-19.3	27	13.5
500	30	5,805	-11.7	-25.2	26	14.9
450	30	6,598	-17.3	-30.9	27	16.8
400	30	7,478	-23.6	-37.0	27	18.6
350	30	8,441	-30.5	-43.0	27	20.8
300	30	9,519	-38.7	-49.9	27	23.9
250	30	10,747	-47.8		26	27.3
200	29	12,196	-55.0		27	32.5
175	29	13,047	-56.0		27	29.1
150	29	14,026	-56.8		27	23.9
125	29	15,176	-59.0		27	18.1
100	29	16,575	-58.7		27	11.0
80	29	17,980	-57.0		27	3.7
70	29	18,827	-55.4		29	1.1
60	29	19,812	-53.9		04	1.1
50	29	20,987	-52.2		08	2.2
40	29	22,440	-49.6		08	4.9
30	29	24,333	-47.5		09	7.7
25	28	25,544	-45.4		09	9.2
20	26	27,039	-43.5		09	10.4
15	25	28,989	-39.9		08	12.5
10	20	31,797	-34.6		09	15.1
7	17	34,309	-30.6		09	16.3

GREEN BAY, WIS. — 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	210	15.1	12.[illegible]	28	.7
1000	31	122				
950	31	557	16.6	10.3	28	3.7
900	31	1,018	14.0	7.5	29	5.1
850	31	1,498	11.0	3.[illegible]	29	6.4
800	31	2,002	8.5	-1.4	30	7.2
750	31	2,532	5.4	-4.9	30	7.4
700	31	3,095	2.5	-9.8	30	8.7
650	31	3,688	-.3	-15.1	30	10.1
600	31	4,327	-4.4	-18.6	30	11.5
550	31	5,002	-8.4	-23.0	30	12.2
500	31	5,741	-13.0	-28.3	30	12.8
450	31	6,527	-18.5	-33.2	30	14.0
400	31	7,405	-24.8	-38.9	30	14.7
350	31	8,363	-31.9	-44.6	30	16.7
300	31	9,435	-39.9	-49.8	30	18.4
250	31	10,657	-48.4		30	21.4
200	31	12,109	-52.9		30	23.2
175	31	12,970	-53.3		30	20.7
150	31	13,958	-55.2		30	17.6
125	31	15,117	-56.9		30	13.0
100	31	16,527	-57.8		30	8.2
80	31	17,939	-56.4		31	4.7
70	31	18,788	-55.1		33	2.8
60	31	19,776	-53.7		03	2.3
50	31	20,952	-52.1		08	4.1
40	30	22,402	-50.1		08	6.3
30	30	24,290	-48.1		09	8.5
25	30	25,496	-46.5		09	9.7
20	29	26,987	-44.1		09	11.0
15	27	28,931	-40.8		09	13.6
10	22	31,722	-36.0		09	17.0
7	13	34,240	-31.6			

GREENSBORO, N. C. — 986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	273	20.7	20.1	25	.8
1000	31	149				
950	31	594	20.5	15.4	29	1.6
900	31	1,060	17.9	12.2	28	2.5
850	31	1,548	14.9	8.8	27	3.8
800	31	2,060	11.9	5.3	26	5.2
750	31	2,598	8.8	-.3	26	6.7
700	31	3,166	5.4	-4.2	25	8.0
650	31	3,770	2.3	-7.7	25	9.1
600	31	4,413	-1.0	-12.4	25	9.8
550	31	5,105	-4.5	-17.4	25	11.1
500	31	5,849	-8.9	-24.6	25	11.8
450	31	6,660	-14.0	-28.5	25	11.7
400	31	7,544	-19.9	-34.5	25	12.8
350	31	8,521	-26.8	-41.7	25	13.6
300	31	9,616	-34.9	-49.2	25	15.4
250	31	10,863	-44.7		25	16.5
200	31	12,320	-55.6		26	16.8
175	31	13,161	-60.4		26	16.2
150	30	14,115	-63.6		27	12.5
125	29	15,227	-65.4		26	8.7
100	29	16,586	-64.1		26	4.7
80	29	17,958	-61.7		06	1.5
70	29	18,788	-60.0		09	3.9
60	29	19,755	-57.8		09	6.7
50	29	20,911	-55.3		09	8.8
40	29	22,342	-52.9		09	10.0
30	28	24,207	-50.1		09	10.2
25	27	25,400	-48.4		09	11.7
20	27	26,874	-46.4		09	13.4
15	24	28,792	-43.3		09	14.8
10	21	31,546	-38.8		10	16.0
7	10	33,962	-35.8			
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GUAM, MARIANA IS. — 996 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	111	24.8	23.9	17	.4
1000	31	77				
950	31	528	24.0	21.7	20	1.9
900	31	1,002	21.3	18.1	21	1.9
850	31	1,496	18.6	15.1	21	1.7
800	31	2,015	15.9	11.9	20	1.5
750	31	2,560	13.0	8.7	17	1.4
700	31	3,140	9.9	4.8	17	1.6
650	31	3,751	6.3	1.0	15	1.9
600	31	4,405	2.3	-2.0	13	2.0
550	31	5,100	-1.5	-6.0	12	2.3
500	31	5,858	-5.7	-11.1	11	2.6
450	31	6,675	-10.5	-16.9	10	3.0
400	31	7,575	-15.8	-24.1	10	3.4
350	31	8,569	-22.6	-31.2	09	3.7
300	31	9,681	-30.8	-40.0	07	4.6
250	31	10,948	-41.1	-49.4	07	6.4
200	31	12,423	-53.7		06	8.6
175	31	13,267	-61.1		06	9.0
150	31	14,205	-69.0		06	10.1
125	31	15,273	-76.9		06	12.4
100	27	16,537	-79.4		07	13.4
80	22	17,826	-72.4		08	13.8
70	22	18,616	-68.9		09	15.3
60	22	19,550	-64.9		09	15.0
50	22	20,671	-61.3		09	15.4
40	22	22,069	-57.4		09	18.0
30	22	23,901	-53.7		09	22.8
25	22	25,079	-51.6		09	26.3
20	20	26,531	-49.3		09	31.1
15	12	28,429	-45.8		09	32.2
10	6	31,169	-42.7			

HILO, HAWAII — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	11	22.5	20.4	23	1.6
1000	31	140	22.5	19.9	23	1.4
950	31	588	19.6	17.7	09	2.4
900	31	1,051	16.5	15.2	09	3.6
850	31	1,537	13.9	12.3	09	3.3
800	31	2,047	11.5	7.2	09	4.0
750	31	2,589	9.7	.4	09	4.4
700	31	3,158	7.6	-6.5	10	4.1
650	31	3,765	4.7	-10.4	09	3.2
600	31	4,414	1.2	-15.7	09	2.2
550	31	5,106	-2.6	-20.5	12	1.2
500	31	5,860	-7.2	-24.8	34	.2
450	31	6,674	-12.5	-29.6	27	2.1
400	31	7,563	-18.8	-35.3	28	3.9
350	31	8,545	-26.0	-41.8	28	6.0
300	31	9,643	-34.6	-49.4	28	8.8
250	31	10,891	-44.6		28	12.0
200	31	12,346	-56.4		28	15.9
175	31	13,182	-62.6		28	17.4
150	31	14,119	-68.6		27	16.7
125	31	15,202	-71.5		26	11.9
100	30	16,521	-71.0		23	1.9
80	30	17,849	-68.4		10	7.0
70	30	18,653	-66.0		10	10.5
60	30	19,594	-62.8		09	13.8
50	30	20,725	-59.7		09	16.3
40	29	22,129	-56.5		09	18.4
30	29	23,970	-52.4		09	21.3
25	29	25,154	-50.2		09	22.4
20	29	26,618	-47.8		09	23.1
15	27	28,527	-45.0		09	24.8
10	22	31,244	-41.7		09	26.4

HUNTINGTON, W. VA. — 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	246	17.2	16.4	19	1.0
1000	31	145				
950	31	587	19.1	15.0	25	3.7
900	31	1,050	16.6	11.3	26	4.4
850	31	1,535	13.3	8.3	27	4.9
800	31	2,043	9.9	4.7	27	6.1
750	31	2,573	6.8	-.1	27	6.7
700	31	3,142	3.7	-4.8	27	7.6
650	31	3,739	1.0	-10.0	26	7.8
600	31	4,382	-2.1	-16.2	26	8.9
550	31	5,065	-5.8	-21.8	26	9.2
500	31	5,812	-10.4	-25.7	26	10.3
450	31	6,611	-15.8	-31.1	26	11.8
400	31	7,495	-21.8	-36.4	26	14.0
350	31	8,465	-28.6	-43.3	26	16.6
300	31	9,552	-36.5	-49.3	26	19.2
250	31	10,792	-45.6		26	20.9
200	31	12,250	-54.0		27	21.5
175	31	13,101	-56.9		27	18.0
150	31	14,070	-59.6		27	13.7
125	31	15,203	-62.2		27	8.5
100	31	16,580	-61.[illegible]		27	5.0
80	31	17,967	-59.5		35	1.1
70	31	18,804	-58.0		08	2.4
60	31	19,780	-56.0		09	5.4
50	31	20,945	-53.9		09	7.3
40	31	22,383	-51.7		09	8.2
30	31	24,261	-48.6		09	10.2
25	31	25,464	-46.8		09	10.7
20	28	26,949	-44.6		09	12.2
15	25	28,882	-41.3		09	15.7
10	20	31,665	-36.5		09	16.6
7	9	34,183	-31.1			

* INTERNATIONAL FALLS, MINN. — 972 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	360	12.4	9.5	26	1.0
1000	31	120				
950	31	553	14.9	9.1	27	3.0
900	31	1,011	13.4	6.7	29	5.0
850	31	1,489	10.3	3.2	29	5.7
800	31	1,992	7.6	-1.3	30	6.1
750	31	2,514	4.9	-5.9	30	7.4
700	31	3,081	2.0	-11.3	30	8.9
650	31	3,668	-1.4	-15.8	30	9.3
600	31	4,309	-5.1	-20.0	31	10.6
550	31	4,977	-9.2	-25.5	31	11.6
500	31	5,718	-13.9	-31.4	31	12.7
450	31	6,499	-19.7	-36.3	30	13.0
400	31	7,373	-26.1	-42.1	30	14.7
350	31	8,325	-33.5	-47.0	30	15.8
300	31	9,389	-41.5	-51.1	30	18.4
250	31	10,605	-49.1		30	20.5
200	30	12,046	-52.8		30	22.0
175	30	12,908	-52.7		30	20.7
150	30	13,902	-53.3		30	18.7
125	30	15,071	-54.8		30	14.7
100	30	16,494	-55.7		30	10.9
80	30	17,919	-54.4		30	5.8
70	30	18,774	-53.4		32	3.8
60	30	19,769	-52.3		36	1.7
50	30	20,951	-50.7		05	1.7
40	30	22,410	-49.0		07	3.4
30	30	24,306	-46.9		08	6.1
25	30	25,518	-45.3		08	7.9
20	30	27,014	-43.0		09	9.6
15	29	28,969	-39.5		09	11.8
10	26	31,775	-34.8		09	14.6
7	22	34,283	-30.5		09	15.1
5	7	36,656	-29.0			

JACKSON, MISS. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	30	94	21.4	20.3	21	1.2
1000	30	154	21.7	20.3	22	2.0
950	30	600	21.4	16.8	24	5.3
900	30	1,069	18.9	13.7	25	5.0
850	30	1,559	16.1	10.1	26	4.7
800	30	2,072	13.0	6.6	26	4.4
750	30	2,607	9.8	2.2	27	4.4
700	30	3,184	6.4	-1.7	28	4.8
650	30	3,785	3.2	-6.3	28	4.4
600	30	4,434	-.3	-10.0	29	5.3
550	30	5,120	-4.0	-14.6	30	6.0
500	30	5,873	-7.9	-20.7	30	5.6
450	30	6,681	-13.0	-25.5	31	5.8
400	30	7,572	-18.9	-32.1	33	6.4
350	30	8,553	-26.2	-38.1	34	7.4
300	30	9,650	-34.3	-46.3	33	8.5
250	30	10,899	-44.1		34	9.5
200	30	12,359	-55.1		35	10.7
175	30	13,201	-60.4		35	11.4
150	30	14,150	-65.0		35	11.7
125	30	15,251	-68.4		36	7.3
100	30	16,589	-67.7		03	3.9
80	30	17,944	-63.7		07	5.4
70	30	18,765	-61.8		08	7.0
60	30	19,725	-59.1		09	8.7
50	30	20,876	-56.1		09	10.3
40	30	22,301	-53.7		09	11.4
30	30	24,161	-50.7		09	13.3
25	30	25,354	-48.6		09	13.9
20	30	26,827	-46.6		09	14.3
15	29	28,746	-44.0		09	15.8
10	24	31,490	-39.2		09	19.7
7	14	33,937	-36.0			

* JACKSONVILLE, FLA. — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	5	23.3	21.8	24	1.7
1000	31	174	23.4	20.6	24	3.4
950	31	620	21.8	17.2	25	5.0
900	31	1,092	19.2	13.3	24	4.8
850	31	1,582	16.2	9.9	24	5.7
800	31	2,096	13.2	6.1	24	6.4
750	31	2,635	10.1	2.3	24	6.0
700	31	3,208	6.8	-1.4	24	6.4
650	31	3,807	3.3	-5.4	25	6.6
600	31	4,459	-.4	-9.9	25	6.2
550	31	5,142	-4.3	-15.4	25	6.3
500	31	5,896	-8.5	-21.5	24	5.6
450	31	6,700	-13.3	-28.9	24	6.2
400	31	7,595	-19.0	-33.5	24	6.1
350	31	[illegible],576	-26.0	-40.1	23	6.4
300	31	9,674	-34.3	-48.1	23	5.8
250	31	10,923	-44.2		22	5.6
200	31	12,382	-55.8		22	4.7
175	31	13,220	-61.8		24	3.5
150	31	14,164	-66.3		30	1.6
125	31	15,261	-68.9		04	1.9
100	31	16,599	-67.5		09	2.6
80	31	17,950	-64.4		08	6.2
70	30	18,771	-62.5		09	8.1
60	30	19,727	-59.8		09	11.2
50	30	20,873	-56.8		09	12.8
40	30	22,295	-53.9		09	13.0
30	30	24,153	-50.8		09	14.5
25	30	25,344	-48.8		09	14.9
20	29	26,816	-46.5		09	15.0
15	29	28,737	-43.5		09	16.0
10	27	31,482	-39.2		09	20.3
7	12	33,923	-34.9			

JOHN F. KENNEDY INT. AP NY — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	5	21.0	18.5	27	1.0
1000	31	141	20.3	17.4	27	1.6
950	31	586	18.8	13.8	27	3.5
900	31	1,048	16.4	10.7	26	3.9
850	31	1,533	13.4	8.3	26	5.0
800	31	2,042	10.6	4.1	26	6.6
750	31	2,581	7.7	-.6	26	7.7
700	31	3,145	5.0	-5.4	26	8.2
650	31	3,746	2.0	-9.2	25	10.2
600	31	4,389	-1.6	-14.3	25	11.5
550	31	5,075	-5.3	-19.0	25	12.9
500	31	5,821	-9.9	-23.3	25	15.0
450	31	6,624	-15.2	-26.6	24	15.5
400	31	7,508	-20.9	-33.0	24	16.8
350	31	8,481	-28.0	-40.2	24	18.5
300	31	9,569	-36.1	-47.8	24	20.6
250	31	10,810	-45.3		25	23.1
200	31	12,269	-54.3		25	23.1
175	31	13,117	-58.1		25	21.0
150	31	14,083	-59.9		25	16.3
125	31	15,218	-61.1		25	12.1
100	31	16,602	-60.7		26	6.4
80	31	17,996	-58.8		20	.9
70	31	18,837	-57.0		12	1.8
60	31	19,817	-55.4		10	3.5
50	31	20,985	-53.5		09	5.1
40	31	22,428	-51.3		08	7.4
30	30	24,309	-48.3		08	9.0
25	27	25,525	-46.1		08	10.8
20	25	27,012	-44.0		09	12.6
15	22	28,963	-40.1		09	14.9
10	10	31,767	-35.5			

JOHNSTON IS., PACIFIC AREA — 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	31	3	26.5	23.3	10	6.1
1000	31	116	25.5	22.8	10	6.9
950	31	565	21.9	20.3	09	8.3
900	31	1,036	19.1	16.6	10	8.9
850	31	1,527	16.4	13.5	10	8.3
800	31	2,043	14.4	8.5	10	7.2
750	31	2,582	12.3	1.3	10	6.7
700	31	3,162	9.1	-3.8	10	5.9
650	31	3,769	6.0	-8.6	10	5.6
600	31	4,425	2.3	-12.3	09	5.3
550	31	5,114	-2.3	-15.9	09	3.9
500	31	5,873	-6.9	-21.3	11	3.2
450	31	6,682	-11.7	-27.2	11	1.9
400	31	7,582	-17.8	-32.1	27	1.1
350	31	8,567	-24.7	-39.1	27	3.0
300	31	9,670	-33.4	-46.3	26	4.7
250	31	10,924	-43.5		26	7.9
200	31	12,385	-55.7		25	10.1
175	31	13,222	-62.4		25	11.5
150	31	14,159	-69.2		25	13.5
125	30	15,231	-74.2		25	10.3
100	30	16,530	-73.4		20	.8
80	30	17,846	-69.9		09	8.5
70	29	18,645	-66.6		09	11.9
60	29	19,583	-63.3		09	14.2
50	29	20,712	-60.4		09	15.8
40	29	22,112	-57.1		09	18.8
30	29	23,947	-53.4		09	21.9
25	29	25,126	-51.1		09	23.3
20	28	26,585	-48.3		09	26.3
15	26	28,491	-45.5		09	30.1
10	23	31,219	-41.5		09	34.4
7	9	33,647	-38.5			

KEY WEST, FLA. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed Mps
SURFACE	30	3	27.6	21.6	11	3.3
1000	30	163	26.2	21.2	12	4.8
950	30	610	22.6	19.0	12	5.9
900	30	1,084	20.0	14.5	12	5.8
850	30	1,576	17.3	9.9	12	4.9
800	30	2,092	14.5	5.1	11	3.8
750	30	2,629	11.3	1.2	11	3.5
700	30	3,209	8.0	-2.4	13	3.6
650	30	3,812	4.6	-6.1	13	3.2
600	30	4,465	.8	-9.5	11	2.4
550	30	5,155	-3.4	-13.6	11	1.8
500	30	5,907	-7.9	-18.3	09	1.9
450	30	6,711	-13.3	-23.3	06	1.4
400	30	7,605	-19.5	-28.8	06	1.7
350	30	8,584	-26.5	-34.9	07	2.4
300	30	9,680	-34.7	-42.9	05	3.7
250	30	10,928	-44.7		06	4.2
200	30	12,384	-56.2		05	5.5
175	30	13,221	-62.2		05	4.6
150	30	14,162	-66.8		04	4.8
125	30	15,257	-69.1		04	4.6
100	30	16,592	-68.6		08	5.6
80	30	17,936	-66.4		08	8.2
70	30	18,747	-64.7		08	10.9
60	30	19,691	-62.2		09	14.2
50	30	20,829	-58.5		09	16.4
40	30	22,244	-55.2		10	17.4
30	30	24,102	-50.6		09	16.6
25	28	25,295	-48.3		09	17.2
20	27	26,769	-46.3		09	16.9
15	27	28,692	-43.8		09	17.9
10	26	31,440	-39.3		09	18.4
7	13	33,903	-36.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KING SALMON, ALASKA — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	9.8	7.3	20	3.5
1000	31	130	10.4	7.7	23	3.9
950	31	554	10.1	6.6	25	5.9
900	31	1,006	8.2	3.1	26	5.7
850	31	1,477	6.2	.7	27	5.1
800	31	1,973	3.6	-1.3	27	5.0
750	31	2,494	1.4	-5.8	28	6.2
700	31	3,050	-1.3	-10.3	28	7.4
650	31	3,634	-4.3	-13.7	28	8.0
600	31	4,265	-7.9	-15.9	29	8.2
550	31	4,932	-11.8	-22.2	29	8.8
500	31	5,661	-16.4	-26.8	29	9.9
450	31	6,441	-21.7	-31.4	29	10.8
400	31	7,305	-27.6	-37.1	29	12.5
350	31	8,252	-34.7	-41.9	30	14.3
300	31	9,312	-42.2	-48.5	30	16.8
250	31	10,524	-50.0		30	18.4
200	31	11,966	-53.4		31	17.3
175	31	12,827	-52.7		30	13.9
150	31	13,824	-51.9		30	11.4
125	31	15,005	-52.0		30	9.0
100	31	16,449	-52.3		30	5.9
80	30	17,896	-51.2		31	3.5
70	30	18,765	-50.5		33	2.2
60	29	19,773	-49.7		02	1.3
50	29	20,968	-48.7		05	1.8
40	29	22,439	-47.5		06	2.5
30	28	24,347	-45.7		08	5.0
25	28	25,566	-44.3		08	4.9
20	27	27,066	-42.6		07	6.7
15	26	29,022	-40.0		08	7.3
10	24	31,816	-36.1		08	9.7
7	21	34,307	-33.2		07	10.8
5	16	36,676	-30.3			
4						

+ KOROR, CAROLINE IS. — 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.9	24.1	23	2.2
1000	31	80	27.4	23.6	24	2.7
950	31	531	23.6	19.8	24	5.8
900	31	1,005	20.9	15.8	25	6.2
850	31	1,499	18.2	12.5	25	5.6
800	31	2,017	15.5	9.3	25	4.5
750	31	2,562	12.7	5.8	24	3.6
700	31	3,141	9.4	2.3	24	2.5
650	31	3,750	5.9	-1.0	21	1.3
600	31	4,404	2.0	-4.9	15	1.8
550	31	5,100	-1.6	-10.2	12	2.7
500	31	5,857	-5.7	-15.7	11	2.9
450	31	6,671	-10.3	-21.2	11	4.1
400	31	7,577	-15.6	-27.4	10	5.7
350	31	8,571	-22.6	-34.5	09	7.3
300	31	9,683	-31.0	-43.2	08	8.5
250	31	10,949	-41.2		07	11.3
200	31	12,424	-53.9		07	14.7
175	31	13,267	-61.1		07	17.1
150	31	14,207	-68.8		07	18.4
125	31	15,277	-76.3		07	18.8
100	31	16,553	-76.5		08	13.4
80	31	17,862	-69.2		08	8.4
70	31	18,663	-66.5		08	6.5
60	31	19,600	-63.7		08	6.3
50	31	20,726	-60.8		09	6.5
40	31	22,123	-57.9		09	11.3
30	30	23,951	-54.4		09	22.1
25	30	25,124	-52.1		09	29.3
20	30	26,580	-48.2		09	34.3
15	26	28,489	-44.1		09	36.3
10	22	31,232	-39.2		09	41.2
7	11	33,671	-37.2			

KOTZEBUE, ALASKA — 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	10.9	8.5	29	2.6
1000	31	85			27	2.6
950	31	509	7.9	4.1	25	3.2
900	31	955	5.8	2.2	24	3.7
850	31	1,422	3.5	-.7	23	4.9
800	31	1,913	1.2	-3.8	24	4.9
750	31	2,430	-1.2	-7.1	24	5.7
700	31	2,978	-4.1	-10.7	25	5.7
650	31	3,555	-7.2	-14.9	25	6.8
600	31	4,179	-11.1	-18.6	25	7.3
550	31	4,838	-15.4	-23.2	25	7.0
500	31	5,557	-20.0	-27.1	26	8.3
450	31	6,324	-25.6	-32.6	26	8.4
400	31	7,173	-32.0	-39.0	26	9.1
350	31	8,103	-38.4	-43.7	27	10.7
300	31	9,148	-44.7		27	12.3
250	31	10,353	-49.7		28	13.7
200	31	11,814	-48.1		28	11.7
175	31	12,697	-47.1		28	10.8
150	31	13,717	-47.4		29	9.3
125	31	14,922	-47.7		29	7.0
100	31	16,395	-47.6		29	5.5
80	31	17,872	-46.8		30	3.9
70	31	18,757	-46.3		31	2.3
60	31	19,784	-45.7		33	1.8
50	31	20,999	-45.1		03	1.8
40	30	22,493	-44.2		05	3.7
30	28	24,418	-42.9		07	4.6
25	28	25,651	-41.7		07	5.3
20	27	27,168	-39.8		08	6.6
15	22	29,138	-36.6		09	6.9
10	17	31,977	-31.3		08	6.9
7	6	34,539	-25.9			

KWAJALEIN, MARSHALL IS. — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	27.1	24.1	10	2.8
1000	31	86	26.5	23.8	10	3.2
950	31	541	23.5	21.4	11	3.6
900	31	1,011	20.7	17.7	10	4.0
850	31	1,505	18.3	15.2	10	4.9
800	31	2,022	15.7	11.9	10	5.6
750	31	2,568	12.8	8.4	10	6.5
700	31	3,148	9.7	4.4	10	7.2
650	31	3,755	6.2	.8	10	7.5
600	31	4,410	2.4	-2.8	10	7.7
550	31	5,111	-1.4	-8.0	09	7.4
500	31	5,867	-5.8	-12.4	09	6.9
450	31	6,679	-10.5	-18.5	09	5.9
400	31	7,583	-15.9	-25.0	09	5.2
350	31	8,572	-23.0	-32.2	09	5.2
300	31	9,688	-31.4	-40.6	09	4.9
250	31	10,951	-41.7		08	5.2
200	31	12,421	-54.3		05	4.7
175	31	13,258	-61.3		03	5.2
150	31	14,202	-69.0		02	4.4
125	31	15,274	-76.7		34	2.3
100	28	16,540	-77.9		06	3.1
80	25	17,841	-71.3		09	6.9
70	24	18,634	-68.0		08	7.2
60	23	19,568	-64.3		08	7.0
50	23	20,690	-61.7		08	9.1
40	22	22,081	-58.7		09	12.9
30	22	23,907	-55.0		09	20.3
25	21	25,074	-53.1		09	26.9
20	20	26,520	-50.2		09	32.5
15	20	28,417	-45.9		09	36.8
10	19	31,144	-41.5		09	39.3
7	14	33,586	-37.4		09	28.9
5	9	35,905	-34.0			
4	5	37,497	-32.4			

LAKE CHARLES, LA. — 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	23.3	22.1	12	.5
1000	31	155	24.5	21.8	19	2.2
950	31	604	21.9	18.3	21	5.1
900	31	1,073	19.3	12.6	21	4.8
850	31	1,564	16.9	7.8	22	5.1
800	31	2,079	14.1	3.6	23	3.4
750	31	2,618	10.8	.9	24	2.5
700	31	3,193	7.2	-1.7	25	2.6
650	31	3,796	3.8	-5.2	28	2.6
600	31	4,446	.1	-8.6	30	2.5
550	31	5,135	-3.6	-12.4	31	2.4
500	31	5,889	-7.3	-21.0	33	2.8
450	31	6,700	-12.5	-27.4	35	3.7
400	31	7,592	-18.7	-32.0	01	5.2
350	31	8,573	-25.9	-39.6	36	6.3
300	31	9,671	-34.0	-47.7	01	7.8
250	31	10,922	-43.7		01	8.5
200	31	12,384	-54.7		02	10.8
175	31	13,227	-60.3		03	11.5
150	30	14,177	-65.3		03	11.0
125	29	15,274	-69.9		04	9.0
100	29	16,602	-68.9		05	5.8
80	29	17,950	-64.7		08	6.8
70	29	18,768	-62.4		08	8.5
60	29	19,725	-59.5		09	10.5
50	29	20,872	-56.6		09	11.8
40	29	22,295	-54.1		09	13.0
30	29	24,154	-50.7		09	14.7
25	29	25,345	-48.9		09	15.1
20	28	26,817	-46.5		09	15.5
15	28	28,740	-43.2		08	16.6
10	25	31,492	-39.2		09	20.9
7	20	33,944	-35.8		09	22.3
5	6	36,261	-34.7			

LANDER, WYO. — 833 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,696	14.5	7.1	25	2.0
1000	31	115				
950	31	559				
900	31	1,027				
850	31	1,521				
800	31	2,038	17.1	3.9	30	1.0
750	31	2,586	14.8	.1	28	1.8
700	31	3,167	11.1	-4.1	28	4.3
650	31	3,778	6.3	-7.3	29	6.5
600	31	4,432	.9	-11.1	29	7.9
550	31	5,115	-4.1	-17.5	28	9.2
500	31	5,870	-9.1	-23.4	28	10.0
450	31	6,673	-14.7	-28.6	28	10.7
400	31	7,560	-20.9	-34.6	28	13.8
350	31	8,533	-28.1	-40.0	28	17.2
300	31	9,621	-36.0	-47.4	28	21.6
250	31	10,862	-45.0		27	27.5
200	31	12,322	-54.5		27	32.9
175	31	13,168	-59.1		27	30.4
150	31	14,125	-63.0		27	25.1
125	31	15,239	-65.2		28	14.1
100	31	16,596	-64.9		27	6.7
80	30	17,961	-61.3		31	1.3
70	30	18,793	-58.9		06	1.2
60	30	19,766	-56.8		08	3.5
50	30	20,926	-54.6		09	5.4
40	30	22,363	-51.7		09	6.8
30	30	24,242	-48.9		09	9.6
25	30	25,444	-47.0		09	10.8
20	29	26,927	-44.5		09	12.2
15	21	28,861	-41.0		09	13.6
10	5	31,598	-36.9			
7						
5						
4						
3						

* LIHUE KAJAI, HAWAII — 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	24.4	20.8	06	4.6
1000	31	149	23.7	20.5	07	6.1
950	31	593	20.4	18.7	07	7.9
900	31	1,063	17.2	14.8	08	8.1
850	31	1,550	14.2	12.1	08	7.5
800	31	2,061	12.3	5.2	08	7.1
750	31	2,595	10.7	-3.0	09	5.1
700	31	3,174	8.2	-8.6	09	3.7
650	31	3,775	4.7	-11.8	08	2.8
600	31	4,430	1.3	-15.4	09	2.0
550	31	5,114	-2.9	-19.8	05	.9
500	31	5,874	-7.5	-23.8	34	.9
450	31	6,683	-12.7	-29.6	33	1.5
400	31	7,576	-18.8	-34.8	31	3.0
350	31	8,557	-26.2	-41.6	30	5.5
300	31	9,652	-34.9	-49.3	30	8.3
250	31	10,897	-45.1		29	11.0
200	31	12,348	-56.7		29	15.6
175	30	13,181	-63.0		29	17.1
150	30	14,116	-68.7		28	17.1
125	30	15,200	-70.1		28	11.5
100	30	16,530	-69.0		25	2.7
80	28	17,868	-67.4		09	5.5
70	27	18,675	-65.2		09	9.6
60	27	19,618	-62.6		09	13.1
50	27	20,750	-59.8		09	15.4
40	26	22,156	-56.2		09	17.9
30	26	24,000	-52.7		09	20.5
25	26	25,181	-50.8		09	20.9
20	26	26,641	-48.4		09	20.4
15	26	28,549	-44.7		09	21.6
10	23	31,274	-41.9		09	21.7
7	17	33,699	-39.2		09	24.8
5	14	36,017	-36.1		09	27.7
4	12	37,563	-34.1		09	33.1
3	12	39,584	-31.9			

LITTLE ROCK, ARK. — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	21.2	18.6	23	1.6
1000	31	146	21.6	18.6	23	2.1
950	31	593	21.6	16.2	26	4.3
900	31	1,062	19.1	13.2	26	4.2
850	31	1,551	16.1	9.5	27	3.7
800	31	2,065	13.3	4.5	28	3.8
750	31	2,603	10.3	1.1	29	3.8
700	31	3,178	7.0	-2.9	30	4.6
650	31	3,780	3.6	-7.3	31	4.8
600	31	4,430	.0	-12.8	30	5.4
550	31	5,115	-3.7	-17.1	31	5.6
500	31	5,871	-7.9	-21.4	31	7.2
450	31	6,675	-13.2	-26.2	32	8.5
400	31	7,571	-19.2	-31.9	32	10.4
350	30	8,550	-25.9	-39.2	32	11.4
300	30	9,647	-34.2	-46.7	32	12.5
250	30	10,898	-43.9		33	14.2
200	30	12,362	-54.6		33	17.8
175	30	13,207	-59.7		33	16.6
150	30	14,160	-64.5		33	14.6
125	30	15,264	-67.5		34	10.5
100	30	16,611	-66.5		01	4.1
80	30	17,971	-63.0		04	4.0
70	30	18,797	-60.4		06	5.0
60	30	19,764	-58.2		08	6.4
50	30	20,917	-56.2		09	8.0
40	30	22,343	-53.8		09	9.0
30	30	24,206	-50.1		09	11.2
25	30	25,402	-48.1		09	12.3
20	28	26,680	-45.9		09	13.4
15	26	28,808	-43.5		09	14.8
10	19	31,562	-38.8		09	17.9
7	10	34,038	-35.0			

MCGRATH, ALASKA — 1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	10.9	8.0	23	1.8
1000	31	113			26	2.0
950	31	543	11.0	5.9	25	3.8
900	31	992	8.5	3.8	24	4.8
850	31	1,463	6.0	1.0	23	5.6
800	31	1,957	3.0	-1.3	23	6.0
750	31	2,476	.0	-5.1	24	6.2
700	31	3,028	-2.9	-9.2	24	6.1
650	31	3,608	-6.2	-13.7	25	6.1
600	31	4,235	-10.0	-17.5	25	6.1
550	31	4,896	-14.0	-22.2	25	6.8
500	31	5,618	-18.5	-28.0	26	8.1
450	31	6,389	-23.6	-32.0	26	9.0
400	31	7,248	-29.7	-36.7	27	10.0
350	31	8,186	-36.7	-41.5	27	12.3
300	31	9,236	-44.4		27	13.8
250	31	10,438	-51.0		28	15.4
200	31	11,880	-51.8		29	12.9
175	31	12,751	-49.8		29	10.6
150	31	13,759	-49.7		29	9.6
125	31	14,952	-49.7		29	7.8
100	31	16,411	-49.7		30	4.7
80	31	17,875	-48.7		33	2.9
70	31	18,753	-48.4		34	2.5
60	31	19,770	-47.5		01	2.1
50	30	20,980	-46.8		04	2.1
40	30	22,462	-45.7		06	3.0
30	29	24,386	-44.1		08	4.6
25	28	25,614	-42.7		07	5.9
20	26	27,124	-41.1		08	7.1
15	23	29,108	-37.8		08	7.2
10	22	31,933	-33.0		07	9.3
7	10	34,470	-29.6			

+ MAJURO, MARSHALL IS. — 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	28.7	24.6	09	2.2
1000	30	90	27.2	21.8	10	2.9
950	30	536	23.6	19.0	11	4.2
900	30	1,015	21.0	15.7	11	5.7
850	30	1,508	18.3	12.9	10	6.0
800	30	2,027	15.6	9.7	10	6.1
750	30	2,568	12.8	6.3	10	6.8
700	29	3,151	9.8	2.6	10	7.4
650	29	3,759	6.5	-1.5	10	7.7
600	29	4,417	2.7	-5.4	10	8.4
550	28	5,110	-1.1	-10.1	10	7.5
500	28	5,873	-5.0	-15.7	09	7.2
450	28	6,693	-9.6	-21.9	09	6.2
400	28	7,597	-15.0	-27.1	09	5.5
350	27	8,595	-21.5	-34.1	09	6.0
300	27	9,713	-29.9	-42.7	09	6.5
250	26	10,985	-40.2	-51.5	09	6.2
200	26	12,468	-52.6		07	5.2
175	26	13,317	-59.6		05	4.2
150	26	14,265	-67.2		01	3.4
125	26	15,344	-74.5		36	1.0
100	26	16,630	-76.4		34	.4
80	26	17,936	-70.4		09	5.4
70	25	18,734	-67.0		10	3.3
60	24	19,675	-62.9		09	3.1
50	24	20,807	-59.8		10	4.6
40	24	22,209	-57.3		09	6.7
30	23	24,050	-52.9		09	18.5
25	23	25,231	-50.6		09	26.9
20	23	26,696	-47.3		09	31.3
15	23	28,615	-43.3		09	34.8
10	16	31,376	-38.5		09	36.4
7	6	33,851	-33.4			

+ MARCUS IS., N. PACIFIC — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	9	28.4	24.6	12	5.2
1000	30	92	27.1	22.8	11	5.7
950	30	545	22.8	18.5	11	7.9
900	30	1,014	19.9	14.8	11	7.7
850	30	1,506	17.3	11.4	11	7.2
800	30	2,023	14.8	7.8	11	7.0
750	30	2,567	12.3	3.8	11	6.7
700	30	3,145	9.5	-.3	10	6.2
650	30	3,755	6.1	-4.3	10	6.1
600	30	4,409	2.4	-8.8	09	6.1
550	30	5,107	-1.5	-13.0	10	5.6
500	30	5,862	-5.9	-17.7	10	5.7
450	30	6,678	-10.7	-23.9	10	5.3
400	30	7,578	-16.4	-29.2	09	5.1
350	30	8,569	-23.2	-36.8	08	4.1
300	30	9,680	-31.4	-45.2	07	3.8
250	29	10,942	-41.5		05	4.4
200	29	12,415	-53.8		04	6.3
175	29	13,260	-60.5		03	8.2
150	29	14,204	-67.0		03	10.1
125	29	15,290	-71.8		05	10.5
100	29	16,598	-72.4		06	11.6
80	29	17,922	-68.3		07	13.1
70	29	18,729	-64.9		08	14.9
60	28	19,674	-61.4		09	15.6
50	27	20,813	-58.0		09	15.8
40	27	22,229	-55.0		09	17.7
30	27	24,084	-50.7		09	19.8
25	27	25,278	-48.2		09	20.3
20	27	26,756	-45.9		09	20.7
15	27	28,682	-43.0		09	20.5
10	26	31,435	-39.7		09	20.0
7	12	33,882	-38.6			
5						

* MEDFORD, OREG. — 970 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	16.0	8.9	32	.6
1000	31	139				
950	31	582	17.8	9.1	30	1.5
900	31	1,041	16.9	7.3	30	1.5
850	31	1,527	15.4	4.5	35	.2
800	31	2,040	14.0	-.5	20	1.1
750	31	2,584	11.2	-3.9	22	5.0
700	31	3,155	7.6	-8.7	22	7.4
650	31	3,757	3.9	-14.1	22	8.5
600	31	4,406	-.2	-18.1	23	9.4
550	31	5,090	-4.5	-23.4	23	10.4
500	31	5,840	-9.6	-28.1	24	12.2
450	31	6,638	-15.7	-32.4	24	13.3
400	31	7,523	-22.2	-37.9	24	15.5
350	31	8,490	-29.6	-43.2	24	16.9
300	31	9,570	-38.0	-50.5	24	19.6
250	31	10,801	-47.2		24	23.4
200	30	12,247	-55.5		24	26.3
175	30	13,093	-57.9		24	26.2
150	30	14,060	-59.7		24	23.1
125	30	15,195	-61.5		24	15.8
100	30	16,576	-62.1		23	8.4
80	29	17,960	-60.0		22	2.7
70	29	18,795	-58.6		14	1.7
60	29	19,766	-57.0		10	2.9
50	29	20,925	-55.0		09	4.7
40	29	22,358	-52.6		09	5.8
30	29	24,229	-49.4		09	9.6
25	28	25,430	-47.5		09	11.1
20	28	26,912	-45.2		09	12.4
15	25	28,847	-41.5		09	13.8
10	22	31,622	-36.2		09	17.4
7	21	34,123	-31.3		09	19.1
5	17	36,518	-26.9		09	20.8

MERIDA, MEXICO — 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	22.9	22.3	09	2.7
1000	31	157	24.5	23.3	10	6.2
950	31	602	23.2	18.4	11	8.5
900	31	1,079	20.8	13.3	11	8.6
850	31	1,572	18.1	8.3	10	8.2
800	31	2,089	15.1	2.9	10	7.3
750	31	2,630	11.9	-2.0	10	7.7
700	31	3,207	8.4	-5.5	10	7.8
650	31	3,809	4.8	-8.9	11	6.8
600	31	4,464	1.2	-13.9	10	5.7
550	31	5,147	-2.6	-18.7	09	6.0
500	31	5,909	-7.1	-22.6	08	5.4
450	31	6,715	-12.3	-26.7	07	5.4
400	31	7,615	-18.3	-32.7	06	4.8
350	29	8,600	-25.3	-39.8	07	3.4
300	29	9,700	-33.5	-47.0	06	2.1
250	29	10,953	-43.4		33	1.5
200	28	12,417	-55.1		26	3.0
175	28	13,256	-61.4		26	3.8
150	28	14,198	-67.3		31	3.0
125	27	15,286	-70.7		02	3.6
100	27	16,607	-70.1		06	8.9
80	27	17,942	-67.1		08	11.1
70	27	18,751	-64.2		08	12.0
60	26	19,701	-61.4		08	13.0
50	26	20,837	-58.7		08	16.2
40	26	22,253	-54.2		09	17.6
30	25	24,113	-50.0		09	19.0
25	24	25,307	-47.9		08	19.7
20	22	26,783	-46.0		08	20.5
15	21	28,712	-42.7		08	23.9
10	12	31,473	-39.4			

* MIAMI, FLA. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	25.9	22.5	12	2.0
1000	31	163	25.8	22.2	13	4.0
950	31	609	22.5	19.7	13	5.9
900	31	1,084	19.7	15.0	13	4.8
850	31	1,576	17.1	9.6	12	4.1
800	31	2,092	14.4	4.4	12	3.1
750	31	2,630	11.2	.1	14	2.6
700	31	3,208	7.6	-4.7	14	2.3
650	31	3,810	4.2	-9.1	15	2.8
600	31	4,462	.4	-13.9	15	1.6
550	31	5,147	-3.7	-17.7	17	.9
500	31	5,903	-8.3	-23.0	18	.8
450	31	6,707	-13.6	-26.5	36	.2
400	31	7,600	-19.5	-31.1	08	.8
350	31	8,578	-26.6	-38.2	07	1.6
300	31	9,673	-35.0	-46.3	07	2.3
250	31	10,919	-44.7		06	3.7
200	30	12,375	-56.4		06	4.9
175	30	13,210	-62.5		06	6.0
150	29	14,150	-67.4		05	5.0
125	27	15,245	-69.7		05	5.3
100	27	16,573	-69.3		08	5.8
80	27	17,912	-67.1		08	8.2
70	26	18,722	-64.8		08	11.7
60	26	19,669	-61.6		09	14.5
50	25	20,804	-58.5		09	16.4
40	24	22,216	-54.9		10	17.4
30	23	24,071	-51.0		09	16.5
25	23	25,263	-48.7		09	17.4
20	22	26,737	-46.0		09	17.3
15	20	28,654	-44.3		08	16.6
10	16	31,396	-40.4		09	17.7
7	12	33,865	-35.5		09	21.6

* MIDLAND, TEXAS — 917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	21.6	14.5	15	2.5
1000	31	111				
950	31	565				
900	31	1,035	22.6	13.8	16	5.9
850	31	1,532	21.2	10.8	19	9.8
800	31	2,055	18.3	7.9	20	5.0
750	31	2,600	14.7	4.9	16	1.4
700	31	3,185	10.6	.8	09	1.7
650	31	3,791	6.5	-3.1	07	2.2
600	31	4,450	2.2	-7.4	06	2.9
550	31	5,140	-1.9	-13.7	06	3.6
500	31	5,901	-6.2	-19.6	06	3.4
450	31	6,712	-11.1	-25.2	05	3.3
400	31	7,614	-17.0	-30.7	04	3.7
350	31	8,601	-24.2	-37.1	03	4.7
300	31	9,707	-32.5	-43.5	03	6.6
250	31	10,967	-42.3		03	8.5
200	31	12,437	-54.2		03	9.9
175	31	13,280	-60.6		03	11.1
150	30	14,224	-67.2		03	10.6
125	30	15,308	-72.5		03	9.7
100	30	16,618	-71.5		06	7.1
80	30	17,955	-65.9		08	6.6
70	29	18,768	-63.5		08	7.3
60	29	19,721	-61.0		08	8.9
50	29	20,860	-58.6		09	11.9
40	29	22,274	-55.1		09	13.3
30	28	24,129	-51.2		09	14.5
25	27	25,319	-49.6		09	14.8
20	26	26,789	-46.5		09	14.3
15	23	28,711	-44.0		08	14.3
10	21	31,463	-38.8		09	20.6
7	18	33,946	-34.2		09	22.8
5	13	36,311	-29.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1967

Columns in each station table: Standard pressure surface (mb) | No of observations | Dynamic height | Temperature | Dew Point | Resultant Wind: Direction | Resultant Wind: Speed M.p.s

MONTGOMERY, ALA. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	61	21.7	19.9	24	.6
1000	31	158	22.2	19.7	25	1.8
950	31	605	21.9	17.2	27	4.4
900	31	1,075	19.2	13.7	27	4.6
850	31	1,565	16.2	9.5	26	5.0
800	31	2,079	13.3	4.8	26	4.8
750	31	2,617	10.1	1.0	26	5.1
700	31	3,192	6.9	-2.2	26	6.0
650	31	3,794	3.3	-5.8	27	6.4
600	31	4,444	-.2	-10.6	27	7.0
550	31	5,131	-3.8	-16.0	27	6.5
500	31	5,883	-8.1	-22.5	28	6.0
450	31	6,689	-13.1	-27.9	28	6.2
400	31	7,582	-19.1	-33.4	28	6.9
350	31	8,561	-26.2	-40.2	28	7.1
300	31	9,658	-34.5	-46.9	28	7.0
250	31	10,907	-43.9		28	7.6
200	31	12,369	-54.9		30	7.9
175	31	13,211	-60.2		31	7.4
150	31	14,162	-64.4		31	6.6
125	31	15,266	-68.1		33	4.3
100	31	16,609	-66.6		03	1.8
80	31	17,966	-63.9		07	4.4
70	31	18,788	-62.0		08	6.5
60	31	19,747	-59.2		09	8.7
50	31	20,897	-56.4		09	10.4
40	31	22,324	-53.4		09	11.1
30	31	24,189	-50.3		09	12.2
25	31	25,384	-48.6		09	13.3
20	31	26,861	-46.1		09	14.7
15	29	28,785	-43.0		09	14.8
10	12	31,529	-39.9			
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* NANTUCKET, MASS. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	14	18.1	17.8	19	2.0
1000	31	152	19.1	17.5	21	4.5
950	31	591	18.5	14.0	23	5.7
900	31	1,058	16.4	10.2	23	6.1
850	31	1,543	13.8	6.6	23	6.4
800	31	2,052	10.9	2.1	24	7.3
750	31	2,586	8.2	-2.8	24	8.5
700	31	3,155	5.2	-6.0	24	9.[illegible]
650	31	3,751	1.9	-9.2	24	11.4
600	31	4,399	-1.4	-13.4	24	13.1
550	31	5,081	-5.5	-17.8	24	13.2
500	31	5,830	-10.2	-23.0	24	14.9
450	31	6,633	-15.2	-28.4	24	16.5
400	31	7,516	-21.0	-34.0	23	18.0
350	31	8,490	-27.7	-40.1	23	19.4
300	31	9,580	-35.9	-49.0	23	20.8
250	31	10,822	-45.8		24	21.6
200	30	12,274	-55.9		24	21.1
175	29	13,117	-59.6		25	18.9
150	29	14,077	-61.0		25	16.1
125	29	15,209	-61.7		25	12.2
100	29	16,592	-60.5		25	6.9
80	29	17,987	-58.3		19	2.7
70	29	18,829	-56.9		14	2.3
60	29	19,809	-55.3		12	3.7
50	29	20,977	-53.5		10	5.1
40	27	22,420	-51.3		09	7.3
30	24	24,295	-48.6		09	9.3
25	24	25,499	-46.8		09	10.7
20	24	26,985	-44.4		09	12.9
15	22	28,926	-40.5		09	14.4
10	19	31,707	-35.9		09	16.1
7	15	34,211	-31.3		09	17.9
5						

* NASHVILLE, TENN. 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	180	19.1	18.6	20	1.0
1000	31	149				
950	31	595	20.0	15.5	27	3.2
900	31	1,057	17.3	12.6	28	4.9
850	31	1,543	14.2	9.4	28	5.2
800	31	2,054	11.1	5.7	27	6.1
750	31	2,591	8.0	.3	28	6.9
700	31	3,157	5.1	-4.5	27	7.2
650	31	3,758	1.9	-9.2	28	7.2
600	31	4,401	-1.5	-14.8	28	7.5
550	31	5,083	-5.3	-19.3	28	8.3
500	31	5,832	-9.6	-24.4	28	8.8
450	31	6,632	-14.[illegible]	-30.4	29	10.3
400	31	7,521	-20.5	-36.2	29	10.4
350	31	8,495	-27.7	-41.3	28	11.9
300	31	9,586	-35.4	-47.7	29	12.9
250	31	10,831	-44.4		29	14.0
200	31	12,291	-54.4		29	15.6
175	31	13,138	-58.5		30	15.0
150	31	14,100	-61.8		30	11.9
125	31	15,221	-64.2		30	7.8
100	31	16,583	-64.9		30	3.7
80	31	17,956	-61.2		04	2.5
70	31	18,788	-59.2		07	4.3
60	31	19,759	-56.9		08	6.2
50	31	20,919	-54.7		09	7.7
40	31	22,353	-52.6		09	8.5
30	31	24,219	-50.2		08	10.5
25	31	25,415	-48.2		09	12.1
20	31	26,893	-45.7		09	14.1
15	31	28,822	-42.3		09	15.6
10	27	31,591	-37.1		09	17.7
7	26	34,074	-33.3		09	19.9
5	12	36,456	-29.6			

NOME, ALASKA 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	30	5	7.2	4.7	25	1.5
1000	30	88			25	2.3
950	30	509	6.8	4.0	25	2.9
900	30	955	5.6	1.2	24	4.3
850	30	1,421	4.2	-2.1	25	5.0
800	30	1,913	2.1	-5.5	25	5.7
750	30	2,429	-.6	-8.9	25	5.9
700	30	2,982	-3.3	-12.8	26	6.1
650	30	3,558	-6.5	-17.3	26	7.0
600	30	4,186	-10.4	-21.0	27	7.3
550	29	4,839	-14.5	-26.1	27	7.9
500	29	5,562	-19.4	-31.5	27	9.4
450	29	6,330	-24.7	-34.9	28	10.2
400	29	7,185	-31.0	-39.8	28	10.7
350	29	8,120	-37.4	-45.2	28	12.1
300	29	9,171	-43.6		28	14.2
250	29	10,381	-49.1		28	16.4
200	29	11,840	-49.4		28	12.2
175	29	12,718	-48.3		28	11.2
150	28	13,731	-48.3		28	9.3
125	28	14,930	-48.9		29	8.2
100	28	16,395	-49.0		29	6.7
80	28	17,862	-48.2		30	3.9
70	28	18,742	-47.7		30	2.5
60	28	19,763	-47.1		33	2.2
50	28	20,972	-46.4		02	2.0
40	28	22,456	-45.6		05	2.9
30	28	24,379	-44.3		06	4.0
25	28	25,605	-43.0		06	5.1
20	27	27,113	-41.0		07	5.6
15	23	29,084	-38.2		09	6.8
10	16	31,905	-33.5			
7						
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* NORTH PLATTE, NEBR. 920 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	848	15.8	13.0	11	.9
1000	31	128				
950	31	570				
900	31	1,031	17.[illegible]	12.8	16	1.5
850	31	1,522	17.9	9.2	23	3.3
800	31	2,039	15.6	6.1	26	3.9
750	31	2,584	12.5	1.9	28	4.0
700	31	3,160	8.6	-2.4	29	5.0
650	31	3,763	4.3	-5.4	30	6.0
600	31	4,416	-.2	-11.1	30	7.4
550	31	5,102	-4.4	-16.9	30	8.6
500	31	5,852	-9.0	-22.6	31	10.2
450	31	6,658	-14.1	-28.3	30	12.3
400	31	7,545	-20.0	-32.7	30	15.3
350	31	8,522	-26.9	-38.9	30	17.7
300	31	9,616	-35.1	-46.4	30	21.1
250	31	10,862	-44.7		30	25.7
200	31	12,322	-54.5		30	29.5
175	30	13,167	-59.3		30	27.8
150	30	14,123	-63.5		30	24.5
125	30	15,234	-65.7		30	15.5
100	30	16,590	-64.7		31	7.8
80	30	17,963	-61.4		34	3.1
70	30	18,794	-59.4		04	3.0
60	30	19,765	-57.0		06	3.7
50	30	20,925	-54.4		07	5.5
40	30	22,364	-51.7		09	8.1
30	29	24,243	-49.4		09	9.7
25	29	25,442	-47.8		09	10.9
20	28	26,925	-44.8		09	12.5
15	26	28,865	-41.5		09	14.6
10	23	31,650	-36.2		09	18.4
7	19	34,137	-30.8		09	20.7
5	5	36,557	-26.2			

* OAKLAND, CALIF. 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	6	13.8	12.0	30	1.1
1000	31	123	13.0	11.3	28	1.2
950	31	572	19.5	6.4	26	3.2
900	31	1,027	23.4	-.7	29	4.5
850	31	1,524	21.6	-2.9	26	3.3
800	31	2,046	18.5	-4.8	24	4.2
750	31	2,592	14.9	-6.8	23	4.6
700	31	3,174	10.8	-9.0	22	5.0
650	31	3,781	[illegible].5	-11.3	22	5.4
600	31	4,437	1.6	-14.6	21	5.5
550	31	5,124	-3.3	-20.2	22	6.4
500	31	5,878	-8.5	-26.0	23	6.6
450	31	6,682	-14.1	-31.6	23	6.8
400	31	7,570	-20.8	-37.4	23	8.1
350	31	8,543	-28.1	-43.1	23	9.6
300	31	9,630	-36.6	-49.3	23	13.1
250	31	10,869	-45.5		22	17.0
200	31	12,325	-54.9		22	20.7
175	31	13,170	-59.3		22	20.6
150	31	14,126	-63.2		22	17.6
125	31	15,237	-66.5		23	12.2
100	28	16,591	-66.1		21	4.8
80	28	17,955	-62.7		15	2.7
70	28	18,780	-61.0		11	4.0
60	27	19,742	-58.8		10	6.5
50	27	20,893	-56.3		09	6.6
40	27	22,318	-54.0		09	9.4
30	26	24,178	-51.1		09	11.3
25	26	25,369	-49.2		09	12.1
20	25	26,841	-46.9		09	13.3
15	25	28,760	-43.7		09	15.5
10	25	31,515	-39.1		09	17.7
7	23	33,976	-34.3		09	21.3
5	11	36,313	-28.9			

OMAHA, NEBR. 969 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	403	17.1	15.0	22	1.4
1000	31	132				
950	31	571	19.6	14.4	24	3.2
900	31	1,039	18.9	11.4	26	5.4
850	31	1,529	16.0	7.3	28	4.9
800	31	2,042	13.7	.9	29	5.0
750	31	2,578	10.6	-2.7	30	5.5
700	31	3,155	6.9	-6.4	30	6.4
650	31	3,753	3.1	-12.2	31	7.5
600	31	4,404	-.9	-16.9	31	8.8
550	31	5,085	-4.9	-22.3	31	10.5
500	31	5,837	-9.7	-26.6	31	12.0
450	31	6,635	-14.9	-31.0	31	13.8
400	31	7,525	-20.8	-35.3	30	15.8
350	31	8,498	-27.5	-41.3	30	19.5
300	31	9,588	-35.8	-48.5	30	22.9
250	31	10,830	-45.0		30	26.5
200	31	12,288	-54.4		30	28.9
175	31	13,135	-58.0		30	28.7
150	31	14,098	-61.6		30	25.1
125	31	15,219	-63.9		31	17.3
100	31	16,589	-62.7		31	9.4
80	31	17,972	-60.4		34	4.1
70	31	18,806	-58.6		01	3.1
60	31	19,779	-56.3		05	4.0
50	31	20,943	-53.9		08	5.4
40	31	22,382	-51.8		08	6.[illegible]
30	30	24,259	-49.3		09	8.9
25	28	25,457	-47.7		08	9.7
20	28	26,937	-45.4		08	11.7
15	28	28,868	-42.2		08	13.3
10	27	31,639	-37.5		08	16.1
7	21	34,120	-34.2		08	18.2
5	10	36,493	-32.0			

+ PAGO PAGO, AMERICAN SAMOA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	30	5	26.7	22.6	11	4.7
1000	30	116	25.0	20.0	11	5.3
950	30	569	21.1	16.6	10	6.7
900	30	1,031	18.0	13.6	10	7.2
850	30	1,519	15.5	10.2	09	6.3
800	30	2,033	13.8	6.2	07	4.3
750	30	2,578	11.7	1.0	03	2.7
700	30	3,151	9.1	-4.5	01	2.0
650	30	3,761	6.1	-8.7	33	.7
600	30	4,414	2.6	-14.7	30	1.7
550	30	5,106	-1.6	-18.8	28	3.2
500	30	5,866	-6.2	-23.0	27	4.5
450	30	6,682	-11.3	-27.7	27	5.1
400	30	7,578	-17.1	-32.[illegible]	28	6.5
350	30	8,566	-24.0	-39.7	27	9.[illegible]
300	30	9,672	-32.5	-47.4	26	11.6
250	30	10,930	-42.9		26	15.1
200	30	12,396	-54.6		26	16.6
175	30	13,238	-60.9		26	17.2
150	30	14,181	-67.5		26	16.7
125	30	15,262	-73.6		27	13.3
100	28	16,554	-76.4		27	9.7
80	28	17,853	-71.9		27	8.0
70	28	18,647	-67.5		27	6.4
60	28	19,592	-61.5		28	4.9
50	28	20,734	-57.1		30	1.5
40	28	22,159	-53.4		08	2.7
30	28	24,021	-51.0		09	8.4
25	27	25,208	-49.5		09	11.5
20	26	26,681	-46.3		08	13.8
15	26	28,604	-43.4		09	14.8
10	19	31,353	-38.8		09	13.1
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* PEORIA, ILL. 993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	200	16.8	14.1	23	.7
1000	31	137				
950	31	575	18.8	12.7	29	3.4
900	31	1,040	16.1	9.0	30	4.2
850	31	1,524	13.3	4.6	30	5.0
800	31	2,033	10.7	-.3	30	5.7
750	31	2,567	7.8	-5.3	30	6.4
700	31	3,134	5.0	-10.0	31	7.2
650	31	3,728	1.6	-13.6	31	8.5
600	30	4,375	-2.3	-17.6	31	9.4
550	30	5,052	-6.4	-22.7	31	10.3
500	30	5,800	-11.0	-26.8	32	11.1
450	30	6,597	-16.2	-33.1	31	12.8
400	30	7,478	-22.5	-38.0	31	15.5
350	30	8,445	-29.3	-44.0	31	17.5
300	30	9,529	-37.2	-48.3	31	21.2
250	30	10,765	-45.9		31	25.3
200	30	12,223	-53.7		30	25.2
175	30	13,075	-56.8		30	23.3
150	30	14,046	-59.3		31	19.4
125	30	15,183	-60.8		30	11.6
100	30	16,566	-61.2		31	6.9
80	30	17,956	-59.1		34	3.5
70	30	18,795	-57.3		04	2.4
60	30	19,775	-55.5		07	3.7
50	30	20,943	-53.2		08	5.3
40	30	22,387	-51.2		09	7.6
30	30	24,264	-49.2		09	9.8
25	30	25,464	-47.4		09	11.0
20	30	26,948	-44.7		09	12.9
15	29	28,892	-41.1		09	15.5
10	29	31,680	-35.4		09	18.9
7	29	34,181	-31.3		09	20.7
5	10	36,590	-26.9			

* PITTSBURGH, PA. 975 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	359	16.8	14.7	24	.9
1000	31	138				
950	31	582	18.4	13.5	25	2.5
900	31	1,040	16.3	10.4	26	4.6
850	31	1,524	13.0	7.5	26	5.8
800	31	2,031	9.6	4.3	26	6.4
750	31	2,565	6.5	-.9	26	7.8
700	31	3,128	3.3	-5.5	26	8.2
650	31	3,722	.4	-11.9	26	8.2
600	31	4,364	-3.0	-15.5	26	9.2
550	31	5,041	-6.8	-20.6	26	9.4
500	31	5,786	-11.4	-25.8	26	10.3
450	31	6,580	-16.8	-31.5	26	11.1
400	31	7,460	-22.9	-38.6	26	12.7
350	31	8,424	-29.9	-43.8	25	15.0
300	31	9,505	-37.9	-50.5	25	17.7
250	31	10,739	-46.0		25	21.7
200	31	12,197	-53.0		26	23.2
175	31	13,053	-55.5		26	20.6
150	31	14,031	-57.7		26	14.7
125	31	15,175	-59.9		26	11.0
100	31	16,564	-60.2		27	6.9
80	31	17,961	-58.3		21	.6
70	31	18,802	-57.0		10	1.7
60	31	19,780	-55.4		09	3.5
50	31	20,948	-53.[illegible]		09	4.4
40	31	22,389	-51.5		10	5.2
30	30	24,265	-48.9		09	7.0
25	30	25,467	-47.0		09	8.2
20	30	26,952	-44.3		09	10.5
15	29	28,894	-41.1		09	12.8
10	26	31,680	-36.4		09	15.6
7	24	34,175	-31.7		09	16.8
5	13	36,583	-26.5			

+ PONAPE, CAROLINE IS. 1004 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	39	28.8	24.2	10	.7
1000	31	76	28.3	23.3	11	.8
950	31	520	24.1	18.4	13	1.3
900	31	1,002	20.9	15.0	13	2.2
850	31	1,495	18.4	11.6	11	3.2
800	31	2,014	15.7	8.2	10	3.2
750	31	2,559	12.7	4.3	10	4.1
700	31	3,137	9.8	.5	10	5.4
650	31	3,746	6.4	-2.[illegible]	10	6.0
600	31	4,404	2.8	-6.5	10	7.1
550	31	5,099	-.8	-11.0	10	7.5
500	31	5,861	-4.8	-16.9	10	7.4
450	31	6,682	-9.6	-22.4	10	7.2
400	31	7,585	-15.2	-28.1	10	6.8
350	31	8,582	-21.9	-34.8	10	6.9
300	31	9,698	-30.4	-42.8	09	6.2
250	31	10,968	-40.6	-51.1	09	6.8
200	31	12,447	-53.1		07	6.8
175	31	13,294	-60.1		06	7.1
150	31	14,239	-67.7		06	5.3
125	31	15,315	-75.5		06	3.5
100	31	16,593	-77.0		06	3.7
80	31	17,898	-70.1		08	5.7
70	30	18,699	-65.5		09	4.9
60	30	19,639	-63.4		10	4.0
50	29	20,768	-59.9		10	4.1
40	29	22,169	-57.4		09	8.8
30	29	24,001	-53.8		09	19.3
25	29	25,176	-51.6		09	27.3
20	26	26,637	-47.9		09	32.3
15	25	28,553	-44.0		09	35.5
10	23	31,294	-40.1		09	41.6
7	13	33,734	-37.5			
5	5	36,017	-37.8			

PORTLAND, MAINE 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	20	17.4	15.7	23	1.0
1000	31	136	17.6	15.0	24	1.8
950	31	575	17.[illegible]	12.1	26	3.5
900	31	1,038	16.1	8.7	25	4.2
850	31	1,522	13.0	6.1	25	5.8
800	31	2,029	9.7	2.2	24	7.1
750	31	2,556	6.8	-1.4	24	8.4
700	31	3,127	3.8	-5.7	24	9.7
650	31	3,719	.6	-10.1	24	10.7
600	31	4,365	-2.7	-15.4	24	11.9
550	31	5,041	-6.6	-19.2	24	13.7
500	31	5,789	-11.1	-24.9	25	14.7
450	31	6,583	-16.4	-30.3	24	15.8
400	31	7,467	-22.5	-35.7	24	18.1
350	31	[illegible],435	-29.2	-41.0	24	22.0
300	31	9,519	-37.5	-49.3	24	24.7
250	31	10,753	-46.6		24	26.8
200	31	12,203	-55.2		24	26.0
175	31	13,050	-57.6		24	23.4
150	31	14,020	-58.8		24	20.8
125	31	15,164	-59.3		25	14.5
100	31	16,562	-59.0		25	7.8
80	31	17,968	-56.8		22	3.2
70	31	18,814	-55.7		19	1.5
60	31	19,800	-54.3		13	1.8
50	30	20,971	-52.7		11	3.7
40	30	22,417	-50.8		09	5.9
30	30	24,298	-48.8		09	8.9
25	30	25,501	-46.9		09	10.4
20	29	26,986	-44.4		09	11.0
15	29	28,927	-41.0		09	13.7
10	18	31,711	-35.8		09	15.1
7	9	34,256	-30.2			
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* QUILLAYUTE, WASH. 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	58	11.6	10.7	02	.4
1000	31	159	12.2	10.1	36	1.2
950	31	595	11.2	7.1	33	2.3
900	31	1,040	10.8	2.8	29	2.1
850	31	1,515	9.5	-.9	26	2.1
800	31	2,017	7.8	-5.2	25	3.3
750	31	2,546	5.1	-8.8	26	4.7
700	31	3,107	2.6	-13.4	26	6.2
650	31	3,699	-.6	-15.4	25	7.7
600	31	4,338	-4.4	-18.6	25	9.6
550	31	5,010	-9.0	-22.3	24	10.8
500	31	5,749	-13.9	-26.4	24	12.2
450	31	6,537	-19.4	-31.8	24	14.0
400	31	7,406	-25.7	-37.1	24	15.4
350	31	8,359	-32.9	-43.3	24	17.6
300	31	9,425	-41.1	-50.1	24	19.6
250	31	10,639	-50.2		24	19.8
200	30	12,075	-55.2		24	22.3
175	30	12,928	-54.5		24	21.2
150	30	13,916	-54.4		24	18.2
125	29	15,080	-55.5		24	13.6
100	29	16,498	-56.4		24	8.9
80	28	17,919	-55.6		24	4.2
70	28	18,769	-55.0		24	2.5
60	27	19,757	-54.1		19	1.4
50	27	20,930	-52.7		11	1.9
40	26	22,379	-50.9		09	4.9
30	26	24,262	-48.4		09	6.8
25	25	25,467	-46.6		09	7.9
20	24	26,958	-43.9		09	10.0
15	24	28,901	-40.9		08	12.1
10	24	31,687	-35.9		09	13.8
7	19	34,193	-30.8		09	15.3
5	5	36,605	-25.6			

RAPID CITY, S. DAK. 906 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	966	15.3	9.4	32	1.0
1000	31	118				
950	31	558				
900	31	1,023	17.3	9.1	32	.6
850	31	1,514	18.6	6.8	25	1.6
800	31	2,032	16.1	3.4	26	2.7
750	31	2,572	12.5	-.1	27	3.8
700	31	3,153	8.4	-3.9	29	5.9
650	31	3,753	4.1	-7.3	30	8.0
600	31	4,407	-.5	-11.3	29	9.0
550	31	5,088	-5.1	-17.0	29	10.8
500	31	5,840	-10.0	-23.9	29	12.3
450	31	6,639	-15.[illegible]	-30.0	29	13.6
400	31	7,524	-21.6	-35.8	29	14.8
350	31	8,495	-28.9	-42.3	29	18.2
300	31	9,580	-37.0	-48.5	29	23.0
250	31	10,818	-45.9		29	29.2
200	31	12,275	-54.4		29	32.6
175	31	13,123	-57.8		29	29.7
150	31	14,088	-61.1		29	25.0
125	31	15,213	-63.4		29	17.2
100	31	16,587	-62.3		30	9.7
80	31	17,973	-59.4		31	4.7
70	31	18,812	-57.5		36	2.0
60	31	19,790	-56.0		06	2.4
50	31	20,957	-53.5		07	4.8
40	31	22,399	-51.2		08	6.5
30	31	24,281	-48.3		09	8.5
25	29	25,486	-46.4		09	9.3
20	28	26,975	-44.0		09	11.8
15	24	28,921	-41.2		08	11.8
10	10	31,677	-37.4			
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ST CLOUD, MINN. 978 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	316	15.2	13.1	22	.7
1000	31	124				
950	31	564	17.3	11.9	26	2.5
900	31	1,023	15.5	8.4	29	3.8
850	31	1,506	12.4	5.3	31	5.2
800	31	2,013	9.6	-.7	31	6.5
750	31	2,542	7.5	-6.6	30	8.4
700	31	3,112	4.1	-10.5	31	9.9
650	31	3,704	.7	-14.7	31	11.3
600	31	4,348	-3.2	-19.7	31	12.6
550	31	5,023	-7.6	-23.4	31	13.2
500	31	5,766	-12.4	-28.1	30	14.4
450	31	6,550	-17.9	-34.0	31	15.5
400	31	7,432	-24.4	-39.6	30	16.1
350	31	8,390	-31.7	-45.9	30	18.0
300	31	9,463	-39.5	-50.6	30	21.2
250	31	10,688	-47.4		30	24.1
200	31	12,140	-53.4		30	28.6
175	31	12,997	-54.3		30	26.0
150	31	13,980	-56.3		30	22.5
125	31	15,134	-57.7		30	15.7
100	31	16,538	-58.2		31	9.6
80	31	17,947	-56.7		32	4.8
70	31	18,794	-55.8		33	3.2
60	31	19,779	-54.0		02	2.2
50	31	20,954	-52.1		07	3.5
40	31	22,404	-49.8		07	5.7
30	30	24,295	-47.5		09	7.7
25	29	25,499	-46.0		09	8.9
20	29	26,989	-44.0		09	10.4
15	27	28,940	-40.2		08	12.4
10	27	31,729	-36.1		09	15.0
7	17	34,231	-33.0			
5	5	36,570	-32.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST PAUL IS., ALASKA 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	8.1	7.4	21	2.9
1000	31	144	8.0	7.3	22	4.1
950	31	572	8.3	5.9	23	5.6
900	31	1,015	8.1	4.4	22	5.9
850	31	1,487	6.9	1.9	23	6.8
800	31	1,985	5.2	-1.4	23	7.0
750	31	2,510	3.2	-5.7	24	8.0
700	31	3,069	.9	-8.1	25	9.4
650	31	3,659	-1.8	-12.8	25	10.0
600	31	4,296	-5.3	-16.6	25	10.9
550	31	4,968	-9.4	-19.4	26	11.9
500	31	5,706	-14.2	-24.5	26	12.7
450	31	6,495	-19.3	-29.2	26	14.0
400	31	7,367	-24.9	-33.7	26	15.[illegible]
350	31	8,325	-31.7	-39.3	27	16.3
300	31	9,398	-39.8	-41.7	27	19.2
250	31	10,619	-49.2		27	21.3
200	31	12,056	-56.1		27	17.7
175	31	12,907	-54.6		28	14.1
150	31	13,897	-53.6		28	10.7
125	31	15,068	-54.1		28	8.3
100	31	16,499	-54.0		28	6.0
80	31	17,936	-52.7		30	2.9
70	31	18,799	-51.9		31	1.5
60	31	19,798	-50.9		06	1.2
50	31	20,988	-49.7		07	2.2
40	30	22,452	-48.3		07	3.5
30	30	24,354	-46.3		08	5.5
25	28	25,573	-44.6		08	5.8
20	24	27,080	-42.7		08	6.0
15	16	29,028	-40.1		09	7.8
10	6	31,831	-34.8			
7						
5						

SALEM, OREG. 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	11.7	8.7	29	.8
1000	31	153	13.5	9.3	34	1.4
950	31	591	13.8	8.4	01	3.9
900	31	1,044	14.0	6.3	35	2.0
850	31	1,525	12.5	1.2	28	2.1
800	31	2,032	11.0	-4.5	26	3.1
750	31	2,564	8.5	-8.1	25	5.4
700	31	3,135	5.6	-11.3	24	7.6
650	31	3,732	2.4	-15.7	24	9.0
600	31	4,379	-2.0	-18.9	24	10.4
550	31	5,056	-6.4	-23.1	24	11.5
500	31	5,803	-11.3	-27.1	24	13.5
450	31	6,595	-17.2	-31.0	24	15.2
400	31	7,476	-23.6	-37.1	24	17.0
350	31	8,437	-30.8	-43.6	24	19.3
300	31	9,512	-39.1	-50.0	24	21.9
250	30	10,737	-48.5		24	24.6
200	30	12,176	-56.1		24	26.8
175	30	13,023	-56.9		24	25.9
150	30	13,998	-57.7		24	22.8
125	30	15,144	-59.4		24	17.2
100	29	16,540	-59.[illegible]		24	9.3
80	28	17,937	-58.8		23	4.0
70	28	18,776	-57.4		21	1.0
60	28	19,754	-55.3		10	1.8
50	28	20,921	-53.7		10	4.1
40	28	22,363	-51.4		09	5.[illegible]
30	28	24,242	-48.8		09	8.3
25	28	25,445	-46.7		08	10.0
20	28	26,933	-44.2		09	11.3
15	27	28,877	-41.0		09	13.4
10	18	31,657	-36.1		09	16.2
7						
5						

SALT LAKE CITY, UTAH 873 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	18.9	9.3	15	3.1
1000	31	97				
950	31	543				
900	31	1,019				
850	31	1,515	22.7	7.7	15	4.6
800	31	2,041	20.6	3.5	18	3.4
750	31	2,596	16.7	.5	23	2.5
700	31	3,179	12.2	-2.7	26	3.7
650	31	3,793	7.1	-5.2	27	4.1
600	31	4,446	1.6	-9.1	28	4.5
550	31	5,134	-4.1	-13.3	27	5.4
500	31	5,885	-9.5	-18.9	26	6.9
450	31	6,691	-14.0	-25.7	26	8.8
400	31	7,578	-19.9	-32.0	26	11.1
350	31	8,554	-27.0	-38.5	26	13.1
300	31	9,647	-35.1	-45.0	26	17.5
250	31	10,894	-44.2		25	23.3
200	31	12,356	-54.7		25	28.1
175	31	13,200	-60.2		25	26.8
150	31	14,151	-65.0		25	22.5
125	30	15,254	-67.7		26	13.9
100	30	16,595	-67.5		25	5.7
80	30	17,954	-62.9		23	1.3
70	30	18,780	-60.7		13	1.5
60	30	19,745	-58.2		08	3.6
50	30	20,900	-55.5		08	5.6
40	30	22,330	-52.[illegible]		08	7.7
30	29	24,197	-49.9		09	10.1
25	29	25,393	-48.2		09	10.6
20	28	26,871	-46.1		09	12.8
15	28	28,798	-42.4		09	14.6
10	25	31,569	-37.6		09	16.4
7	21	34,049	-33.2		09	18.2
5	12	36,433	-27.6			

SAN DIEGO, CALIF. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	17.6	15.9	31	.7
1000	31	113	18.0	16.1	34	1.5
950	31	559	19.2	11.7	16	.2
900	31	1,023	24.1	5.5	31	.7
850	31	1,522	23.2	3.5	31	1.4
800	31	2,048	20.1	2.4	25	1.2
750	31	2,598	15.9	[illegible].3	17	2.1
700	31	3,182	11.5	-1.2	15	4.0
650	31	3,795	7.0	-5.5	14	4.8
600	31	4,450	2.4	-9.7	13	5.3
550	31	5,145	-2.1	-14.3	15	5.0
500	31	5,900	-6.7	-20.9	15	3.4
450	31	6,709	-12.0	-26.0	17	3.0
400	31	7,608	-18.0	-32.4	18	3.9
350	31	8,593	-24.7	-38.7	19	5.5
300	31	9,696	-33.1	-46.4	19	8.3
250	31	10,953	-42.4		19	13.1
200	31	12,426	-53.8		18	17.1
175	31	13,271	-60.0		18	17.3
150	31	14,219	-66.1		19	15.1
125	31	15,311	-71.0		19	[illegible].4
100	31	16,630	-70.5		14	3.6
80	31	17,963	-66.9		10	5.[illegible]
70	31	18,774	-64.[illegible]		10	7.3
60	31	19,723	-60.8		09	8.5
50	31	20,865	-57.8		10	[illegible].8
40	31	22,282	-54.5		09	10.9
30	31	24,137	-51.5		09	13.0
25	31	25,325	-49.4		09	13.6
20	31	26,795	-46.9		09	14.6
15	31	28,711	-44.3		09	15.4
10	29	31,455	-39.0		09	17.9
7	20	33,920	-34.3		09	19.0
5	5	36,281	-29.9			

* SAN JUAN, P. R. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	26.2	23.1	10	4.0
1000	31	159	25.1	21.8	09	7.8
950	31	601	21.8	18.6	09	10.6
900	31	1,077	18.7	15.0	09	11.1
850	31	1,566	15.[illegible]	11.0	09	11.0
800	31	2,080	13.5	5.7	09	10.4
750	31	2,613	11.2	-1.5	09	10.6
700	31	[illegible],195	8.0	-6.2	09	10.0
650	31	3,796	4.2	-10.2	10	8.9
600	31	4,449	.4	-15.1	10	8.4
550	31	5,136	-3.1	-19.2	09	6.6
500	31	5,892	-7.3	-24.4	10	5.5
450	31	6,697	-12.6	-30.2	11	4.2
400	31	7,594	-18.9	-36.6	11	2.5
350	31	[illegible],574	-26.0	-42.6	18	1.6
300	31	9,671	-34.5	-49.6	23	3.4
250	31	10,919	-44.4		24	6.9
200	31	12,376	-56.1		25	8.6
175	31	13,212	-62.0		26	8.6
150	30	14,155	-66.7		26	7.4
125	30	15,249	-69.4		24	3.5
100	30	16,573	-71.2		09	2.8
80	30	17,902	-67.7		08	9.6
70	30	18,710	-65.2		09	12.0
60	30	19,654	-62.3		09	14.5
50	30	20,787	-59.5		09	15.9
40	30	22,194	-55.9		09	17.0
30	30	24,042	-51.8		09	19.7
25	28	25,231	-49.7		09	21.3
20	27	26,702	-46.[illegible]		09	24.6
15	27	28,623	-43.3		09	27.2
10	25	31,377	-39.4		09	28.7
7	20	33,827	-36.4		09	30.5
5	7	36,107	-32.8			

SAN NICOLAS, CALIF. 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	174	14.0	12.6	30	1.5
1000	31	113				
950	31	551	20.3	6.3	28	.4
900	31	1,022	24.6	3.2	30	1.0
850	31	1,521	23.0	3.0	30	[illegible].1
800	31	2,046	19.8	.2	14	.6
750	31	2,598	15.9	-1.8	14	1.9
700	31	3,179	11.7	-4.9	13	3.0
650	31	3,794	7.2	-8.2	13	4.2
600	31	4,447	2.6	-13.1	13	4.6
550	31	5,145	-2.2	-16.8	14	4.1
500	31	5,895	-7.1	-21.1	15	[illegible].7
450	31	6,708	-12.6	-26.8	17	3.2
400	31	7,596	-18.9	-33.0	19	4.2
350	31	8,577	-26.2	-39.7	20	6.0
300	31	9,673	-34.4	-47.4	20	8.[illegible]
250	31	10,923	-43.7	-55.8	19	13.2
200	31	12,388	-54.3	-65.7	19	17.[illegible]
175	31	13,232	-60.2	-70.8	19	18.3
150	31	14,181	-66.0	-75.7	19	15.1
125	31	15,274	-70.2		20	11.0
100	31	16,601	-69.3		14	[illegible].0
80	31	17,944	-65.7		10	6.3
70	31	18,760	-63.3		10	7.0
60	31	19,714	-60.4		09	9.4
50	31	20,859	-57.6		10	[illegible].6
40	30	22,276	-54.[illegible]		09	10.5
30	30	24,130	-51.4		09	13.1
25	30	25,319	-49.9		09	13.9
20	30	26,787	-47.2		09	13.6
15	28	28,700	-44.2		09	17.0
10	27	31,445	-39.1		08	17.8
7	22	33,914	-33.3		09	23.4
5	13	36,241	-30.2		09	25.9
4	8	37,630	-27.7			
3	5	39,899	-25.0			

* SAULT STE MARIE, MICH. 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	221	12.7	11.9	01	.3
1000	31	118				
950	31	549	14.5	9.9	27	3.6
900	31	1,007	12.5	7.1	28	5.6
850	31	1,485	9.9	3.0	28	6.2
800	31	1,987	7.1	-.3	28	6.8
750	31	2,511	4.6	-4.6	28	7.7
700	31	3,075	1.6	-8.0	28	8.6
650	31	3,664	-1.6	-13.8	28	9.0
600	31	4,302	-5.3	-18.3	28	9.0
550	31	4,977	-9.4	-22.5	28	9.7
500	31	5,711	-13.9	-27.8	28	9.9
450	31	6,498	-19.5	-32.3	28	[illegible].7
400	31	7,368	-25.9	-38.9	29	10.6
350	31	8,321	-33.[illegible]	-45.2	28	11.7
300	31	9,387	-40.9	-50.2	28	12.2
250	31	10,604	-48.9		29	13.9
200	31	12,054	-52.0		29	15.6
175	31	12,919	-51.8		29	13.9
150	31	13,916	-52.4		29	12.0
125	31	15,088	-54.6		28	9.9
100	31	16,512	-55.2		28	7.2
80	31	17,939	-54.1		29	3.6
70	31	18,796	-53.1		29	1.7
60	31	19,793	-51.9		04	1.0
50	31	20,977	-50.6		08	2.6
40	31	22,436	-49.1		09	5.2
30	31	24,333	-46.8		09	8.0
25	31	25,545	-45.3		09	[illegible].3
20	30	27,039	-42.9		09	10.8
15	30	28,994	-39.3		09	12.8
10	28	31,798	-34.7		09	16.5
7	22	34,308	-29.7		09	17.3
5	9	36,734	-25.2			
4						
3						

SHEMYA, ALASKA 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	38	7.5	7.3	18	2.8
1000	31	101	7.7	7.6	20	4.7
950	31	529	9.0	8.0	21	7.9
900	31	974	9.4	5.4	22	8.7
850	31	1,448	8.3	3.4	22	8.8
800	31	1,948	6.8	-1.1	22	9.1
750	31	2,476	4.4	-4.7	22	10.5
700	31	3,036	1.7	-6.1	22	11.2
650	31	3,629	-1.2	-10.0	23	11.9
600	30	4,272	-4.4	-13.9	23	11.7
550	30	4,948	-8.2	-18.2	23	13.9
500	30	5,688	-12.9	-22.8	23	14.9
450	30	6,480	-17.8	-26.3	23	16.5
400	30	7,357	-23.9	-33.6	23	14.9
350	30	8,318	-31.1	-40.9	23	16.2
300	30	9,393	-39.1	-47.1	24	17.4
250	30	10,620	-47.4		24	15.5
200	29	12,075	-53.3		25	13.9
175	29	12,934	-53.7		25	13.2
150	29	13,924	-53.8		25	10.2
125	28	15,092	-54.4		26	8.0
100	28	16,518	-55.1		26	4.8
80	28	17,947	-54.0		25	1.4
70	28	18,804	-53.5		15	.2
60	28	19,798	-52.8		07	1.7
50	27	20,975	-51.8		08	3.6
40	27	22,426	-50.2		09	5.8
30	26	24,318	-47.8		08	7.7
25	26	25,526	-46.3		08	8.4
20	26	27,015	-44.4		09	9.5
15	25	28,959	-41.7		08	9.9
10	21	31,731	-38.1		09	12.[illegible]
7	18	34,203	-34.6		09	15.5
5	7	36,560	-33.1			
4						
3						

* SHREVEPORT, LA. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	21.5	19.8	17	1.8
1000	31	147	21.6	19.6	18	2.9
950	31	602	21.6	15.9	23	7.0
900	31	1,062	19.5	12.8	24	5.8
850	31	1,553	16.6	10.1	25	4.8
800	31	2,068	13.7	6.3	27	3.3
750	31	2,611	10.3	2.4	28	3.8
700	31	3,181	6.8	-1.6	29	3.5
650	31	3,787	3.6	-6.5	30	3.8
600	31	4,433	.2	-12.4	30	4.2
550	31	5,124	-3.3	-18.9	31	3.9
500	31	5,875	-7.4	-23.6	32	4.9
450	31	6,685	-12.4	-27.7	35	5.3
400	31	7,578	-18.6	-32.8	35	6.9
350	31	8,559	-25.9	-38.6	35	8.4
300	31	9,657	-34.3	-45.8	35	9.7
250	31	10,906	-44.0		36	11.9
200	30	12,366	-55.0		36	15.1
175	30	13,208	-60.6		36	15.8
150	30	14,156	-65.3		36	13.7
125	30	15,253	-69.7		01	9.8
100	30	16,582	-68.4		03	4.9
80	30	17,935	-63.9		07	5.6
70	30	18,756	-61.9		08	7.1
60	30	19,716	-59.1		08	8.8
50	30	20,865	-56.6		09	10.1
40	29	22,289	-54.0		09	11.3
30	29	24,147	-51.0		09	13.2
25	28	25,335	-49.5		09	13.8
20	28	26,804	-47.0		09	13.9
15	25	28,731	-43.3		08	16.2
10	24	31,485	-38.5		09	19.1
7	17	33,964	-34.0		09	21.4
5	5	36,297	-31.2			
4						
3						

SPOKANE, WASH. 932 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	717	14.6	4.1	18	2.9
1000	31	114				
950	31	554				
900	31	1,017	18.8	1.7	21	3.9
850	31	1,506	17.0	-1.3	24	4.8
800	31	2,020	13.1	-3.8	24	6.4
750	31	2,549	9.0	-6.1	24	7.8
700	31	3,126	5.1	-10.6	25	8.8
650	31	3,719	1.5	-14.4	25	10.6
600	31	4,367	-2.7	-17.8	25	13.0
550	31	5,040	-7.3	-21.4	25	13.3
500	31	5,788	-12.2	-26.[illegible]	25	14.5
450	31	6,577	-17.9	-31.1	25	16.1
400	31	7,458	-24.2	-37.6	25	18.2
350	31	8,417	-31.4	-43.2	25	20.3
300	31	9,490	-39.9	-49.9	25	23.0
250	31	10,710	-49.0		25	25.4
200	30	12,143	-55.6		25	28.7
175	30	12,993	-55.6		25	27.5
150	30	13,975	-56.1		25	22.6
125	30	15,129	-57.9		25	16.4
100	30	16,534	-57.9		26	9.5
80	30	17,942	-56.9		25	4.9
70	30	18,788	-55.8		25	1.8
60	30	19,773	-54.0		14	1.3
50	30	20,948	-52.2		08	2.5
40	29	22,396	-50.6		08	4.6
30	28	24,282	-47.6		09	6.7
25	28	25,491	-45.8		09	9.0
20	28	26,985	-43.2		09	9.6
15	26	28,934	-39.9		09	11.2
10	24	31,737	-34.7		09	14.0
7	17	34,244	-30.3		09	14.6
5	8	36,646	-25.7			
4						
3						

SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	26.5	23.5	08	4.5
1000	31	127	25.6	22.3	08	6.0
950	31	587	22.2	19.9	09	9.0
900	31	1,048	19.5	15.4	09	11.0
850	31	1,539	16.6	11.0	10	12.4
800	31	2,054	14.0	4.9	10	11.6
750	31	2,597	11.1	-1.2	10	11.3
700	31	3,170	7.9	-5.2	10	11.6
650	31	3,783	4.7	-10.7	10	10.3
600	31	4,427	1.0	-14.5	10	9.3
550	31	5,115	-2.9	-18.8	10	8.3
500	31	5,871	-7.3	-23.2	11	7.4
450	31	6,684	-12.4	-27.3	10	6.8
400	31	7,575	-18.7	-32.6	08	5.4
350	31	8,558	-25.6	-39.9	06	4.6
300	31	9,657	-34.0	-47.0	03	3.9
250	31	10,908	-44.0		36	3.9
200	31	12,367	-56.0		34	5.6
175	31	13,204	-62.6		32	6.2
150	29	14,139	-69.0		32	4.5
125	29	15,221	-71.0		02	2.4
100	29	16,541	-71.4		08	4.2
80	29	17,861	-69.6		08	8.7
70	29	18,663	-66.3		08	11.4
60	29	19,602	-63.3		08	14.0
50	29	20,728	-60.4		09	16.5
40	29	22,126	-57.4		09	19.4
30	29	23,965	-52.0		10	22.1
25	28	25,156	-49.3		09	23.9
20	28	26,626	-47.0		09	25.9
15	28	28,543	-43.9		09	28.7
10	26	31,283	-40.5		09	33.0
7	14	33,715	-38.7			
5						

TAMPA, FLA. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	24.7	22.7	13	1.9
1000	31	164	24.6	21.7	15	2.[illegible]
950	31	609	22.7	18.3	19	4.1
900	31	1,085	19.8	14.3	20	3.8
850	31	1,576	16.9	10.5	21	4.2
800	31	2,092	14.1	6.1	22	3.[illegible]
750	31	2,628	11.1	1.3	22	3.[illegible]
700	31	3,208	7.7	-1.3	23	3.5
650	31	3,810	4.0	-4.8	23	3.8
600	31	4,463	.2	-9.1	24	4.1
550	31	5,150	-3.7	-13.8	25	3.3
500	30	5,904	-8.1	-18.8	25	3.6
450	30	6,712	-13.0	-24.5	25	3.8
400	30	7,605	-18.6	-31.9	26	3.2
350	30	8,587	-25.7	-37.8	26	3.3
300	30	9,685	-34.1	-46.1	24	3.2
250	30	10,936	-44.0		25	3.2
200	30	12,395	-55.6		21	1.9
175	30	13,233	-61.5		21	1.4
150	29	14,176	-66.3		36	1.1
125	29	15,272	-69.1		05	2.8
100	29	16,607	-67.9		08	4.4
80	29	17,958	-64.9		08	7.5
70	29	18,774	-63.3		08	9.8
60	29	19,729	-60.3		09	12.6
50	29	20,874	-57.1		09	14.5
40	28	22,297	-53.5		09	15.1
30	28	24,163	-49.8		09	15.0
25	28	25,361	-47.9		09	16.1
20	27	26,837	-46.0		09	16.3
15	27	28,762	-43.7		09	16.6
10	23	31,527	-38.1		09	19.0
7						
5						

TOPEKA, KANS. 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	269	19.0	16.2	18	.7
1000	31	138				
950	31	580	20.7	15.0	22	3.4
900	31	1,049	19.3	11.7	25	4.1
850	31	1,540	16.8	8.3	26	4.2
800	31	2,055	14.1	5.2	27	4.6
750	31	2,595	11.3	.7	28	4.6
700	31	3,171	7.7	-2.8	29	4.7
650	31	3,771	4.1	-8.4	31	6.0
600	31	4,425	.3	-13.0	31	7.2
550	31	5,107	-3.7	-18.2	32	8.4
500	31	5,866	-8.4	-22.4	31	10.0
450	31	6,671	-13.4	-27.4	31	12.3
400	31	7,565	-19.1	-32.0	31	14.3
350	31	8,545	-26.4	-38.9	31	16.0
300	31	9,641	-34.7	-46.0	31	18.4
250	31	10,890	-44.0		31	21.8
200	31	12,353	-54.1		31	23.5
175	31	13,200	-59.2		31	23.8
150	31	14,155	-63.1		32	21.0
125	31	15,268	-66.0		32	13.5
100	31	16,626	-64.1		33	8.1
80	31	17,999	-61.5		36	4.8
70	31	18,831	-59.1		05	4.3
60	31	19,802	-56.7		08	5.3
50	31	20,964	-54.4		08	6.2
40	31	22,402	-51.8		09	7.4
30	29	24,278	-49.3		09	9.6
25	29	25,478	-47.6		09	11.0
20	28	26,962	-45.3		09	12.7
15	27	28,898	-41.7		09	15.3
10	21	31,669	-37.3		09	16.7
7	11	34,145	-33.9			
5						

TRUK, CAROLINE IS. • 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	28.2	24.5	22	1.4
1000	31	84	27.4	23.3	21	1.1
950	31	534	23.9	18.8	23	1.1
900	31	1,010	21.1	15.0	19	1.0
850	31	1,504	18.6	11.4	13	1.4
800	31	2,023	15.8	8.1	11	1.7
750	31	2,569	12.[illegible]	4.7	11	[illegible].6
700	31	3,146	9.9	.7	11	3.9
650	31	3,760	6.4	-2.3	11	4.8
600	31	4,412	2.7	-6.4	10	5.7
550	31	5,108	-1.1	-10.8	10	5.7
500	31	5,868	-5.0	-17.2	10	5.8
450	31	6,688	-9.9	-22.9	10	5.9
400	31	7,591	-15.2	-29.7	10	6.2
350	31	8,588	-21.9	-36.8	09	5.7
300	31	9,704	-30.4	-44.7	08	5.4
250	31	10,974	-40.7	-52.7	07	7.0
200	31	12,453	-53.4		06	8.5
175	31	13,299	-60.6		05	9.7
150	31	14,243	-68.2		05	10.4
125	31	15,316	-75.[illegible]		06	7.5
100	31	16,591	-77.1		07	[illegible].7
80	31	17,895	-70.1		08	7.0
70	31	18,697	-66.2		09	6.3
60	31	19,637	-63.0		09	5.2
50	31	20,767	-59.9		10	5.3
40	31	22,170	-57.3		09	9.9
30	31	24,004	-53.7		09	20.3
25	29	25,183	-51.1		09	28.3
20	29	26,643	-48.1		09	33.6
15	24	28,559	-44.1		09	37.4
10	20	31,312	-39.6		09	41.6
7	16	33,775	-35.7			
5						

* TUCSON, ARIZ. 925 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	789	24.9	17.7	17	2.2
1000	31	93				
950	31	546				
900	31	1,026	25.3	15.1	19	1.6
850	31	1,527	22.8	12.0	28	1.5
800	31	2,052	19.3	9.7	32	2.2
750	31	2,599	15.4	6.8	35	1.9
700	31	3,187	11.4	3.8	06	1.8
650	31	3,796	7.0	.8	09	2.0
600	31	4,456	2.5	-3.1	11	2.8
550	31	5,145	-2.2	-6.6	12	3.5
500	31	5,906	-6.7	-12.6	13	3.2
450	31	6,715	-11.5	-19.6	13	2.6
400	31	7,618	-16.[illegible]	-26.5	14	2.6
350	31	8,607	-23.8	-33.6	13	3.6
300	31	9,714	-31.[illegible]	-41.4	14	3.7
250	31	10,975	-42.0		15	4.6
200	31	12,444	-54.2		14	5.5
175	31	13,286	-60.9		15	5.7
150	30	14,227	-67.[illegible]		15	5.3
125	30	15,308	-73.2		14	3.7
100	30	16,614	-72.1		10	4.4
80	29	17,945	-67.1		09	5.6
70	28	18,753	-64.9		09	8.1
60	28	19,701	-61.2		09	10.0
50	28	20,843	-57.7		09	11.7
40	28	22,262	-54.4		09	13.0
30	28	24,118	-51.4		09	13.6
25	28	25,308	-49.2		09	13.2
20	27	26,780	-47.0		09	13.5
15	26	28,698	-44.2		09	15.8
10	24	31,448	-38.2		09	18.8
7	17	33,917	-33.5		09	20.8
5	6	36,299	-28.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	* VANDENBERG AFB, CALIF. 1002 MB				Resultant Wind		VICTORIA, TEXAS 1012 MB				Resultant Wind		* WAKE IS., PACIFIC AREA 1012 MB				Resultant Wind	
	No of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	100	12.1	11.9	19	.1	31	33	24.2	22.3	15	1.5	31	5	27.4	24.3	11	3.9
1000	31	119	12.1	11.8	02	.1	31	139	24.2	22.3	17	4.1	31	109	26.4	23.8	10	4.6
950	31	564	19.4	7.7	03	2.8	31	587	22.0	19.8	19	9.1	31	558	22.8	21.0	11	5.5
900	31	1,025	24.4	2.1	04	3.3	31	1,058	20.3	12.5	19	8.4	31	1,032	20.2	17.4	11	5.6
850	31	1,523	22.3	.0	04	2.7	31	1,551	17.9	7.2	19	7.2	31	1,526	17.6	13.8	11	5.0
800	31	2,047	19.0	-2.1	04	1.5	31	2,067	15.1	1.8	19	4.5	31	2,043	14.9	10.7	12	4.1
750	31	2,591	15.3	-3.6	06	1.2	31	2,604	11.8	-1.9	19	2.9	31	2,585	12.2	6.8	12	3.7
700	31	3,178	11.1	-6.0	11	1.1	31	3,185	8.2	-3.5	17	1.6	31	3,165	9.0	2.9	11	3.3
650	31	3,783	6.7	-9.3	13	1.2	31	3,789	4.5	-6.8	12	1.0	31	3,772	5.6	-1.3	10	2.6
600	31	4,444	2.0	-14.3	16	2.6	31	4,441	.8	-9.8	09	.9	31	4,427	1.8	-5.2	10	2.0
550	31	5,131	-2.7	-18.5	17	3.0	31	5,129	-3.2	-14.5	08	1.0	31	5,122	-2.1	-10.4	12	1.0
500	31	5,890	-7.6	-23.4	18	3.2	31	5,885	-7.3	-19.9	07	2.4	31	5,878	-6.4	-13.7	08	.9
450	31	6,695	-13.0	-29.7	20	4.0	31	6,692	-12.2	-26.1	05	4.2	31	6,692	-11.3	-18.4	06	.6
400	31	7,591	-19.4	-35.3	21	5.2	31	7,590	-18.2	-33.1	04	5.6	31	7,591	-17.1	-25.2	28	.7
350	31	8,568	-26.7	-41.2	21	6.6	31	8,573	-25.6	-37.8	04	6.7	31	8,580	-24.1	-32.4	30	2.3
300	31	9,663	-35.0	-48.4	21	9.8	31	9,672	-34.0	-45.6	04	8.0	31	9,687	-32.4	-41.6	29	4.2
250	31	10,909	-44.4		20	14.1	31	10,923	-43.7		04	11.1	31	10,945	-42.8		29	6.2
200	31	12,371	-54.5		20	17.6	31	12,387	-55.1		04	13.5	31	12,411	-55.2		30	9.1
175	31	13,215	-60.0		20	17.8	31	13,228	-61.1		04	14.3	31	13,251	-62.1		29	9.9
150	31	14,164	-65.6		20	16.6	30	14,174	-66.7		05	13.8	31	14,188	-69.1		30	9.5
125	31	15,261	-69.5		21	11.0	30	15,263	-71.4		05	11.4	29	15,262	-74.2		35	5.7
100	30	16,590	-68.7		16	3.1	29	16,580	-70.1		06	8.5	25	16,563	-73.0		06	5.6
80	30	17,936	-65.2		11	4.2	29	17,920	-65.7		08	8.8	25	17,884	-68.9		08	10.5
70	30	18,754	-62.7		10	6.1	29	18,735	-63.2		09	9.2	25	18,686	-66.2		08	12.8
60	30	19,708	-60.1		10	7.6	29	19,687	-60.7		09	10.2	24	19,629	-62.6		09	14.1
50	30	20,854	-57.1		10	8.7	29	20,827	-58.2		09	11.5	23	20,762	-59.8		09	17.3
40	29	22,270	-54.7		09	9.9	29	22,241	-55.1		09	14.1	22	22,166	-56.5		09	18.8
30	29	24,123	-51.4		09	12.2	29	24,093	-51.2		09	15.7	22	24,006	-52.7		09	21.4
25	29	25,311	-49.4		09	12.9	29	25,284	-48.9		09	16.1	22	25,188	-50.4		09	23.4
20	28	26,778	-47.4		09	14.0	29	26,757	-46.5		09	15.3	21	26,648	-48.3		09	24.2
15	27	28,692	-44.8		09	15.7	26	28,683	-43.6		09	16.2	20	28,560	-45.0		09	26.2
10	26	31,434	-39.4		09	18.7	25	31,431	-39.3		08	19.9	16	31,294	-41.3		09	28.8
7	25	33,903	-33.7		09	21.3	14	33,875	-36.9		09	24.5	10	33,715	-39.0			
5	16	36,270	-29.3				5	36,212	-33.9				7	36,047	-36.3			

Standard pressure surface (mb)	* WALLOPS IS., VA. NASA 1017 MB				Resultant Wind		WASHINGTON DULLES INT. AP 1007 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	3	19.9	19.4	23	1.1	31	85	18.7	17.5	28	.2
1000	31	150	21.1	18.4	24	1.9	31	144	19.1	16.9	27	.4
950	31	592	19.8	14.6	26	3.8	31	590	19.5	14.2	27	2.5
900	31	1,060	17.3	10.9	25	3.8	31	1,051	16.9	10.6	28	3.1
850	31	1,546	14.4	7.3	25	5.0	31	1,536	13.9	7.4	27	4.1
800	31	2,057	11.4	3.9	25	5.9	31	2,045	10.9	4.1	27	5.3
750	31	2,589	8.2	.7	25	8.2	31	2,582	7.7	.1	26	7.1
700	31	3,161	5.1	-2.9	25	10.1	31	3,147	4.4	-3.2	25	8.6
650	31	3,761	2.1	-7.9	25	11.3	31	3,748	1.0	-6.7	25	10.2
600	31	4,407	-1.1	-12.1	24	12.1	31	4,387	-2.0	-14.0	25	11.5
550	31	5,088	-4.6	-17.0	24	12.2	31	5,070	-5.3	-19.5	25	12.9
500	31	5,842	-9.0	-22.1	24	13.1	31	5,817	-9.8	-23.4	25	14.0
450	31	6,645	-14.3	-27.4	24	14.6	31	6,620	-14.9	-28.8	24	15.2
400	31	7,535	-20.3	-32.7	24	15.9	31	7,504	-21.0	-34.5	24	15.7
350	31	8,511	-27.3	-39.3	24	17.5	31	8,476	-27.9	-41.2	24	20.0
300	30	9,602	-35.6	-47.8	24	17.5	31	9,566	-36.0	-48.4	25	21.6
250	29	10,843	-45.1		25	17.9	31	10,807	-45.4		25	23.5
200	29	12,299	-55.5		25	19.8	31	12,264	-54.7		25	24.8
175	28	13,138	-59.7		25	18.3	31	13,111	-58.3		25	21.5
150	28	14,095	-62.6		25	13.2	31	14,075	-60.8		25	17.8
125	28	15,214	-64.0		24	8.4	31	15,203	-62.6		25	11.8
100	28	16,584	-62.6		24	4.7	31	16,581	-61.6		25	7.0
80	28	17,966	-60.5		13	2.1	31	17,969	-59.8		20	.7
70	27	18,801	-59.1		10	4.2	31	18,806	-58.1		10	2.0
60	27	19,769	-57.4		10	5.0	31	19,782	-56.3		09	5.1
50	27	20,927	-55.1		10	7.0	31	20,945	-54.1		09	6.5
40	27	22,361	-52.5		10	8.8	31	22,383	-52.0		09	8.7
30	27	24,234	-49.1		09	10.8	31	24,258	-49.2		09	10.4
25	26	25,432	-47.4		09	11.8	31	25,459	-47.3		09	12.2
20	26	26,913	-45.3		09	13.5	31	26,943	-44.8		09	13.3
15	25	28,848	-42.0		09	15.2	30	28,879	-41.6		09	14.1
10	21	31,628	-37.0		09	17.9	24	31,651	-38.0		09	15.6
7	17	34,116	-31.9				17	34,116	-35.4		09	17.9
5							7	36,406	-33.0			

Standard pressure surface (mb)	WINNEMUCCA, NEV. 870 MB						WINSLOW, ARIZ. 853 MB						YAKUTAT, ALASKA 1014 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	1,310	15.0	2.7	14	1.5	31	1,492	19.7	9.2	22	1.3	31	12	9.4	9.1	09	.8
1000	31	108					31	99					31	131	9.8	9.0	09	.4
950	31	558					31	551					31	556	8.2	6.5	16	.9
900	31	1,028					31	1,024					31	1,002	6.0	4.0	18	1.1
850	31	1,513	21.4	4.1	18	1.4	31	1,525	19.9	9.3	21	1.2	31	1,469	3.6	1.6	18	.7
800	31	2,037	19.1	1.3	25	2.7	31	2,050	20.6	8.1	26	2.6	31	1,960	.9	-.7	11	.2
750	31	2,579	15.3	-1.8	26	3.3	31	2,601	17.2	5.5	31	.9	31	2,478	-1.4	-4.2	05	.5
700	31	3,168	10.9	-4.6	23	4.9	31	3,190	12.8	2.8	01	1.2	31	3,025	-3.9	-9.7	03	.6
650	31	3,773	6.2	-8.1	22	7.6	31	3,800	8.0	.5	06	.4	31	3,607	-7.0	-14.7	04	1.7
600	31	4,431	1.0	-11.0	23	9.2	31	4,463	2.8	-2.4	11	.5	31	4,227	-10.6	-19.8	03	2.2
550	31	5,116	-4.0	-16.6	23	10.3	31	5,157	-2.2	-6.7	09	.7	31	4,890	-14.8	-24.4	02	3.0
500	31	5,870	-9.1	-22.9	24	9.9	31	5,913	-7.0	-12.1	10	.5	31	5,606	-19.7	-28.9	02	3.5
450	31	6,668	-14.7	-29.2	24	9.9	31	6,725	-11.8	-19.1	23	1.2	31	6,378	-25.2	-35.5	01	4.0
400	31	7,560	-21.0	-34.9	25	11.7	31	7,622	-17.3	-26.0	24	2.2	31	7,226	-31.2	-40.8	01	4.9
350	31	8,532	-28.2	-41.3	25	14.3	31	8,610	-24.1	-32.4	23	3.6	31	8,159	-38.3	-45.1	01	7.0
300	31	9,619	-36.4	-47.7	24	18.8	31	9,717	-32.2	-41.0	23	5.4	31	9,202	-45.5		36	8.2
250	31	10,859	-45.3		24	23.2	30	10,977	-42.2		23	7.9	31	10,402	-50.6		35	8.6
200	31	12,316	-54.7		24	27.7	30	12,447	-54.4		23	9.8	31	11,854	-50.7		32	8.2
175	31	13,162	-58.8		24	26.7	30	13,289	-60.9		23	10.2	31	12,726	-49.3		32	6.6
150	31	14,120	-62.8		24	22.5	30	14,233	-67.2		24	8.4	31	13,736	-49.5		31	5.5
125	31	15,233	-65.6		25	15.9	30	15,316	-72.9		25	4.8	31	14,930	-49.7		30	5.2
100	30	16,586	-65.4		24	6.4	30	16,624	-71.5		12	2.4	31	16,389	-49.9		29	3.3
80	30	17,956	-62.1		20	1.7	29	17,959	-66.5		10	4.2	31	17,848	-49.5		29	.9
70	30	18,785	-59.9		13	1.9	29	18,771	-63.8		09	5.7	31	18,723	-49.0		36	.2
60	29	19,752	-57.9		09	3.6	29	19,723	-60.6		10	7.4	31	19,736	-48.5		05	1.4
50	28	20,907	-55.6		09	6.4	29	20,864	-58.2		09	8.7	31	20,937	-47.8		07	2.7
40	28	22,339	-52.7		09	7.3	29	22,279	-55.2		09	11.5	31	22,413	-46.7		07	4.0
30	27	24,208	-50.0		09	10.4	29	24,132	-51.3		09	12.7	31	24,327	-45.1		08	5.1
25	27	25,403	-48.2		08	11.1	27	25,321	-49.7		09	12.6	31	25,548	-43.5		08	6.3
20	27	26,682	-45.2		09	12.7	27	26,786	-48.3		09	14.0	31	27,056	-41.3		09	7.3
15	24	28,814	-42.0		09	14.3	24	28,692	-44.8		09	16.6	30	29,021	-38.3		09	7.7
10	14	31,602	-36.7		08	15.2	15	31,430	-39.4				26	31,831	-33.8		08	10.5
7	7	34,086	-32.0										14	34,335	-30.8		08	13.2
5													8	36,779	-26.8			

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1007 MB						YUCCA FLAT, NEV. 882 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	31	17	27.3	24.6	24	1.8	31	1,196	19.1	6.5	30	.4
1000	31	76	26.7	23.8	24	2.7	31	95				
950	31	522	23.3	19.7	25	5.2	31	543				
900	31	1,000	20.5	16.2	25	5.7	31	1,021				
850	31	1,494	17.8	13.0	25	5.6	31	1,520	24.3	6.9	28	.7
800	31	2,011	15.1	10.0	25	4.6	31	2,048	21.3	4.0	20	3.3
750	31	2,552	12.5	6.8	24	3.6	31	2,600	17.2	1.5	20	3.8
700	31	3,134	9.4	3.4	22	2.5	31	3,187	12.5	-.9	20	4.3
650	31	3,740	5.9	.0	20	2.2	31	3,798	7.3	-3.2	18	5.1
600	31	4,398	2.1	-3.6	19	2.3	31	4,456	2.1	-7.7	17	4.4
550	31	5,089	-1.6	-8.3	16	2.0	31	5,145	-2.9	-13.9	18	3.6
500	31	5,852	-5.6	-12.8	13	2.5	31	5,901	-7.9	-20.7	21	3.9
450	31	6,668	-10.1	-18.5	13	3.4	31	6,708	-12.8	-27.2	24	5.6
400	31	7,573	-15.5	-25.2	11	3.5	31	7,601	-18.9	-33.1	24	8.0
350	31	8,568	-22.4	-33.1	09	5.1	31	8,582	-25.8	-39.0	23	9.2
300	31	9,683	-30.6	-41.8	08	7.1	31	9,682	-33.8	-46.2	23	12.7
250	31	10,951	-40.7	-50.2	08	9.9	31	10,935	-43.1		22	17.3
200	31	12,430	-53.5		07	13.2	31	12,404	-53.7		22	21.9
175	31	13,274	-61.1		07	15.2	31	13,251	-59.5		22	21.7
150	31	14,214	-69.0		07	18.2	31	14,202	-65.6		22	19.8
125	31	15,283	-76.6		07	18.5	30	15,298	-69.5		23	14.3
100	31	16,555	-77.2		08	15.1	30	16,631	-68.3		22	2.9
80	31	17,862	-70.0		08	12.3	30	17,982	-63.9		11	2.9
70	31	18,660	-67.2		09	11.9	30	18,805	-61.3		10	4.3
60	31	19,597	-64.1		09	10.8	30	19,767	-58.8		09	6.1
50	31	20,720	-61.5		09	11.8	29	20,918	-56.2		09	7.9
40	31	22,114	-58.1		09	15.6	28	22,343	-53.7		09	9.1
30	30	23,941	-54.0		09	23.5	27	24,206	-50.9		09	11.2
25	30	25,118	-51.3		09	30.7	27	25,398	-48.9		09	12.2
20	27	26,581	-48.4		09	35.6	26	26,866	-47.1		09	13.8
15	24	28,491	-44.1		09	39.8	22	28,788	-44.1		09	14.2
10	22	31,241	-39.6		09	45.6	12	31,534	-39.7			
7	14	33,674	-37.3									
5	6	35,993	-34.8									

Standard pressure surface (mb)	YUMA, ARIZ. 995 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	20	131	29.7	15.8	08	.4
1000	20	87				
950	20	547	29.7	13.3	17	1.7
900	20	1,026	27.2	10.3	19	3.2
850	20	1,529	23.8	8.2	20	2.6
800	20	2,055	20.0	6.3	17	2.4
750	20	2,602	15.7	4.0	15	3.1
700	20	3,189	11.4	.7	15	3.2
650	20	3,798	6.9	-2.8	14	3.6
600	20	4,456	2.2	-6.4	12	3.4
550	20	5,150	-2.5	-10.1	13	3.1
500	20	5,903	-7.0	-15.1	14	3.6
450	20	6,713	-11.9	-22.2	14	2.2
400	20	7,611	-17.5	-28.4	13	2.1
350	20	8,596	-24.4	-35.4	15	3.6
300	19	9,699	-32.6	-42.9	16	6.1
250	19	10,956	-42.5		17	9.3
200	19	12,423	-54.5		17	13.7
175	17	13,271	-60.7		18	14.6
150	15	14,217	-66.9		19	11.5
125	8	15,302	-71.6			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. **JULY 1967**

Date	Sun's zenith distance A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
					ALBUQUERQUE, N. MEX. †				
	Air mass 4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Jul.									
1-----	----	0.94	1.07	1.20	1.45	1.25	1.11	0.94	0.90
2-----	0.70	.82	.99	1.17	----	1.13	.98	.84	.77
3-----	.72	.80	.94	1.09	1.33	1.11	----	----	.63
Averages	0.71	0.85	1.00	1.15	1.39	1.16	1.05	0.89	0.77

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
					OMAHA, NEBR.				
	Air mass 4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Jul.									
2-----	0.71	----	0.97	1.09	1.36	----	----	----	----
3-----	----	0.82	.95	----	----	----	----	----	----
6-----	----	----	----	----	----	HI0.98	HI0.79	HI0.66	HI0.59
7-----	----	----	----	----	----	HI .86	HI .72	HI .59	----
11----	----	----	----	----	----	‡	HS .95	HS .80	----
13----	HS .81	HS .96	HS1.02	HS1.12	HS1.32	----	HS .92	HS .81	HS .70
14----	HS .82	HS .92	HS1.05	HS1.20	HS1.38	HS1.16	----	----	----
22----	----	----	----	----	HS1.20	HS1.01	----	----	----
24----	----	----	----	----	----	HS1.06	----	----	----
27----	----	----	HM .91	HM1.01	----	----	----	----	----
28----	----	----	----	HM .95	HS1.26	HM1.02	HI .81	HI .68	HI .53
29----	----	----	----	HM1.07	HS1.24	HM1.00	HS .82	HS .70	HS .55
31----	HM .51	HM .72	HM .88	HM1.07	----	----	----	----	----
Averages	0.71	0.86	0.96	1.09	1.29	1.01	0.84	0.71	0.59

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
					MAUNA LOA OBS., HAWAII				
	Air mass 3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jul.									
2-----	1.08	1.15	1.24	1.37	1.50	----	----	----	----
3-----	1.01	1.10	1.19	1.30	1.50	1.30	1.16	1.05	.99
4-----	1.04	1.13	1.24	1.36	1.53	1.37	1.25	1.15	1.08
5-----	1.05	1.13	1.24	1.36	1.55	1.38	1.25	1.17	1.10
6-----	1.08	1.18	1.28	1.39	----	----	1.29	1.18	1.11
10----	1.03	1.12	1.21	1.33	----	----	----	----	----
11----	1.02	1.11	1.21	1.33	----	----	----	----	----
12----	----	----	----	----	1.52	----	----	----	----
13----	1.08	1.17	----	----	----	----	----	----	----
17----	1.03	1.11	1.20	1.33	----	----	----	----	----
18----	1.05	----	----	----	----	----	----	----	----
19----	----	----	----	----	1.52	----	----	----	----
25----	1.05	1.13	1.23	1.35	----	----	----	----	----
26----	1.06	1.15	1.25	1.37	1.55	1.38	1.25	1.16	1.08
27----	1.06	1.15	1.24	1.36	1.53	1.34	1.21	1.10	1.04
28----	1.07	1.16	1.24	1.37	----	----	----	----	----
29----	1.08	1.17	1.26	1.37	----	----	----	----	----
30----	1.07	1.15	1.25	1.38	----	----	----	----	----
31----	1.05	1.14	1.24	1.36	1.51	----	----	----	----
Averages	1.05	1.14	1.23	1.36	1.52	1.35	1.24	1.14	1.07

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon
† Struck by lightning on July 14, 1967

‡ Off target
HS Slight haze
HM Moderate haze
HI Intense haze

Date	Sun's zenith distance A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
					MADISON, WIS.				
	Air mass 4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jul.									
7-----	----	----	M 0.68	M 0.88	----	----	----	----	----
12----	M 0.75	M 0.84	----	----	----	----	----	----	----
15----	M .78	M .89	M .99	M 1.19	----	----	----	----	----
20----	----	----	----	I .73	----	----	----	----	----
21----	----	HI .43	HI .56	HI .73	----	----	----	----	----
24----	S .77	S .87	S .98	S 1.15	S 1.29	----	S 0.91	S 0.74	S 0.66
Averages	0.77	0.76	0.80	0.94	1.29	----	0.91	0.74	0.66

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
					TUCSON, ARIZ.				
	Air mass 4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jul.									
1-----	0.56	0.68	0.78	0.93	1.24	1.00	0.81	0.68	0.56
2-----	.62	----	----	----	1.20	1.00	.80	.70	.60
3-----				Integrater inoperative					
4-----	----	----	----	----	1.14	.94	----	.68	.57
6-----	----	----	----	----	1.18	----	----	----	----
7-----	----	----	----	----	1.29	----	----	----	----
9-----	----	----	----	----	----	----	.68	.40	----
10----	.77	.85	.93	1.01	1.28	----	----	----	----
11----	.63	.71	.84	----	1.20	----	----	----	----
12----	----	----	----	----	1.29	----	----	----	----
13----	----	----	.50	.90	1.13	----	----	----	----
14----	----	----	----	.87	1.16	----	----	----	----
18-19-				Integrater inoperative					
20----	----	----	----	----	1.23	.99	.84	----	----
21----	.64	.79	.90	----	----	----	----	----	----
23----	.64	.74	.88	1.04	----	----	----	----	----
24----	----	----	.72	1.04	1.22	----	----	----	----
25----	.60	.74	.88	----	----	1.06	.90	.78	.60
31----				Integrater inoperative					
Averages	0.64	0.75	0.80	0.96	1.21	1.00	0.80	0.81	0.58

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
					BLUE HILL OBS., MASS.				
	Air mass 4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
				No readings for the month of July					

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
					GUAM, M. I.				
	Air mass 4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
				No observations due to cloudiness					

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

JULY 1967

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	865	839	833	806	793	---	729	804	776	---	---	---	675	728	675	248	292	600	549	618	601	620	629	711	679	739	741	609	684	746	649	675
AMES IOWA	564	622	654	690	695	717	675	179	328	631	696	674	614	733	628	510	555	568	638	509	595	619	563	672	469	467	406	---	665	308	512	572
ANNETTE ALASKA	616	480	617	645	137	245	456	575	279	177	133	311	140	596	246	618	288	339	514	379	456	620	403	666	615	175	57	181	509	567	514	405
APALACHICOLA FLORIDA	360	573	414	701	723	701	533	525	546	318	722	715	645	144	722	689	269	420	669	493	500	679	474	393	618	300	570	629	657	409	366	531
ARGONNE NAT. LAB.	573	641	585	531	632	723	520	540	358	309	619	662	356	488	681	664	597	268	504	563	569	626	383	592	624	370	415	518	614	507	556	535
ASTORIA OREGON	758	747	---	649	709	612	643	636	513	739	743	246	640	604	625	585	624	489	301	334	591	712	525	566	292	222	595	708	510	694	643	575
ATLANTA GEORGIA	384	514	621	711	598	285	337	563	392	236	496	484	195	636	652	702	440	498	499	349	588	410	522	520	539	355	532	465	295	584	660	486
BARROW ALASKA	702	677	318	490	348	606	754	500	223	395	392	370	641	334	700	200	329	193	283	---	471*	545	301	593	---	---	131	255	327	273	568	426*
BETHEL ALASKA	527	125	184	202	94	292	359	669	708	541	662	599	647	280	121	206	---	162	217	220	411	148	158	308	180	333	195	403	419	188	264	327
BISMARCK N.DAK.	712	354	807	798	725	731	731	760	682	678	779	765	788	723	707	759	743	717	731	710	643	641	724	715	686	586	664	690	657	710	694	704
BLUE HILL MASS.	243	322	249	623	304	485	698	670	361	582	323	391	251	460	286	238	538	364	276	184	340	486	393	509	471	599	553	321	577	325	522	417
BOISE IDAHO	722	689	660	701	502	674	685	544	707	701	694	692	566	634	---	414	639	663	697	688	680	678	665	675	657	673	681	613	579	642	609	647
BOSTON MASSACHUSETTS	452	600	262	593	320	435	666	638	365	539	326	367	295	421	254	223	540	223	280	196	405	483	322	498	501	556	546	267	551	334	466	417
BROWNSVILLE TEXAS	466	721	681	700	727	704	678	752	721	720	680	637	647	200	741	687	547	721	663	500	551	650	636	746	---	647	724	724	712	729	712	657
CANTON ISLAND P.I.	478	542	446	510	499	495	563	594	557	519	570	569	289	590	584	413	588	600	574	562	531	582	536	459	426	512	456	605	593	574	602	530
CAPE HATTERAS N.C.	600	588	368	658	663	594	86	334	480	658	432	585	513	517	145	506	---	---	---	421	593	450	627	636	635	393	---	386	509	377	577	494
CARIBOU MAINE	618	555	193	712	182	540	592	531	282	747	752	114	448	557	427	128	557*	554	548	576	381	390	342	237	310	364	421	136	441	462	363	434*
CHARLESTON S.C.	535	546	629	748	655	590	429	157	214	669	746	708	690	475	280	661	312	348	652	424	671	423	590	691	666	534	544	630	564	431	574	541
CLEVELAND OHIO	---	---	---	398	491	669	474	475	523	334	492	692	452	417	182	365	403	438	451	574	665	569	538	524	685	635	190	372	702	442	603	491
COLUMBIA MISSOURI	704	754	779	677	486	775	618	584	543	716	472	416	677	782	735	622	652	656	574	572	630	614	700	516	683	704	540	585	690	626	687	638
DAVIS CALIFORNIA	738	743	772	738	732	742	780	757	755	748	753	720	720	693	733	727	743	754	732	735	727	751	732	738	733	711	660	674	693	690	721	730
DODGE CITY KANSAS	779	377	471	306	282	548	544	680	731	608	269	445	629	685	296	166	251	440	264	759	716	756	738	520	619	701	727	730	734	713	663	553
E. LANSING MICHIGAN	628	605	604	286	493	751	395	520	538	220	553	680	417	220	353	506	626	437	552	478	644	589	421	699	552	---	---	716	711	409	484	580
EL CENTRO CALIF. NPF	546	543	535	---	---	488	---	550	550	437	542	508	---	475	475	534	534	535	502	492	585	544	544	633	620	435	435	612	618	618	590	536
EL PASO TEXAS	792	803	773	796	760	712	798	716	790	707	758	748	610	743	803	765	768	734	651	444	562	795	598	780	702	704	784	730	374	758	757	717
ELY NEVADA	798	606	777	795	---	431	642	807	828	827	811	773	535	509	518	495	666	807	805	---	---	---	---	---	---	---	---	---	---	---	---	---
EPPLEY NEWPORT R.I.	411	414	214	645	---	482	628	634	430	406	132	411	218	311	392	260	357	343	189	122	442	477	404	422	405	590	592	261	495	---	---	396
FAIRBANKS ALASKA	647	505	393	591	481	483	605	540	589	796	711	764	753	528	497	---	354	418	202	357	158	410	668	128	293	236	519	152	564	301	326	465
FLAMING GORGE UTAH	---	---	---	---	---	---	---	---	---	---	---	---	---	---	382	698	451	742	---	701	591	328	494	487	776	605	765	794	740	585	487	---
FORT WORTH TEXAS	376	733	503	654	503	587	617	751	730	727	711	705	626	760	792	430	566	190	309	389*	601	670	508	724	712	720	635	647	560	669	649	605*
FRESNO CALIFORNIA	696	705	714	684	329	705	730	735	742	738	715	672	655	683	504	683	666	702	725	740	704	697	703	705	705	722	587	629	664	684	690	678
GAINESVILLE FLORIDA	594	682	552	663	704	493	456	572	524	440	643	718	712	441	700	680	442	309	607	678	485	653	448	384	572	427	432	450	562	555	541	552
GLASGOW MONTANA	688	781	774	741	679	715	756	730	735	769	760	740	749	608	683	729	686	691	624	708	588	701	732	734	703	643	678	654	698	714	552	701
GRAND JUNCTION COLO.	795	---	---	---	---	---	---	---	---	---	---	---	740	---	---	365	---	---	743	745	707	508	557	710	723	724	668	715	731	650	562	---
GREAT FALLS MONTANA	766	771	659	747	---	762	754	656	770	765	753	730	585	654	712	719	230	596	607	670	644	745	---	---	668	---	629	695	681	712	---	680
GREENSBORO N.C.	---	---	---	651	647	534	194	346	418	549	398	588	142	336	482	563	420	508	493	341	467	579	539	614	267	416	618	342	444	360	520	456
INDIANAPOLIS INDIANA	680	692	596	497	571	534	446	645	406	311	625	631	525	419	433	691	453	631	340	696	592	663	460	552	700	---	---	---	705	538	610	559
ITHACA NEW YORK	495	278	471	371	255	617	456	321	349	331	279	543	417	434	27	364	524	491	393	451	317	517	351	124	324	586	261	161	314	484	349	376
LAKE CHARLES LA.	457	363	566	565	512	397	575	649	663	557	381	473	130	619	725	652	434	551	192	315	414	412	546	536	643	645	655	549	598	416	643	511
LAKELAND FLORIDA	245	587	328	466	416	457	529	617	597	644	662	587	547	268	448	507	398	337	574	590	509	458	521	458	628	624	445	614	571	575	307	500
LANDER WYOMING	762	765	565	530	620	446	553	607	733	755	490	726	563	440	672	722	383	694	684	660	693	702	610	650	587	598	738	739	513	338	428	612
LARAMIE WYOMING	716	810	662	573	789	666	430	595	805	762	364	764	772	598	248	762	430	615	824	653	675	333	481	560	631	639	756	755	726	523	424	624
LAS VEGAS NEVADA	770	753	709	697	439	464	693	761	760	601	678	636	652	533	409	718	716	757	719	749	714	344	696	717	706	667	675	578	654	588	670	652
LITTLE ROCK ARKANSAS	518	647	783	384	156	345	588	615	641	647	680	210	713	833	701	295	584	517	629	650	499	585	618	647	531	587	645	528	603	601	594	567
LOS ANGELES, CALIF.	550	581	486	475	578	706	591	682	707	701	706	729	673	708	731	705	681	733	767	702	721	737	745	754	723	664	681	726	743	695	611	677
LOS ANGELES CALIF. U	713	---	---	---	---	---	---	---	---	---	---	667	649	721	615	680	659	739	748	620	697	712	711	705	647	633	652	655	746	685	642	---
MADISON WISCONSIN	311	498	512	349	455	746	690	423	367	547	678	776	431	775	698	600	566	667	636	591	626	607	592	706	713	447	306	705	615	530	596	573
MANHATTAN KANSAS	619	663	364	303	278	646	652	227	480	630	373	207	661	670	336	187	354	75	413	536	556	616	618	415	612	600	605	599	609	602	461	483
MATANUSKA ALASKA	562	606	295	523	252	368	616	421	521	700	684	561	601	614	632	109	213	245	96	116	586	485	533	214	304	123	461	635	495	204	111	416
MAUNA LAO OBS HAWAII	392	819	817	829	836	838	394	408	600	539	710	809	672	641	810	428	793	829	741	---	303	332	328	483	709	812	746	792	433	534	800	639
MEDFORD OREGON	714*	723*	720*	739	751	754*	753*	728*	754*	751*	732*	726*	739*	737*	696	728	759	693	734*	713	717	707	719	700	715	735	720	583	696	710	706	721*
MIAMI FLORIDA	315	322	382	420	577	664	639	668	673	691	638	659	590	676	530	668	590	691	661	476	531	531	438	456	489	---	613	731	709	653	476	572
MIDLAND TEXAS	682	687	608	587	579	524	715	682	705	701	627	700	217	696	575	680	683	523	397	498	588	675	660	645	563	647	540	575	386	649	648	601
NASHVILLE TENNESSEE	416	377	701	705	134	211	577	440	520	484	377	397	443	515	451	668	583	545	537	607	521	437	564	567	449	140	491	486	426	649	557	483
NEW YORK N.Y. U	318	552	481	511	500	631	394	552	313	483	279	627	404	296	220	388	431	332	447	535	168	418	494	474	482	652	472	150	485	339	439	428

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

JULY 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
NORTH OMAHA NEBRASKA	725	797	785	761	708	776	765	210	586	781	713	594	812	805	509	658	780	504	489	610	655	726	559	717	547	511	657	721	721	525	713	659
OAK RIDGE TENNESSEE	330	265	676	659	482	95*	223	416	615	50	314	472	239	627	600	676	457	649	587	584	414	361	398	401	355	274	307	260	369	549	367	422*
OKLAHOMA CITY OKLA.	459	376	450	397	484	522	400	557	485	709	560	407	710	648	398	213	377	134	396	596	480	574	652	683	447	329	597	350	640	707	600	495
PALMER AAES ALASKA	537	514	230	395	218	339	521	494	462	622	590	385	531	517	508	111	153	143	68	140	475	466	389	173	228	124	485	543	369	125	98	353
PHOENIX ARIZONA	717	714	687	686	547	453	445	673	389	679	650	631	687	638	420	612	663	682	674	675	665	575	674	658	658	461	509	688	659	520	583	612
PORTLAND MAINE	559	599	192	677	190	534	669	500	310	595	399	197	668	255	255	164	519	323	340	317	442	340	453	410	445	602	642	119	498	405	305	417
PROSSER WASHINGTON	763	687	697	690	673	732	740	480	746	714	731	617	696	759	772	529	739	673	591	647	668	656	667	679	626	662	704	535	663	664	666	673
PULLMAN WASHINGTON	747	740	702	720	595	723	715	554	729	716	698	682	643	706	701	544	641	684	659	561	680	700	678	662	658	603	660	474	666	650	614	661
RAPID CITY S.DAK.	313	702	679	447	651	572	499	647	662	600	591	632	678	477	588	657	602	250	656	594	652	630	610	503	515	308	472	621	594	520	536	563
RENO NEVADA	689	664	648	598	367	674	676	688	698	691	679	606	641	539	362	436	564	682	692	690	693	673	611	661	673	677	612	480	602	418	635	613
RICHLAND 25 NW WASH.	714	712	673	690	659	685	708	422	698	677	671	606	659	692	685	547	674	676	537	591	668	674	670	655	647	616	649	548	659	650	545	644
RIVERSIDE CALIFORNIA	629	639	524	629	583	623	618	646	690	651	466	523	482	580	611	627	622	617	640	650	610	566	595	614	592	529	607	573	606	585	569	597
RUSTON LOUISIANA	495	303	397	362	413	136	253	558	507	592	515	431	336	---	---	---	---	399	163	---	632	438	442	477	552	270	550	525	361	512	567	430
SAINT CLOUD MINN.	556	468	350	434	736	632	317	440	478	629	734	458	740	724	672	614	652	572	608	658	612	557	708	704	651	645	658	683	673	574	659	600
SALT LAKE CITY	798	756	602	769	757	261	412	585	706	773	---	---	758	527	732	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SAN ANTONIO TEXAS	512	475	637	686	673	680	700	695	697	690	643	610	372	683	637	735	569	558	515	329	441	594	669	681	678	630	648	668	664	671	688	617
SANTA MARIA CALIF.	577	693	688	472	568	675	729	638	705	732	703	624	662	680	616	580	480	659	736	753	717	667	675	709	702	694	315	661	631	611	687	646
SAULT STE MARIE MICH	370	704	670	376	723	699	714	150	407	522	510	253	---	388	728	620	275	267	369	688	634	288	511	460	654	521	703	707	407	710	709	525
SEATTLE TACOMA WASH.	772	760	756	509	735	375	649	276	648	719	717	630	501	733	733	636	707	403	316	252	596	714	694	681	501	423	515	644	686	625	432	592
SPOKANE WASHINGTON	780	759	634	705	698	737	751	390	757	738	742	664	654	751	734	603	667	742	626	636	659	724	705	690	687	642	677	590	701	675	680	684

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

JULY 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	293	281	116	212	105	170	274	259	235	274	304	185	243	268	214	67	97	91	40	92	271	251	213	106	139	76	268	289	216	77	61	187

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ʌs Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																														Mean O_3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
	Data will be delayed																															

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e. the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 250 milli-atmo-cm ozone implies an ozone layer 0.250 centimeter thick. The code ʌs designates the type of measurement made.

DESCRIPTION OF CHARTS

CHART I., A. NORMAL DAILY AVERAGE TEMPERATURE (°F. 1931-60) FOR MONTH. B. TEMPERATURE DEPARTURE FROM 30-YEAR MEAN (°F. 1931-60) FOR MONTH. Chart I-A is reproduced from Environmental Data Service Publication "Climatic Maps of the United States". Chart I-B is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin", a publication of Environmental Data Service.

CHART II. TOTAL PRECIPITATION. -CHART II is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin".

CHART III. PRECENTAGE OF NORMAL PRECIPITATION. -Chart III is a reproduction of monthly chart appearing in "Weekly Weather Crop Bulletin".

CHART IV. TOTAL SNOWFALL. CHART V. A. PERCENTAGE OF MEAN MONTHLY SNOWFALL. B. DEPTH OF SNOW ON GROUND. -Chart IV gives the total depth in inches of unmelted snowfall as reported during the month by Weather Bureau and selected cooperative stations. This is converted in Chart V-A into a percentage of the mean monthly total amount computed for each Weather Bureau station having at least 10 years of record. The depth of snow on ground is that reported by both Weather Bureau and selected cooperative stations as of 7:00 a.m. Eastern Standard Time on the Monday nearest the end of the month. This is reported only for the months December through March. The snowfall charts are presented each month November through April.

Isolines for Charts I, II, III, IV, and V, are drawn through points of approximately equal value. Caution should be used in interpolating on these charts, particularly in mountainous areas.

CHART VI. A. PERCENTAGE OF POSSIBLE SUNSHINE. B. PERCENTAGE OF MEAN MONTHLY SUNSHINE. -CHART VI-A shows the amount of sunshine received in terms of percentage of the total hours of sunshine possible during the month. In Chart VI-B this is shown as a percentage of the mean number of hours of sunshine received. Means are computed for Weather Bureau stations having at least 10 years of record.

CHART VII. A. AVERAGE DAILY VALUES OF SOLAR RADIATION, LANGLEYS. B. PERCENTAGE OF MEAN DAILY SOLAR RADIATION. -Shown on Chart VII-A are the monthly averages of daily total solar radiation, both direct and diffuse, in langleys (gm. cal. cm. $^{-2}$) for all Weather Bureau stations which record this element.

CHART VII-B shows the percentages of the mean based on at least 5 years of record during the period 1950-1960, and corrected to the International Pyrheliometer Scale of 1956.

CHART VIII. -TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IX. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL. -Centers which can be identified for 24 hours or more are tracked in these charts. Semipermanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a.m. EST positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

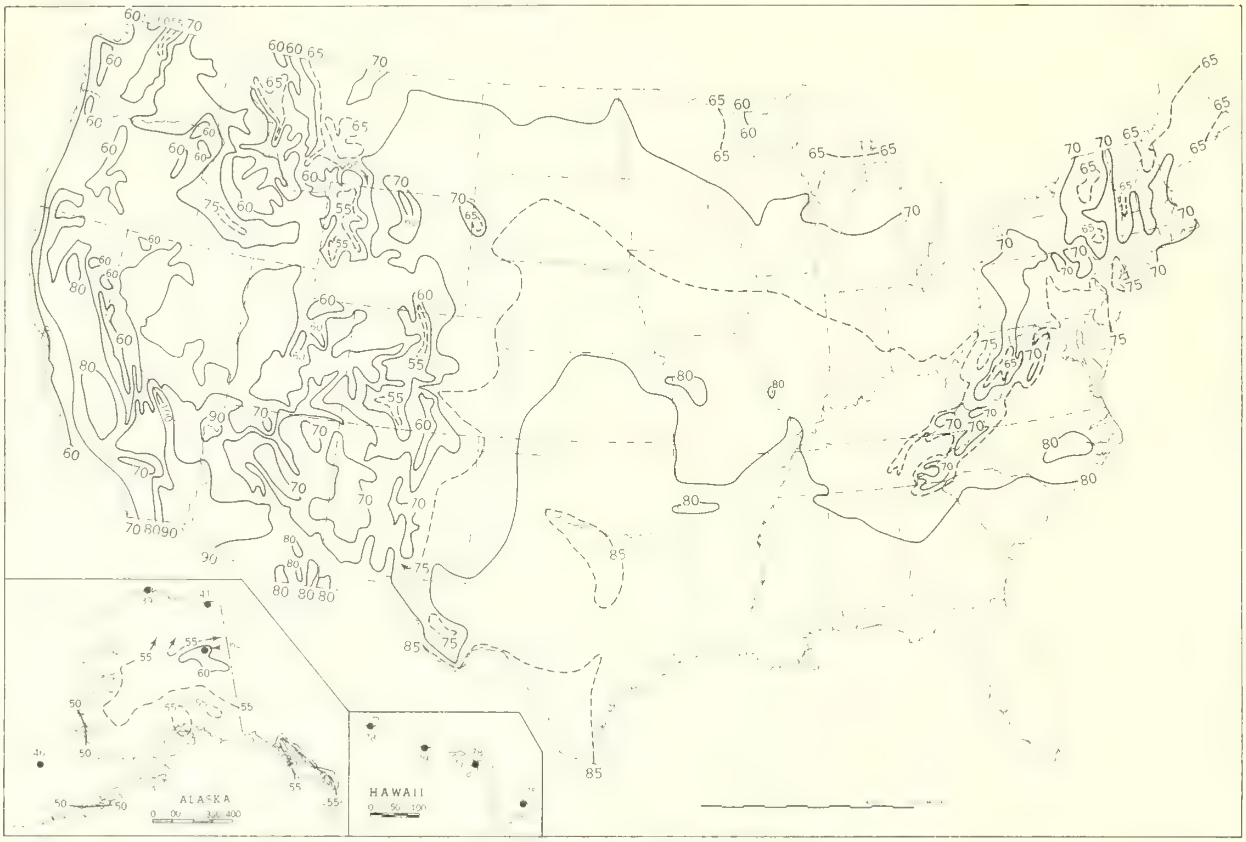
CHART X. AVERAGE SEA LEVEL PRESSURE (mb.) AND RESULTANT SURFACE WIND. -The average monthly sea level pressures are obtained from eight daily 3-hourly observations reported at Weather Bureau Stations. Resultant surface wind directions (to 36 points of the compass) for the month are shown by arrows. Resultant speeds are in miles per hour and are indicated by the length of arrow shafts. Constancy ratios (resultant surface wind divided by average surface wind for month) are shown to two decimal places. The inset shows the departure of the average pressure based on 30-year normals for first-order Weather Bureau Stations, other stations having at least 10 years of record; and for each 10° intersection in a diamond grid over the oceans.

CHARTS XI-XVI. AVERAGE HEIGHT, TEMPERATURE, AND RESULTANT WINDS, 850, 700, 500, 300, 200, and 100 mb. -Height is given in geopotential meters and temperature in degrees Celsius. These are the averages of the 1200 GMT radiosonde reports. Wind speeds are given in meters per second; flag represents 25 m.p.s., full feather 5 m.p.s., and half feather 2 1/2 m.p.s. Directions are shown to 360° of the compass. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

CHART XVII. A. 50-MB. RESULTANT WINDS. B. 30-MB. RESULTANT WINDS. -Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

Exact values of most of these charted elements for Weather Bureau stations are printed each month in tabular form in CLIMATOLOGICAL DATA, NATIONAL SUMMARY. Extreme values of temperature and precipitation for each state are included in the tables, Condensed Climatological Summary. Annual averages for surface elements are presented in the CDNS Annual Issue each year.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), July.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), July 1967.

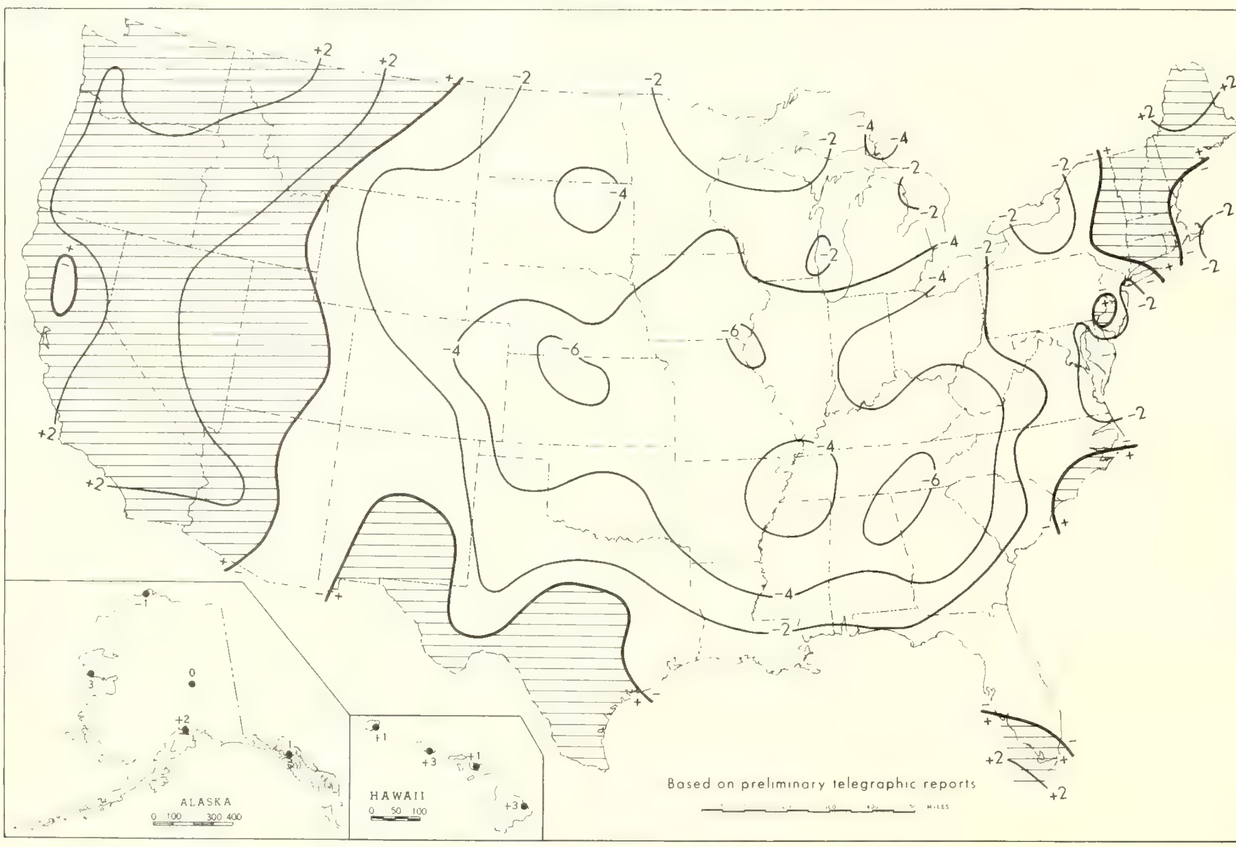


Chart II. Total Precipitation (Inches), July 1967.

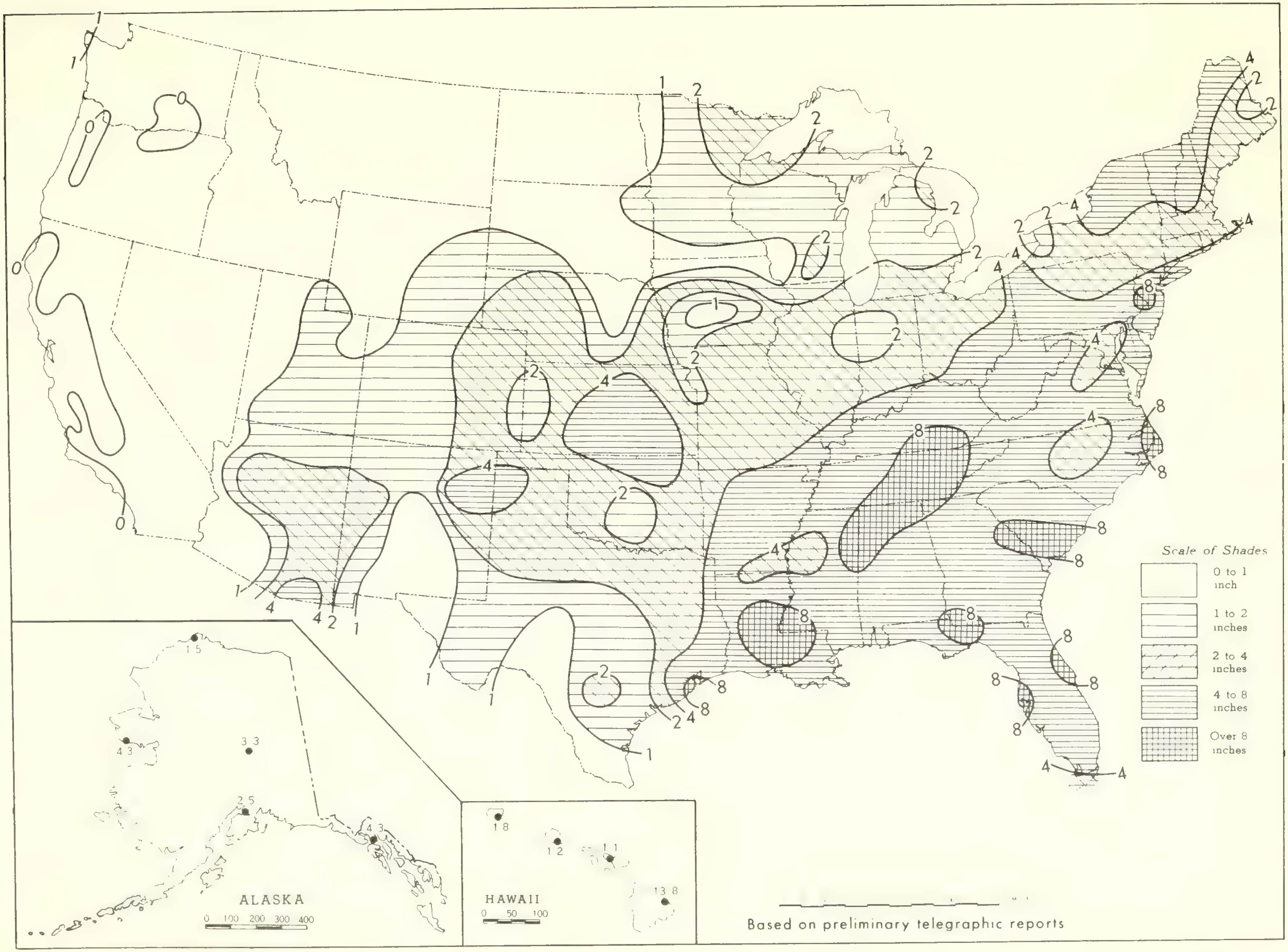


Chart III. Percentage of Normal Precipitation, July 1967.

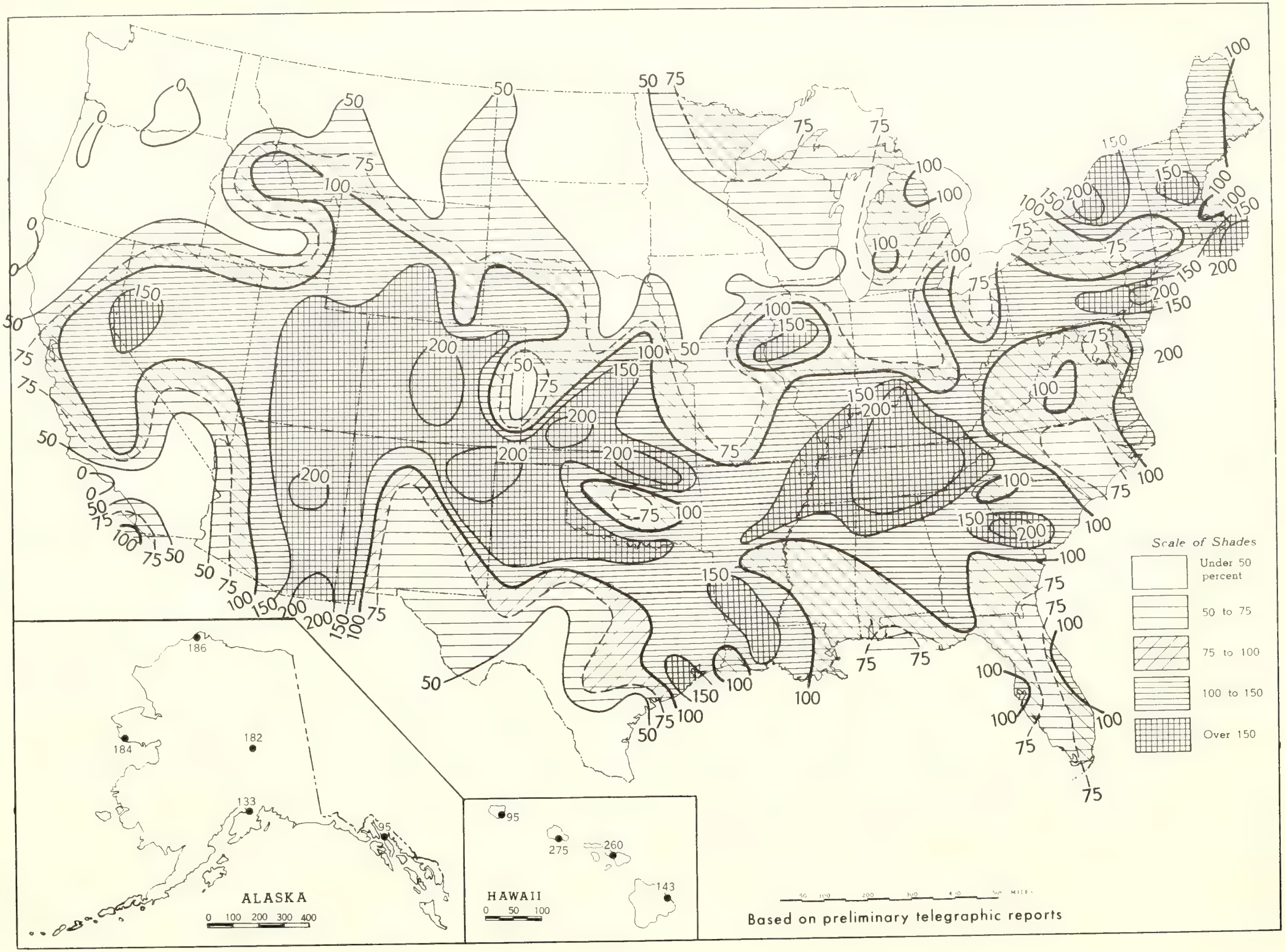
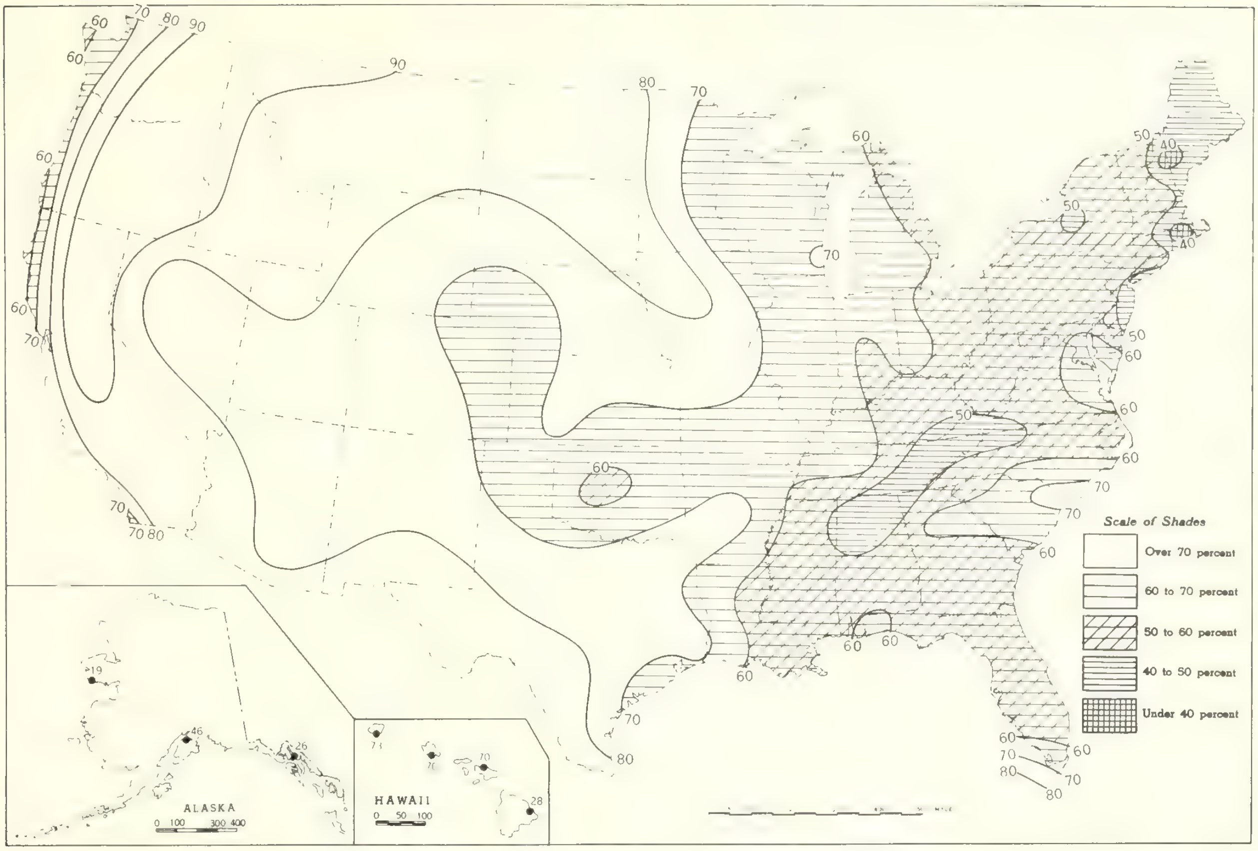
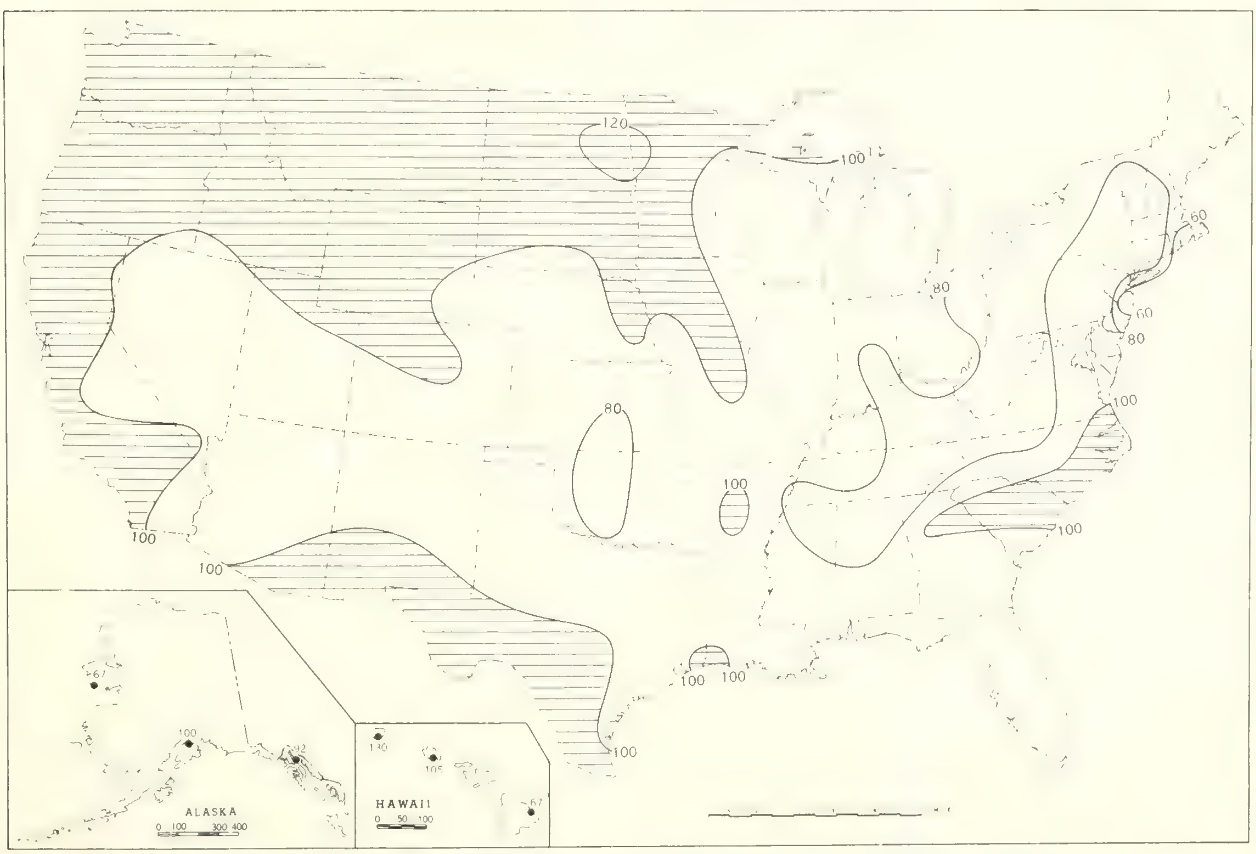


Chart VI. A. Percentage of Possible Sunshine, July 1967.

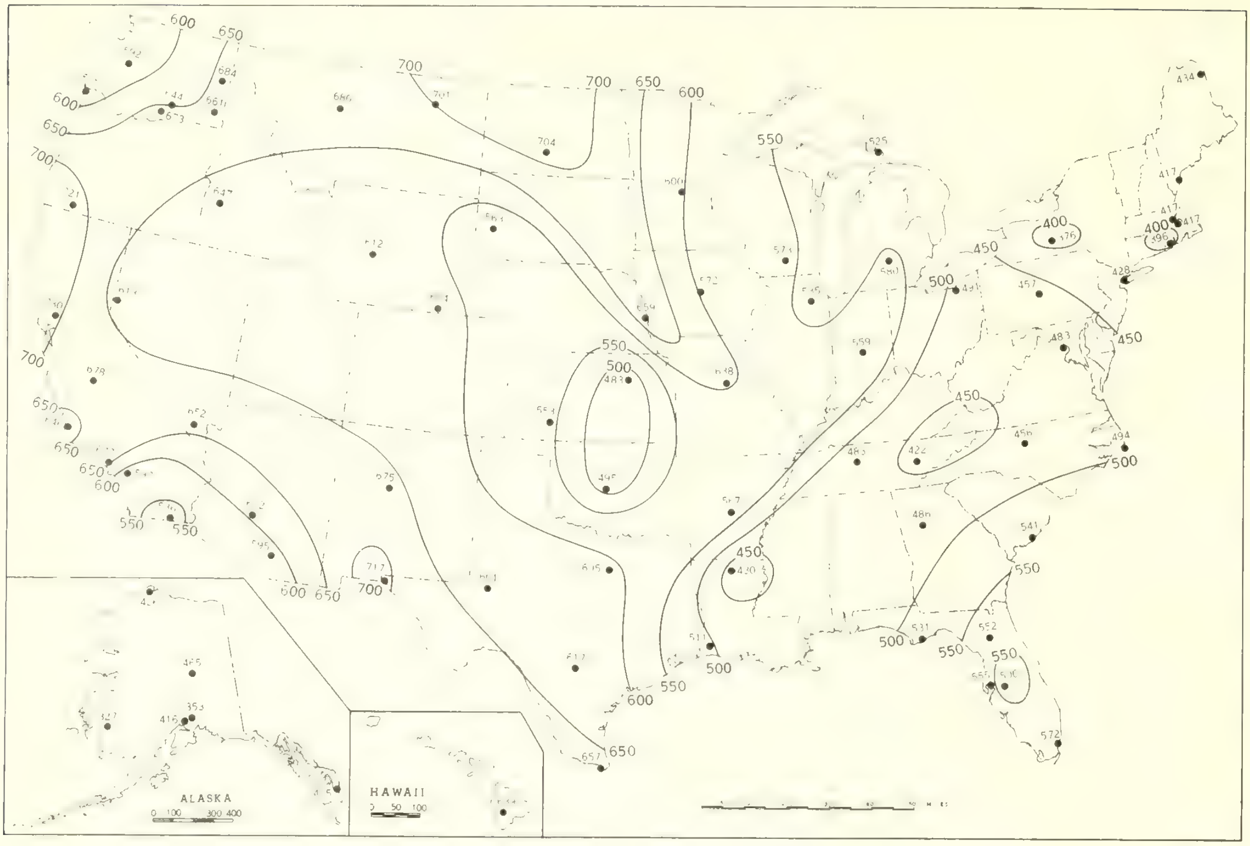


B. Percentage of Mean Monthly Sunshine, July 1967.

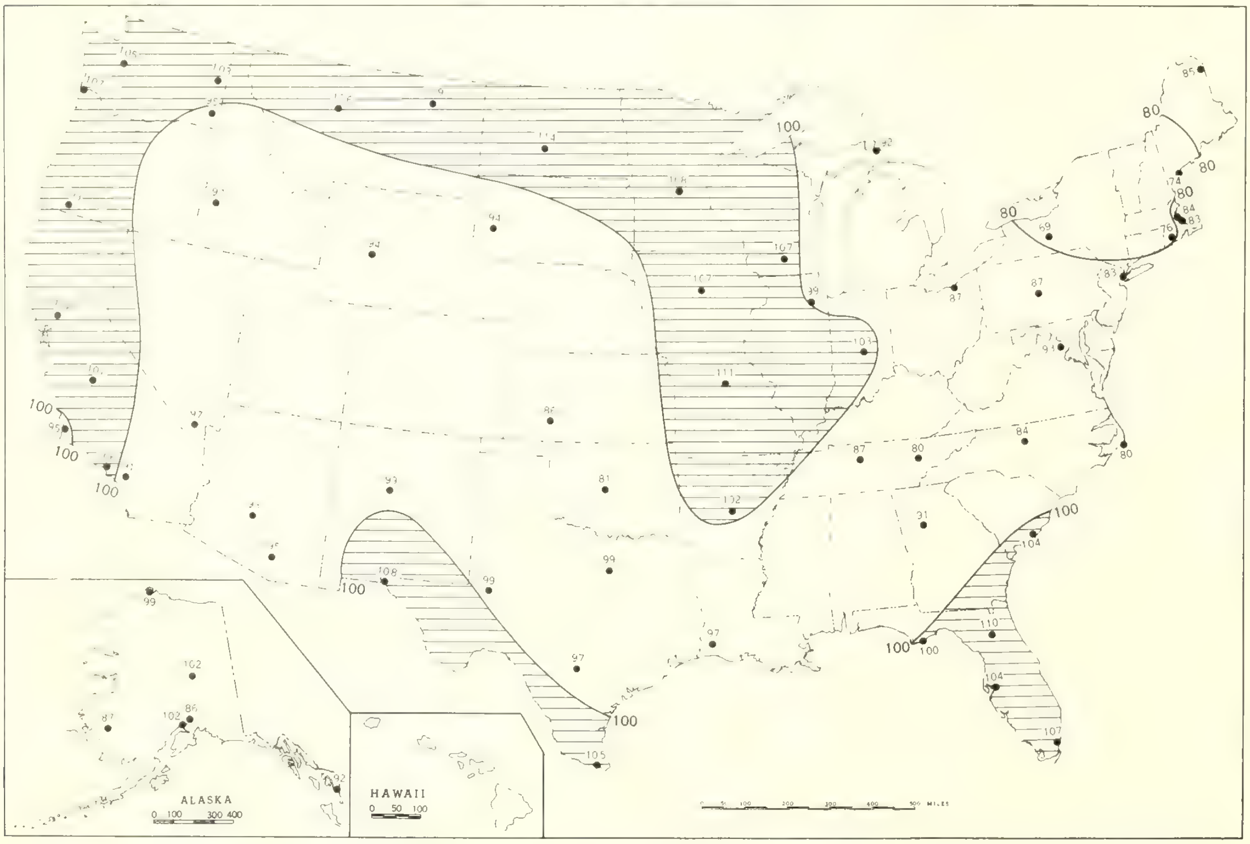


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, July 1967.

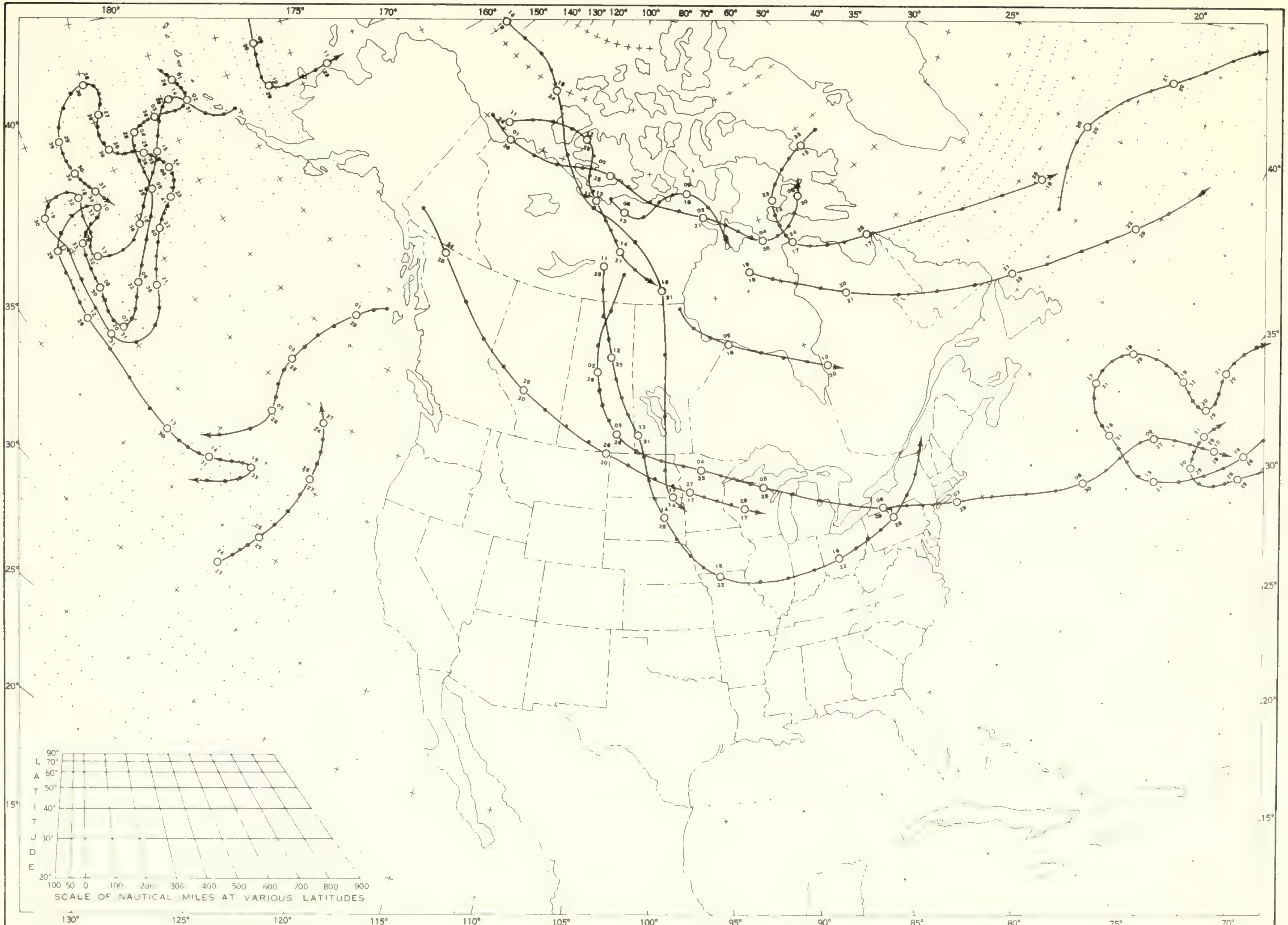


B. Percentage of Mean Daily Solar Radiation, July 1967.



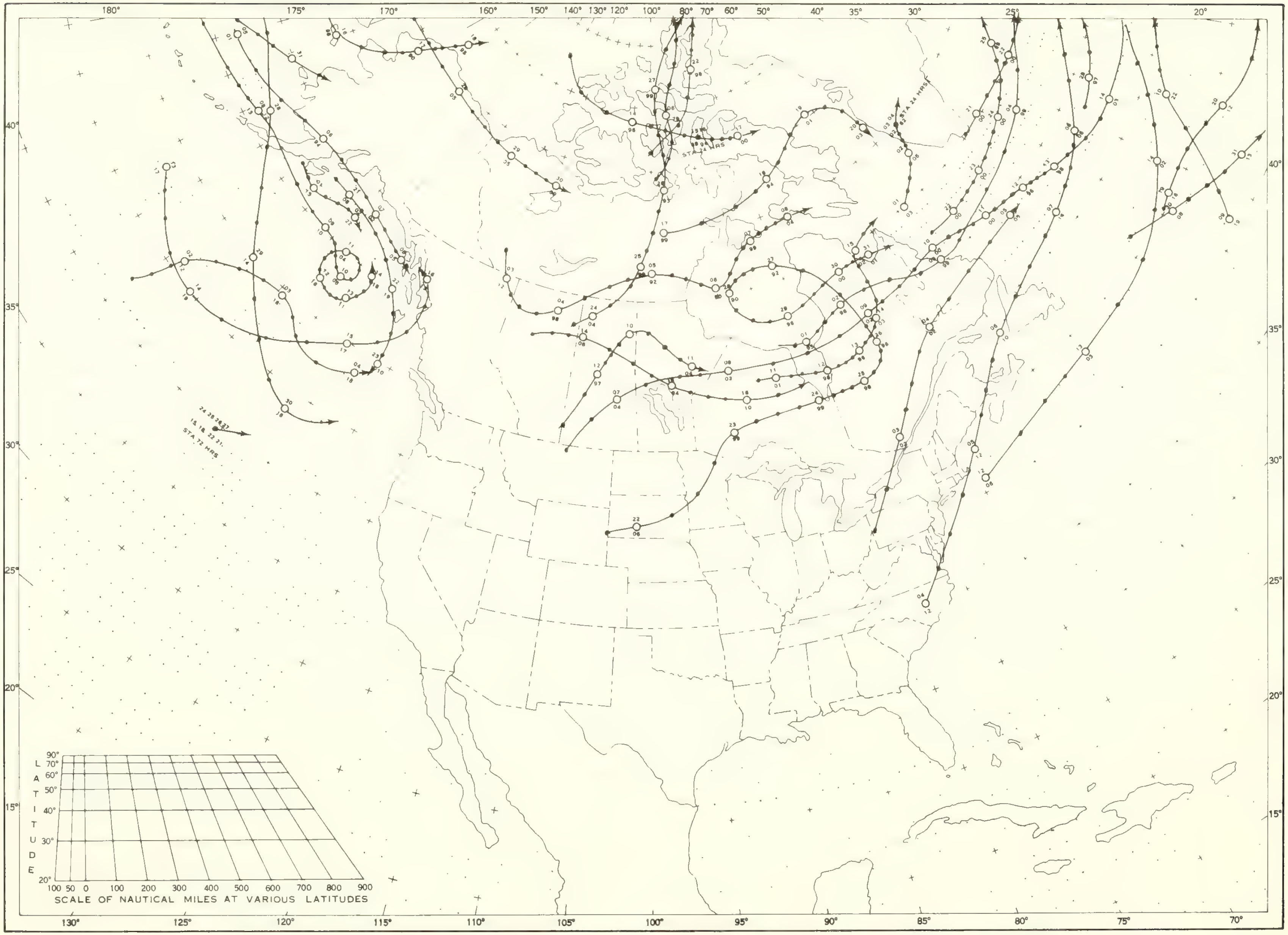
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, July 1967



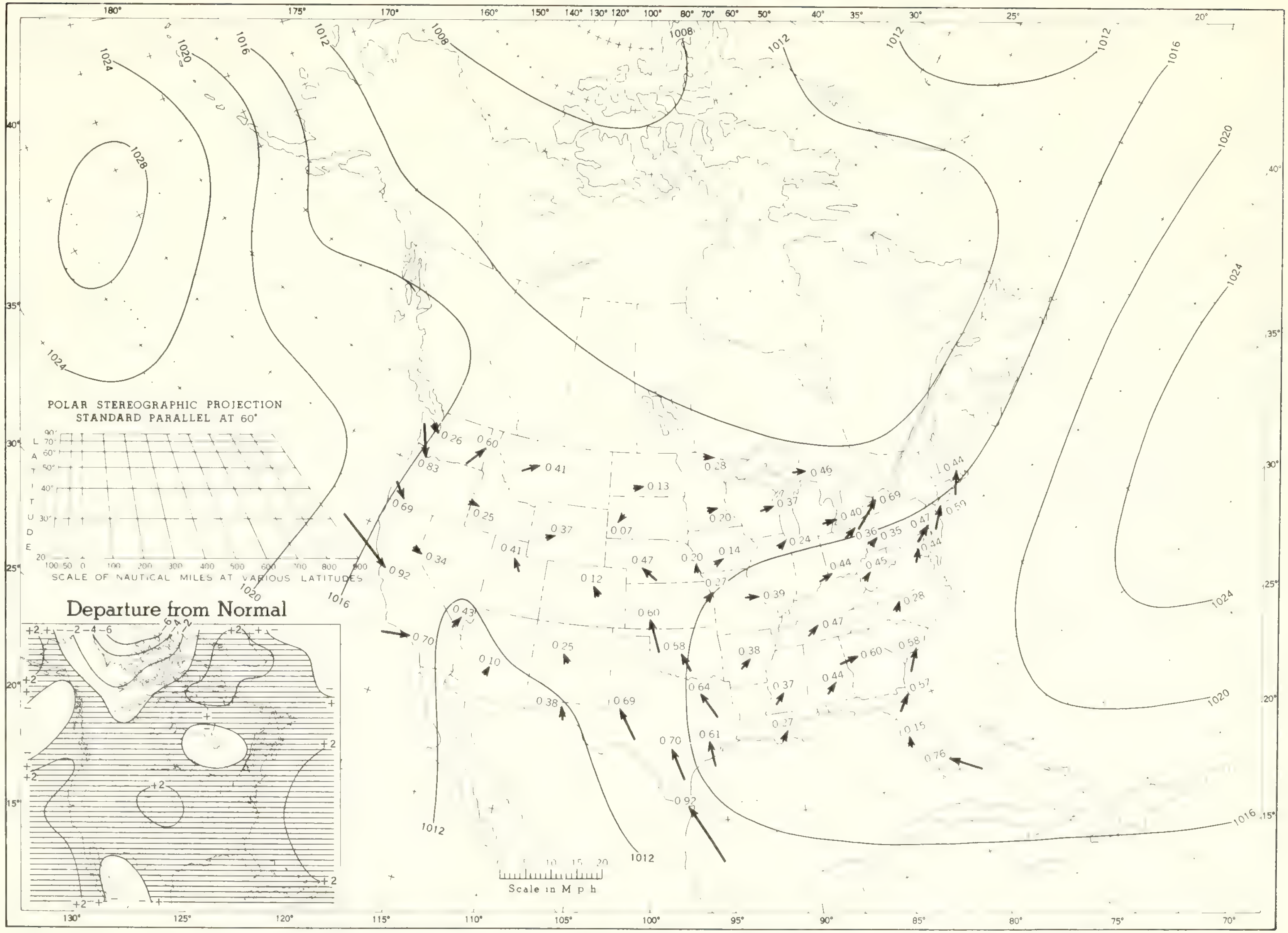
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, July 1967.



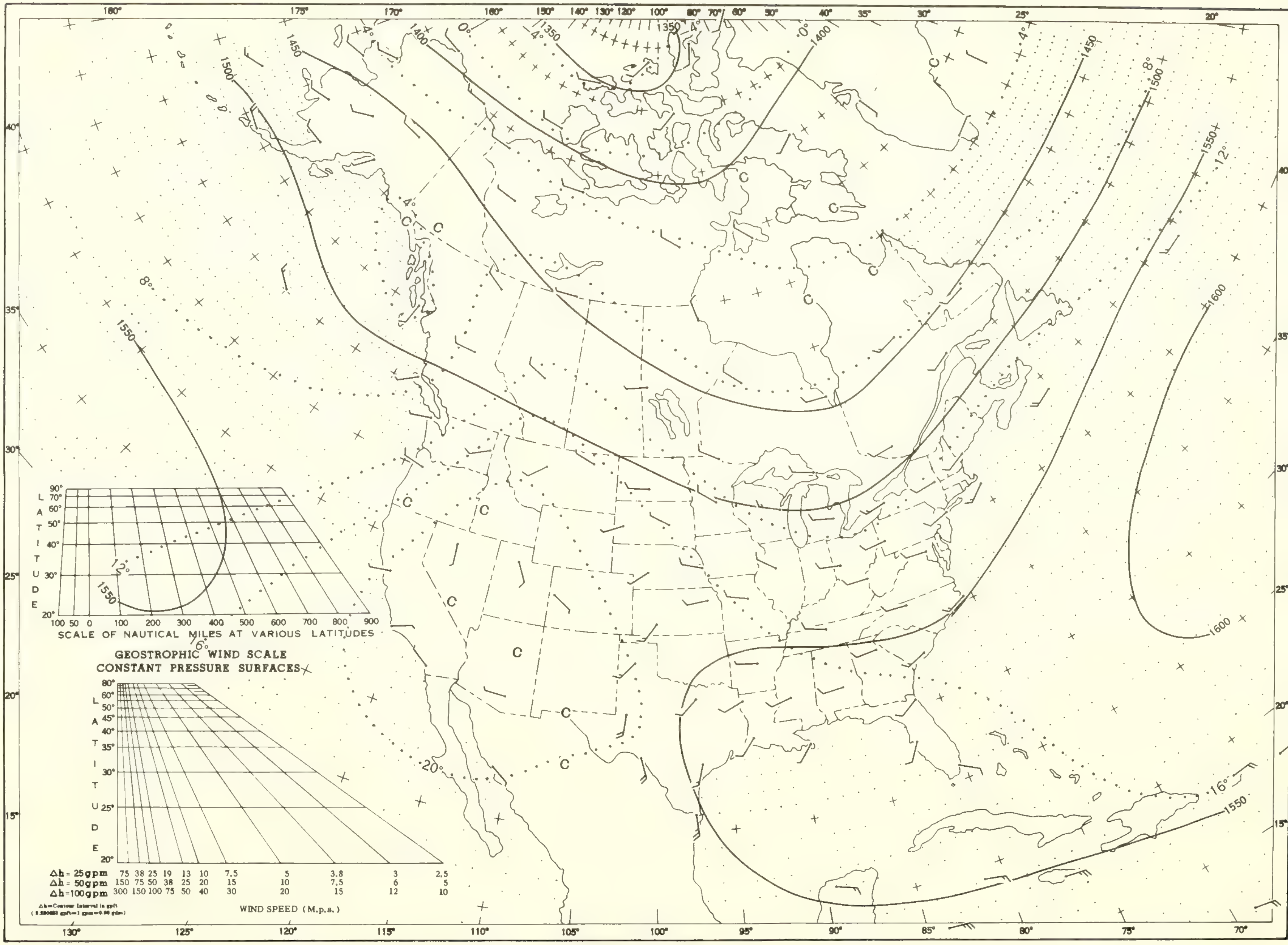
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, July 1967 Inset Departure of Average Pressure (mb) from Normal, July 1967.



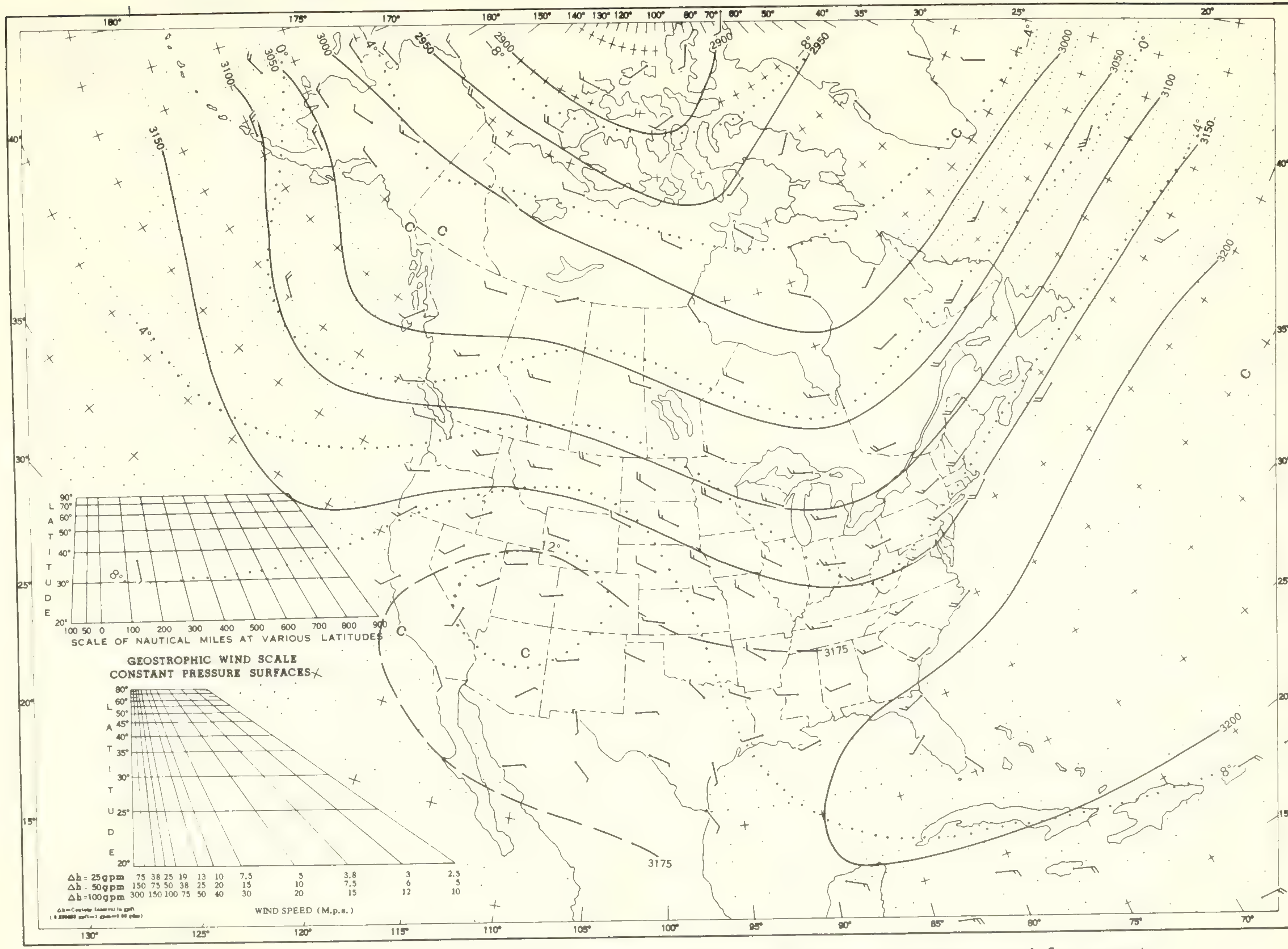
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.



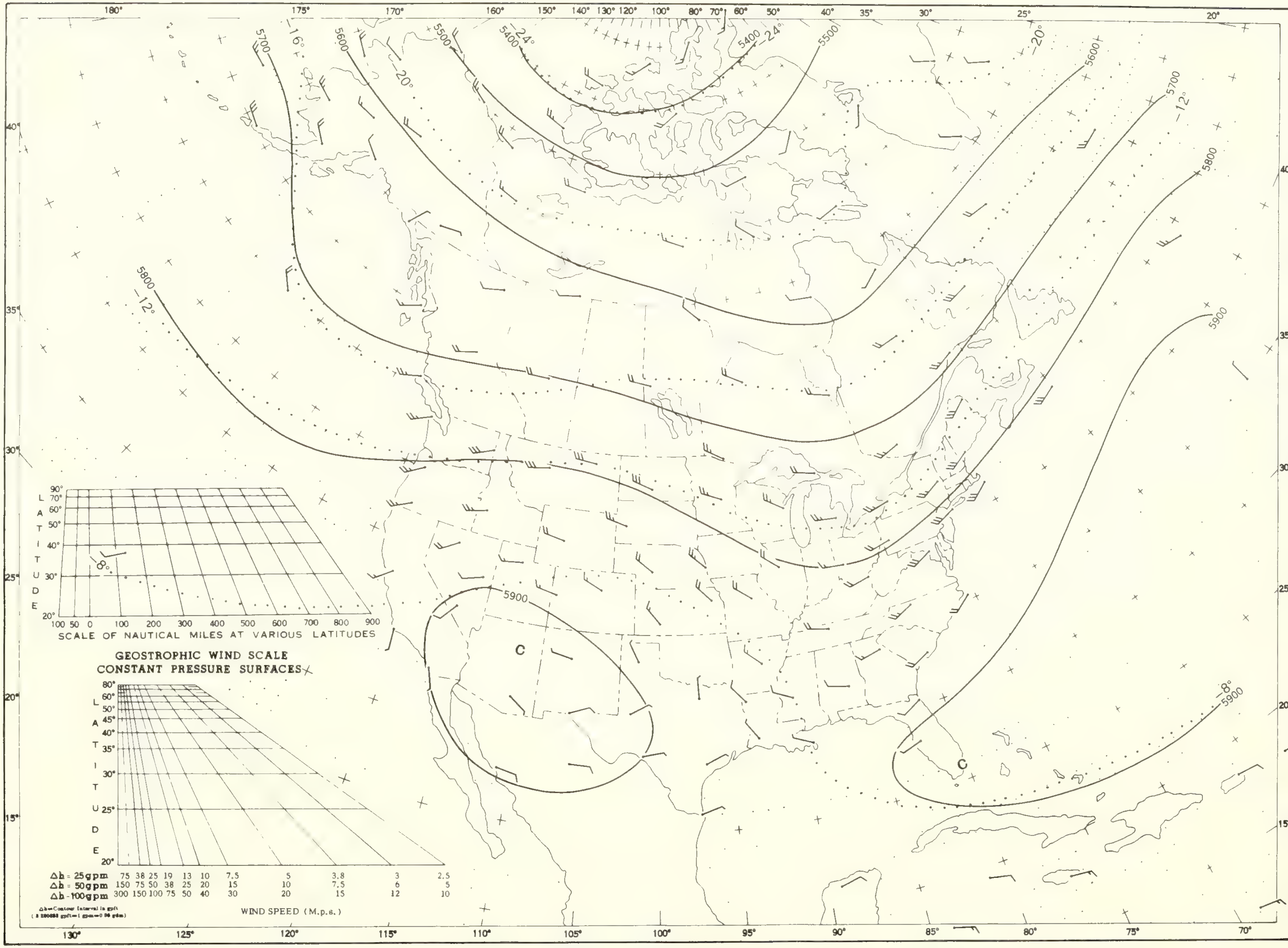
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.



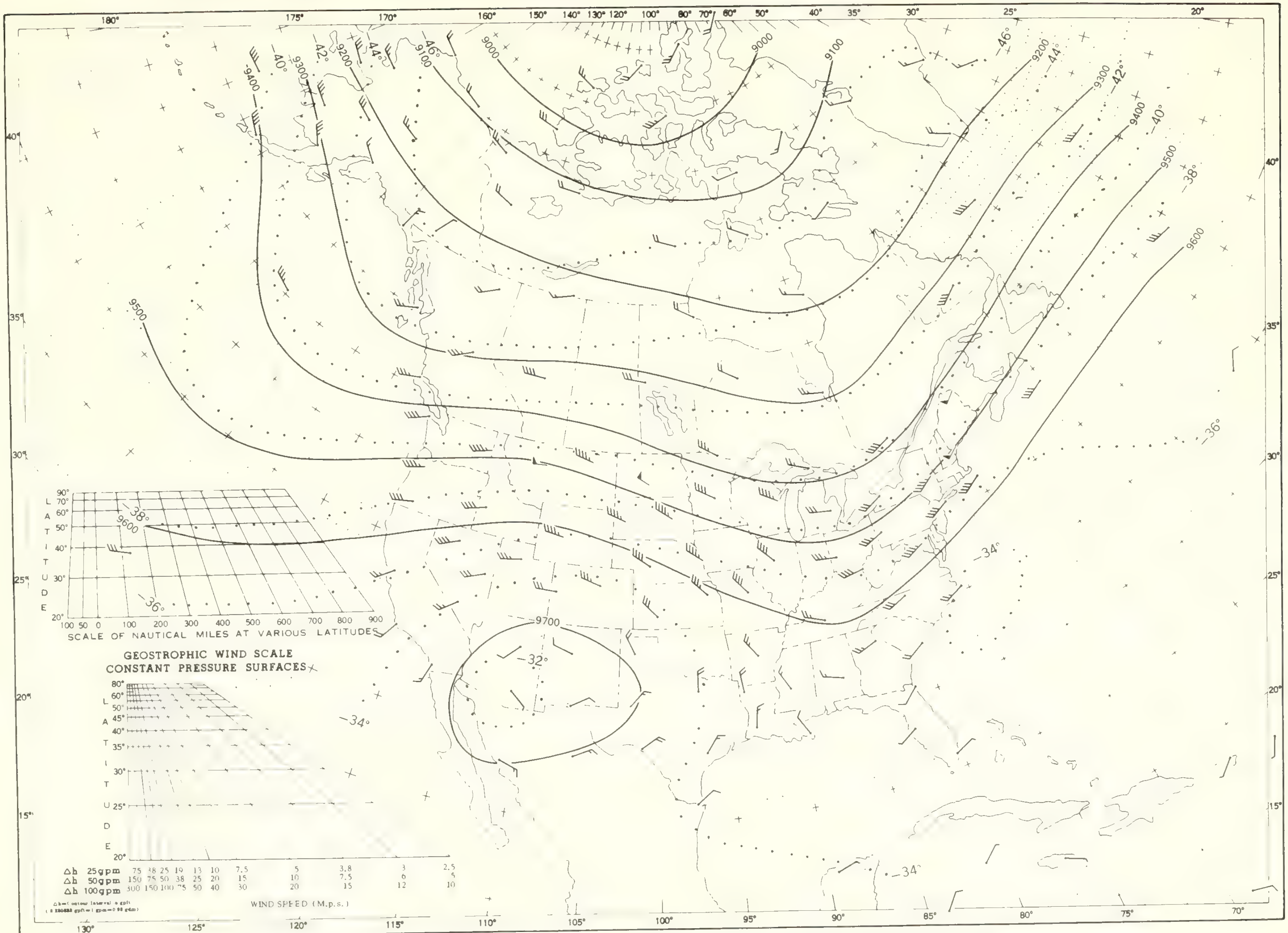
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.



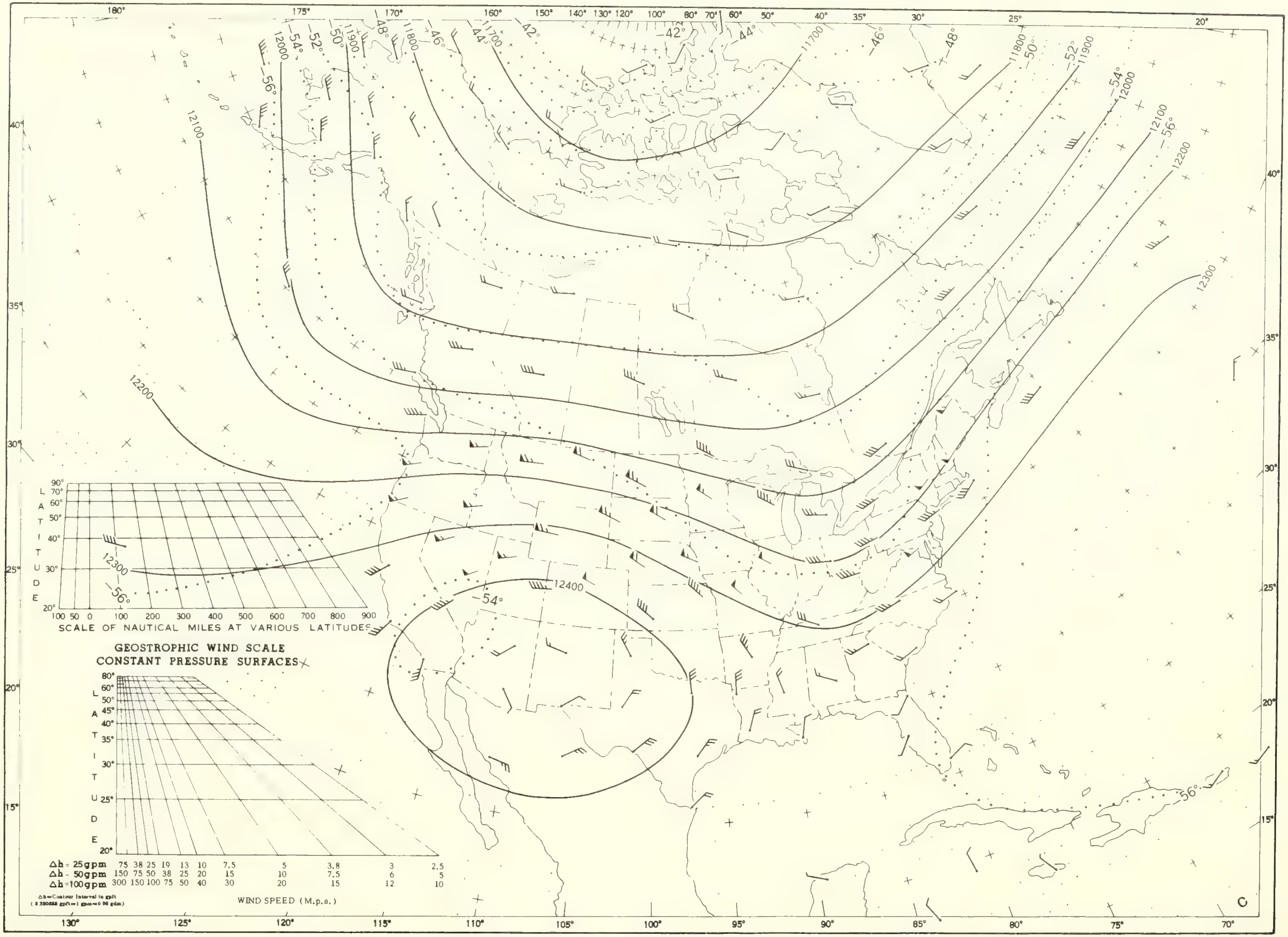
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.



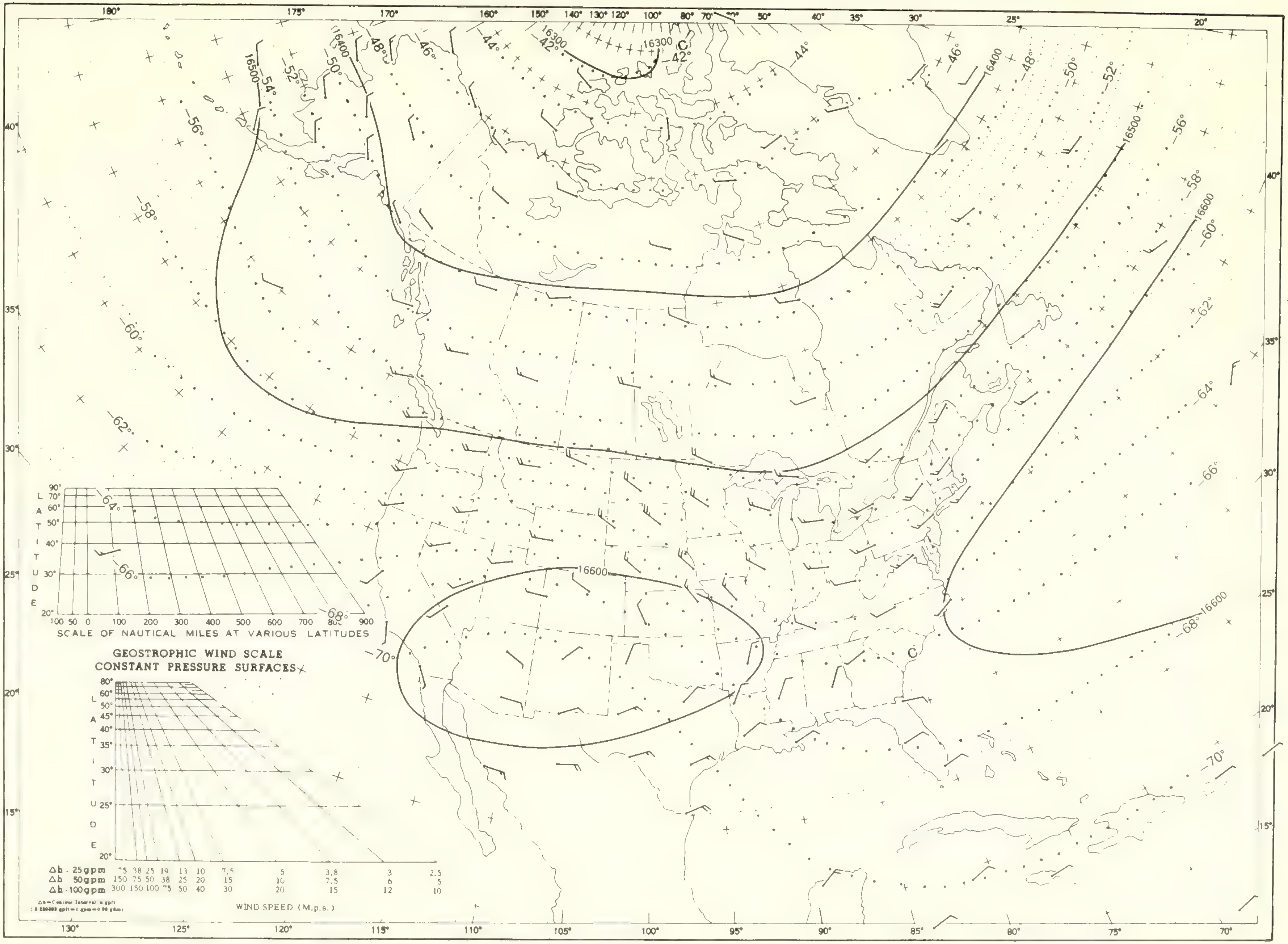
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.



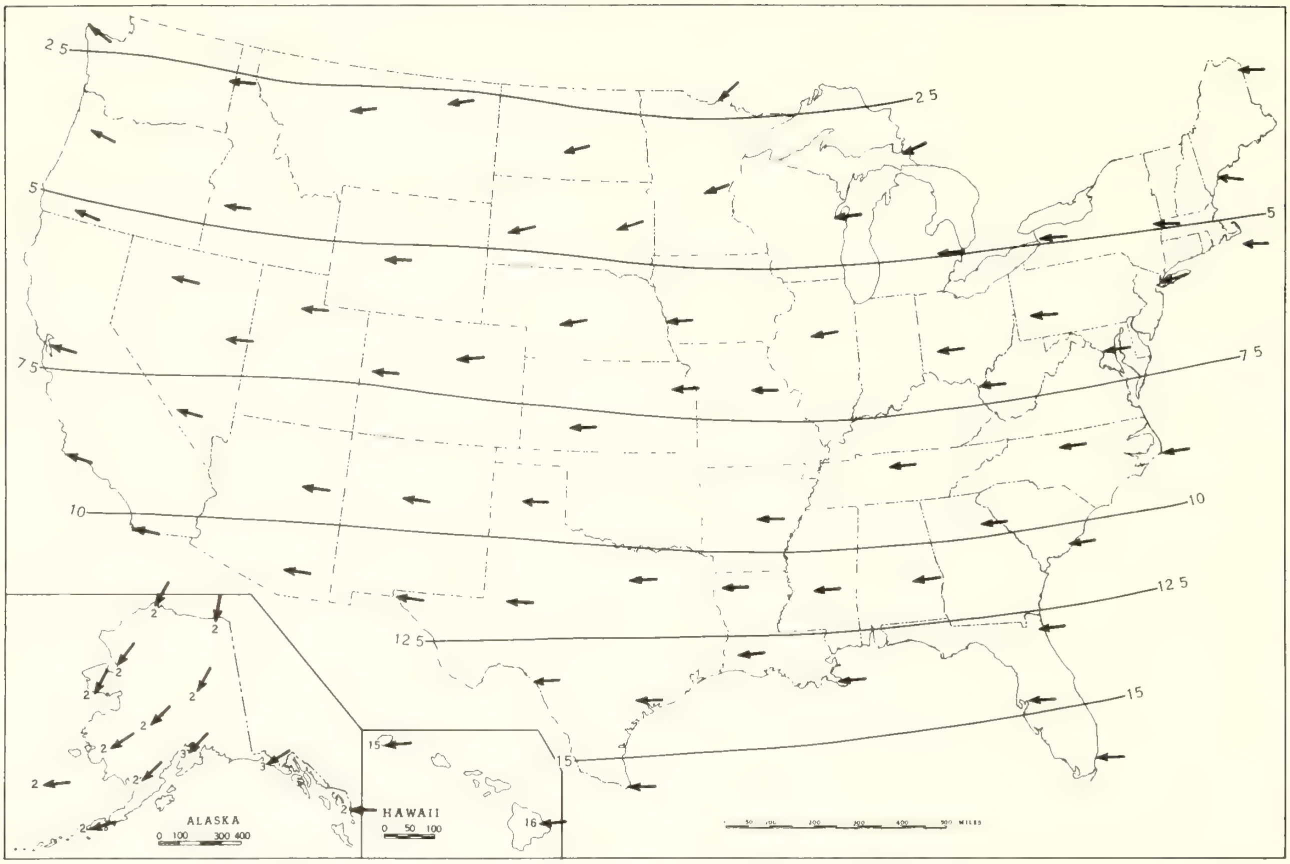
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, July 1967. Average Height and Temperature, and Resultant Winds.

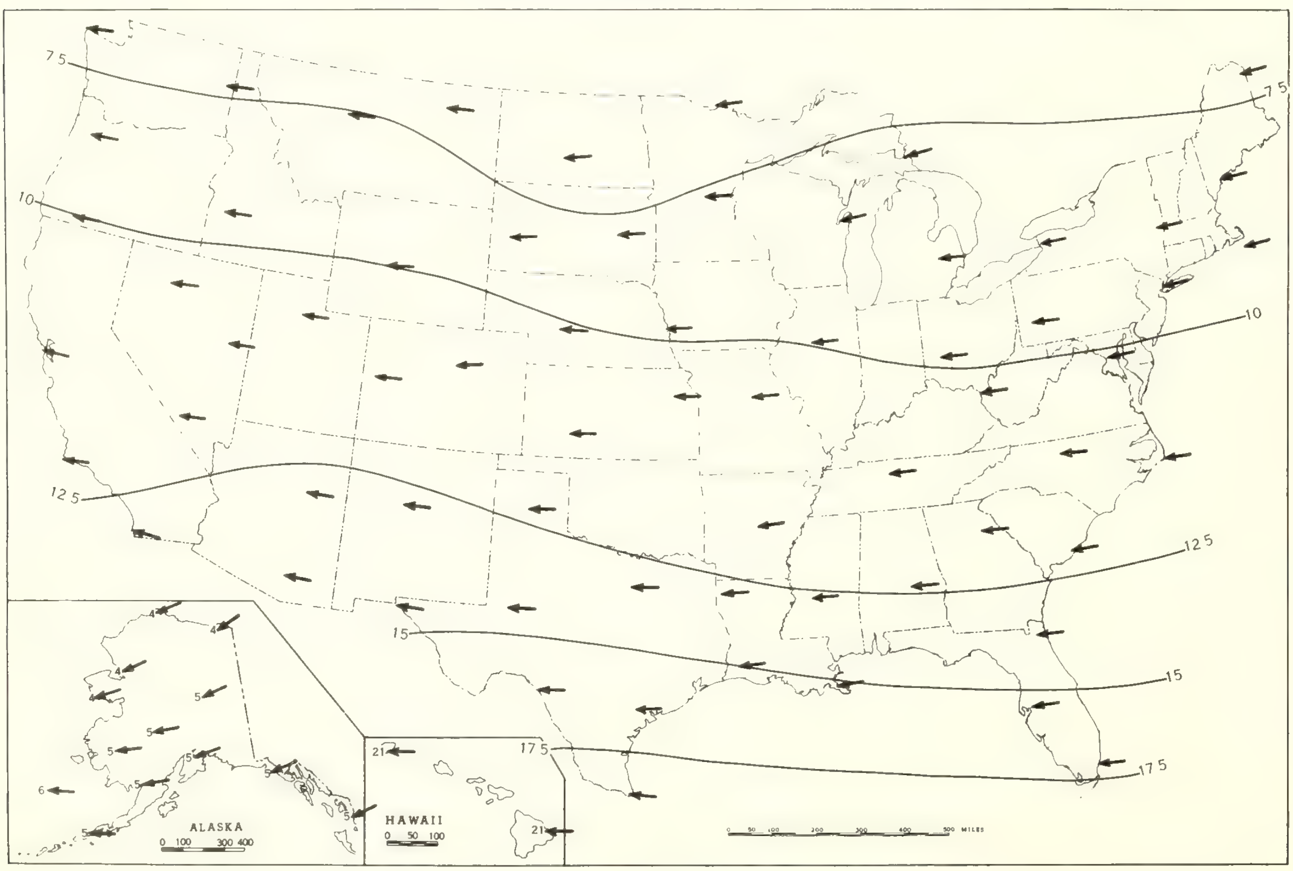


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, July 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, July 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. 11/7/67--1930

U. S. DEPARTMENT OF COMMERCE
ALEXANDER B TROWBRIDGE, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

AUGUST 1967

Volume 18 No. 8

ASHEVILLE: 1967

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 8 AUGUST 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Hot and dry in Pacific States.
2. Coldest August in part of South.
3. Numerous range and forest fires Pacific Northwest.
4. Drought-relieving rains in southern Texas.
5. Disastrous floods at Fairbanks, Alaska.
6. Puerto Rico Drought.

TEMPERATURE.--August 1967 was a month of contrasting temperatures in the 48 States. Monthly averages ranged up to 6° above normal west of the Continental Divide and to 6° below in central and southeastern areas. This temperature pattern persisted throughout August except for relatively warm weather in the lower Great Plains and central Atlantic coastal areas the first week. Temperature patterns for both July and August were almost the same. This was the third consecutive cooler-than-normal month in central and southeastern areas, and the third consecutive relatively warm month in the Pacific Northwest. Temperature extremes set some new records for August in both areas.

This was the coldest August on record in an area bounded by lines joining Meridian, Miss., Macon, Ga., and Evansville, Ind. Most other areas east of the Rockies experienced the coolest August in 10 to 20 years or more. Rochester, N. Y., and Minneapolis, Minn., had their coolest August since 1915; Detroit, Mich., and Denver, Colo., since 1927; Columbus, Ohio, since 1946; and St. Louis, Mo., and Tulsa, Oklahoma, since 1950. Record low temperatures for August occurred at a number of locations between Minneapolis, Minn., (39° on 19th) and Brownsville, Tex., (63° on 4th, equaling lowest). The cool weather was unusually persistent, a good example of which occurred at Concord, N. H., where the monthly maximum was under 90° during both July and August for the first time since 1915. Also, the 88° maximum for August at Trenton, N. J., was the lowest there since 1927, and this was the first August during which the maximum temperature did not rise to 90° at Evansville, Ind., since 1950.

This August was among the hottest west of the Continental Divide. It was actually the hottest at many locations with records dating back into the 19th Century, and included Bakersfield, Mount Shasta, Sacramento, and Stockton, Calif., Eugene, Medford, and Pendleton, Oreg., and Seattle, Stampede Pass, and Walla Walla, Wash.; and was the second or third hottest at many other stations. The number of days with 90° or higher set new records at many stations and the number of days with 100° or higher set new records at some others. The maximum temperature at Fresno, Calif., reached 100° or higher on 24 days equaling the record set there in 1891. Red Bluff recorded 100° or over on 23 days, a new record.

A COOL SUMMER.--The summer of 1967, like its constituent months of July and August and to a lesser extent, June, was considerably warmer than normal in the Far West, cooler than normal east of the Rockies and unusually cool in central and southeastern areas. Athens, Ga., reported its coolest summer in 95 years and Concordia, Kans., its coolest since 1885. The persistently cool weather east of the Rockies was responsible for slower-than-usual development of such major crops as corn, soybeans, and cotton.

PRECIPITATION.--Precipitation for August was generally well above normal in the Atlantic and Gulf Coastal States, Appalachian region, Rio Grande Valley of Texas, and New Mexico. Elsewhere amounts generally ranged from slightly below normal to no rain at all in some western localities.

The month was unusually wet in some areas. In northern Georgia 19.55 inches were recorded at Helen, more than 18 inches of which fell during August 20-26, and over 16 inches in a 3-day period. Heavy rainfall ranged up to 11 inches during a period of thunderstorm activity on the 3d through the 5th in an area including Maryland's central Eastern Shore and central and southern Delaware and boosted the monthly total at Denton, Md., to 19.08 inches and at Bridgeville, Del., to 17.69 inches. From southern New Jersey southward through Florida, along the Gulf coast to Louisiana, and in the lower Appalachians, monthly amounts generally exceeded 8 inches. Some other large monthly totals in this area included 24.74 inches at Wewahitchka, Fla., 15.93 near Williamston, N. C., 18.26 at Catawba, S. C., 18.94 at Wallaceton, Va., and 15.37 inches at Glassboro, N. J. In New Mexico and Arizona monthly totals ranged up to about 8 or 9 inches.

Rainfall was generally less than 50 percent of normal in the Pacific States, the upper portion of the Great Basin, Montana, western Wyoming, the Red River of the North Valley, eastern Nebraska, western Missouri and north Texas. In these dry areas 279 stations in California, 27 in Idaho, 29 in Montana, 73 in Oregon, 69 in Washington, and 11 in Texas recorded no rainfall at all.

Drought developed in central and south Texas during June and continued through the first half of August. Crops suffered severely in some localities from high temperatures and drought before heavy rains the second half replenished soil moisture in the south and benefited crops in central areas.

Drought also plagued Puerto Rico. It was severe to extreme in southern portions where below normal rainfall had been the rule since 1963. At the end of August pastures were burned out and emergency feeding of cattle was necessary. The drought was less severe in eastern and western interior sections.

STORMS AND OTHER UNUSUAL WEATHER.--Flooding in central Alaska was one of the worst weather-caused disasters of the month. Heavy rainfall over the Chena and Tanana River Basins during the period August 8-15 totaled 6.15 inches at Fairbanks. In parts of Fairbanks flood waters were 10 feet deep. Water and telephone systems were knocked out and homes flooded in Fairbanks where estimates of losses ranged up to $200 million.

Heavy rains on the 3d in the Banger area of Northampton County, Pa., caused flash flooding which resulted in several million dollars damage.

Flash floods in northern Georgia resulting from heavy rains on the 20th through the 26th, caused damage estimated at well over $2 million.

A cold air mass covered the entire area east of the Rockies at the end of the month, and on the 31st the following stations reported record high sea level pressure records: Concordia, Kans., 30.47 inches; Omaha, Neb., 30.52; and Sioux City, Iowa, 30.53 inches. Stampede,

AUGUST 1967

Wash., reported its highest average station pressure for August, 26.077 inches.

A hot, dry summer created a high fire hazard in the Pacific Northwest and numerous forest and range fires occurred during August.

CONDENSED CLIMATOLOGICAL SUMMARY

AUGUST 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	97	5+	2 Stations	46	29+	Coden	13.84	Boaz	2.49
Alaska	Data delayed									
Arizona	Buckeye	118	2	do	35	20+	Fritz Ranch	7.81	2 Stations	.00
Arkansas	Waldron	101	9	3 Stations	42	29+	Aplin 1W	8.04	Star City 4ENE	T
California	Death Valley	122	13	2 Stations	29	7	Mt San Jacinto WSP	3.47	279 Stations	.00
Colorado	Kit Carson	102	25	Fraser	20	23+	Wolf Creek Pass 4W	6.29	Glade Park Store	.09
Connecticut	4 Stations	89	19+	Mansfield Hollow Dam	40	24	Burlington	6.56	Pauchaug Forest	2.74
Delaware	do	90	19+	Bridgeville 1NW	52	17+	Bridgeville 1NW	17.69	Middletown 1WSW	6.02
Florida	Starke	98	28+	2 Stations	52	14+	Wewahitchka	24.74	Miami Beach	1.17
Georgia	4 Stations	98	19+	Tallapoosa 2N	49	29	Helen 1ESE	19.55	Albany 3SE	1.52
Hawaii	Data delayed									
Idaho	Riggins Ranger Station	115	20	Warren	26	8	Island Park Dam	1.43	27 Stations	.00
Illinois	4 Stations	94	3+	Mount Carroll	39	31	Fulton Dam 13	8.53	Carlinville	.69
Indiana	2 Stations	94	3+	Osgood	35	12	Evans Landing Dam 43	6.38	Richmond Waterworks	.44
Iowa	do	94	1	Saratoga 2E	32	31	DeWitt	9.41	Blockton 2S	.38
Kansas	Ashland	106	1	2 Stations	41	27+	Hugoton	7.43	2 Stations	.19
Kentucky	Bardwell 4E	99	1	Falmouth 5WNW	41	12	Greensburg Hiway 61	12.54	Covington WBAP	.77
Louisiana	Logansport	101	9	2 Stations	50	13	Franklin 3NW	13.69	Lake End	.42
Maine	Saco	91	18	Eustis 2	36	24	Waterville Pump Sta	7.83	Bridgton 1NNW	1.62
Maryland	Baltimore WB City	94	3	Sines Deep Creek 2	42	13	Denton 1WNW	19.08	Cumberland Police Brks	2.15
Massachusetts	Lowell	91	18	West Medway	41	24	Hyannis 2NNE	8.64	Cummington Hill	1.77
Michigan	Dowagiac 1W	92	17+	2 Stations	29	22+	Ironwood	6.20	Monroe Sewage Plant	.75
Minnesota	Canby	96	1	Cotton 11E	26	22	Springfield 1NW	6.11	Halstad	.26
Mississippi	Merrill	98	8	University	48	28	Shuqualak	13.47	Scott	.87
Missouri	Ozark Beach	99	8	2 Stations	35	28	West Plains	5.39	Centralia	.03
Montana	Libby 1NE Ranger Sta	106	19	do	24	26	Ballantine	1.55	29 Stations	.00
Nebraska	Culbertson 3WSW	103	29	3 Stations	36	27+	Lynch	4.37	Merriman	.00
Nevada	Sunrise Manor Las Vegas	112	13+	Charleston	26	28+	Searchlight	3.12	6 Stations	.00
New Hampshire	Franklin	90	17	Mount Washington	26	31	Massabesic Lake	5.82	Plymouth 1E	1.23
New Jersey	2 Stations	91	20+	2 Stations	47	25+	Glassboro	15.37	Woodcliff Lake	4.73
New Mexico	Jal	105	8	Sandia Crest	24	25	Tajique 4N	9.04	Ochoa	.14
New York	New York Laurel Hill	94	18+	Lake Placid Club	33	31	NY Westerleigh Stat Is	11.74	Ogdensburg 3NE	1.21
North Carolina	2 Stations	95	5+	2 Stations	41	14	Williamston 1ENE	15.93	Yadkinville 6E	3.11
North Dakota	Carson	104	1	Marmarth	29	26	New Salem	2.57	Beach 1NE	T
Ohio	Ironton	93	8	Mansfield 6W	35	12	Portsmouth	5.11	Dayton	.15
Oklahoma	2 Stations	108	8+	Jay	44	12	Beaver	8.42	Marietta 1NNW	T
Oregon	do	110	19+	Fremont	25	7	Squaw Butte Exp Sta	.91	73 Stations	.00
Pennsylvania	Wellsboro 3S	95	5	Coudersport 5NW	35	12	Hop Bottom 2SE	11.81	New Stanton	1.33
Puerto Rico	4 Stations	95	30+	Aibonito	62	9	Adjuntas 2N	19.42	Santa Rita	.20
Rhode Island	Providence WBAP	87	18	2 Stations	51	24	Greenville	5.86	Block Island WBAP	2.75
South Carolina	Winthrop College	98	20	Rainbow Lake	51	30	Catawba	18.26	Rimini	3.38
South Dakota	3 Stations	106	25+	Pactola Dam	30	26	Sisseton	4.07	Redig 11NE	.02
Tennessee	2 Stations	96	4+	Mountain City No 2	44	14	Copperhill	10.45	Newbern	.95
Texas	Brownwood	109	1	4 Stations	47	13+	McCook	12.22	11 Stations	.00
Utah	Saint George	108	13+	2 Stations	32	25+	Cedar Breaks Nat Mon	4.20	6 Stations	T
Vermont	Enosburg Falls	89	6	West Burke	32	24	Salisbury	7.27	Reading Hill	1.65
Virginia	Partlow 3WNW	97	3	Burkes Garden	39	14	Wallaceton Lk Drummond	18.94	Parramore Beach LBS	1.59
Washington	Lower Granite Dam NR	110	17	Greenwater	32	25	Conconully	1.00	69 Stations	.00
West Virginia	Williamson	93	9	Arbovale 2	37	13	Harpers Ferry Nat Mon	9.03	Hogsett Gallipolis Dam	1.40
Wisconsin	La Crosse State U	95	1	Laona 4SSW	27	22	Monroe 1W	8.14	Manitowoc	.92
Wyoming	Powder River 2SW	103	25	Kendall	22	8	Carpenter 3E	2.22	3 Stations	.00

+ An[illegible]

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max. 90 F. or above	Temperature: No of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 01 inch or more	Precipitation: No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days (sunrise to sunset): Partly cloudy, 4-7	No of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb	Mb	F	F	F	F	F		F				F	%	In	In	In			In	In	M p.h.		M p h							%
ALABAMA																																
BIRMINGHAM	620	995.6	1018.0	84	65	74.2	- 6.9	90	1	55	29	1	0	66	80	10.85	6.00	3.05	14	9	0.0	0	1.4	3	27	SW	26	5	7	19	7.3	43
HUNTSVILLE	600	995.3	1018.0	82	65	73.8	- 6.4	89	1	55	14	0	0	65	76	6.24	2.95	1.27	14	8	0.0	0	0.7	2	21	24	3	8	4	19	7.2	
MOBILE	211	1009.1	1017.0	88	72	79.8	- 2.3	94	7+	60	12	14	0	71	80	8.86	2.42	2.72	16	17	0.0	0	1.7	5	18	20	2	4	7	20	7.4	
MONTGOMERY	194	1010.5	1017.5	87	70	78.4	- 3.3	93	1	64	14+	9	0	68	74	2.67	- 1.43	1.06	9	8	0.0	0	0.3	3	24	S	1	4	10	17	7.1	46
ALASKA												B																				
ANCHORAGE	114	1005.4	1010.2	64	53	58.3	2.4	70	28+	41	28	2	0	48	71	2.96	0.39	0.65	17	0	0.0	0	4.1	16	26	17	16+	0	5	26	9.1	24
ANNETTE	110	1013.2	1017.1	69	53	61.0	2.6	83	28	49	24	14	0	53	78	10.25	2.74	2.50	13	0	0.0	0	3.1	17	29	18	19	5	7	19	7.2	
BARROW	31	1010.2	1010.7	41	32	36.1	- 1.8	61	17	25	31	0	18	34	93	0.32	- 0.58	0.08	9	0	1.0	T	1.0	9	29	21	28	2	3	26	8.6	
BARTER ISLAND	39	1010.2	1011.8	42	32	36.8	- 3.2	66	17	26	31+	0	24	32	83	0.34	- 0.71	0.14	5	0	T	T	2.2	7	29	27	13+	1	5	25	8.7	
BETHEL	125	1001.4	1007.0	62	47	54.3	2.0	78	8	36	27	2	0	49	83	2.01	- 2.19	0.70	17	1	0.0	0	1.9	15	41	16	15	0	6	25	8.6	
COLD BAY	96	1003.1	1006.8	56	47	51.3	0.0	67	15	38	28	0	0	46	84	4.72	0.47	0.74	18	0	0.0	0	3.1	24	46	14	12	1	1	29	9.3	
FAIRBANKS	436	991.5	1008.3	67	49	58.3	4.0	83	7	39	25	9	0	49	74	6.20	4.00	3.42	12	0	0.0	0	0.5	31	21	23	12	4	7	20	7.4	
JUNEAU	12	1015.2	1015.9	63	48	55.1	1.0	74	4	40	16	5	0	51	89	5.46	0.44	1.06	18	0	0.0	0	4.8	10	28	12	8	3	2	26	8.6	26
KING SALMON	49	1004.7	1006.7	63	47	54.6	0.0	72	14	37	28	1	0	46	77	3.15	- 0.28	0.90	18	1	0.0	0	4.9	14	36	8	6	1	3	27	9.0	
KOTZEBUE	10	1007.8	1008.2	57	45	51.1	0.5	76	5	36	30+	4	0	43	74	1.32	- 0.84	0.74	9	0	0.0	0	2.3	1	37	16	16	3	11	17	7.4	
MC GRATH	344	995.3	1008.0	64	46	54.9	0.8	77	8	34	28	7	0	47	76	3.41	- 0.38	0.86	17	3	0.0	0	1.3	21	29	20	12	0	10	21	8.5	
NOME	13	1006.1	1006.9	57	42	49.5	0.5	79	7	32	21	2	1	37	63	2.80	- 1.00	1.40	11	0	0.0	0	1.1	5	27	16	17+	2	5	24	8.3	23
ST. PAUL ISLAND	22	1005.1	1006.2	53	46	49.5	1.9	58	7	34	18	0	0	46	89	2.59	- 0.70	0.58	18	0	0.0	0	2.5	24	31	9	19	0	3	28	9.4	
SHEMYA	122	1004.7	1008.5	53	47	50.3	0.6	59	2	44	19+	0	0	48	95	2.10	- 0.02	0.61	21	0	0.0	0	4.7	25	36	22	12	0	6	25	8.9	
YAKUTAT	28	1013.2	1014.2	59	47	52.8	- 1.0	67	29+	38	28	0	0	51	93	14.15	3.23	2.18	21	0	0.0	0	3.5	12	21	15	9	1	1	29	9.5	
ARIZONA																																
FLAGSTAFF	6993	792.8	1018.0	79	49	64.4	0.5	84	26+	42	23	0	0	49	66	2.68	- 0.16	0.55	17	23	0.0	0	0.4	23	20	31	14	5	17	9	6.0	
PHOENIX	1117	972.2	1009.9	103	79	91.0	3.5	110	26	74	17	31	0	58	35	0.02	- 1.10	0.01	2	8	0.0	0	1.7	10	38Y	NE	14	17	6	8	4.0	84
TUCSON	2584	925.5	1011.1	96	73	84.6	1.5	104	26	69	25+	30	0	58	46	2.00	- 0.88	0.64	11	10	0.0	0	3.6	14	38	E	2	16	8	7	4.1	83
WINSLOW	4895	854.7	1015.2	91	61	75.6	- 2.2	96	26+	55	21	21	0	49	44	1.09	- 0.34	0.48	9	14	0.0	0	1.4	14	35	30	23	12	10	9	4.9	
YUMA	194	1002.0	1009.1	105	81	93.3	1.7	112	27	76	25+	31	0	62	39	0.37	- 0.13	0.23	3	4	0.0	0	4.6	18	49	E	31	21	5	5	3.3	84
ARKANSAS																																
FORT SMITH	447	1001.0	1017.2	89	65	76.7	- 5.6	99	7	51	13	11	0	63	66	1.64	- 1.28	0.68	8	5	0.0	0	3.6	6	19	N	9	10	9	12	5.7	63
LITTLE ROCK	257	1008.5	1017.8	87	65	75.5	- 5.8	95	9+	52	29+	6	0	64	70	1.73	- 1.09	1.09	6	8	0.0	0	1.7	7	24	NE	30	7	13	11	5.6	77
TEXARKANA	391	1004.4	1017.2	90	68	79.0	- 3.6	98	30+	54	13	15	0	66	69	1.87	- 1.20	0.80	9	9	0.0	0	2.0	12								
CALIFORNIA																																
BAKERSFIELD	475	993.9	1011.0	102	74	87.7	6.0	111	31	68	9+	31	0	52	32	0.00	0.00	0.00	0	1	0.0	0	3.1	33	23	14	31	25	6	0	1.3	
BISHOP	4108	875.0		98	58	77.9	3.6	102	18+	52	7	31	0			0.03	- 0.09	0.02	2		0.0	0						12	18	1	3.7	
BLUE CANYON	5280			82	64	72.7	6.0	87	14	56	7	0	0			0.20	0.14	0.16	3		0.0	0			17	9	23	22	6	3	2.3	
EUREKA U	43			61	53	56.8	0.1	66	28+	50	20+	0	0			T	- 0.10	T	0		0.0	0			17	NW	6+	4	10	17	7.2	44
FRESNO	328	999.3	1010.9	101	66	83.6	4.7	108	15	59	29	31	0	59	47	T	- 0.01	T	0	0	0.0	0	3.0	29	16	NW	19	25	5	1	1.5	94
LONG BEACH	34	1011.5	1013.0	90	70	80.1	7.8	105	30	66	10	17	0	63	63	T	- 0.03	T	0	0	0.0	0	3.0	25	20	19	15	21	8	2	2.4	
LOS ANGELES	97	1009.1	1012.6	79	67	72.8	3.7	91	31	64	28+	1	0	63	74	0.00	- 0.02	0.00	0	0	0.0	0	6.8	25	23Y	W	29+	16	11	4	3.2	
LOS ANGELES J	270			89	70	79.2	6.1	103	31	66	10	10	0			T	- 0.04	T	0		0.0	0			15	SW	30+	23	8	0	2.4	83
MT SHASTA R	3544			91	52	71.5	4.8	98	18	45	8+	23	0			0.15	- 0.03	0.15	1		0.0	0										
OAKLAND	6	1013.9	1014.2	71	57	63.9	- 0.3	79	29	53	12	0	0	56	80	T	- 0.03	T	0	0	0.0	0	7.7	29	20	28	22+	18	10	3	3.0	
RED BLUFF	342	999.0	1011.3	102	67	84.2	3.2	110	14	62	31+	31	0	51	36	T	- 0.06	T	0	1	0.0	0	1.0	18	25	SE	25	24	6	1	1.7	94
SACRAMENTO	17	1010.8	1011.6	99	60	79.0	4.9	107	18	54	20	29	0	56	54	0.00	- 0.02	0.00	0	0	0.0	0	4.5	21	17	SW	27+	25	5	1	1.5	99
SANDBERG R	4517			89	67	77.8	4.5	98	14	57	7	16	0			T	- 0.09	T	0		0.0	0			36	7	30	19	12	0	2.5	
SAN DIEGO	13	1011.5	1012.6	79	68	73.1	1.3	87	31	64	4	0	0	64	76	0.14	0.06	0.14	1	2	0.0	0	4.6	28	19	NW	27	16	8	7	4.2	67
SAN FRANCISCO	8	1013.5	1014.1	72	54	62.8	0.0	80	29	51	12	0	0	52	74	T	- 0.02	T	0	0	0.0	0	13.1	31	32	WNW	30	21	8	2	2.4	
SAN FRANCISCO U	52			64	55	59.2	- 0.2	72	29	51	12	0	0			T	- 0.04	T	0		0.0	0			27	W	30+					66
SANTA CATALINA	1568			84	67	75.1	4.7	103	29	55	20	8	0			0.00	- 0.06	0.00	0	0	0.0	0						24	4	3	2.1	
SANTA MARIA	236			75	54	64.3	1.9	83	18	49	30+	0	0			T	- 0.03	T	0		0.0	0						18	12	1	3.3	
STOCKTON	22	1011.2	1012.1	99	64	81.2	5.0	107	18	58	10+	30	0	51	40	0.00	0.00	0.00	0	0	0.0	0	6.9	32	18	32	18	24	5	2	1.6	
COLORADO																																
ALAMOSA	7536	778.9		76	46	60.7	- 2.3	84	25+	36	22	0	0			3.28	2.30	0.83	21		0.0	0						7	16	8	5.6	
COLORADO SPRINGS	6145	817.5	1018.6	78	54	66.1	- 3.1	91	25	43	31	2	0	48	59	3.09	0.93	0.83	14	8	0.0	0	3.5	3	32	34	18	7	13	11	5.8	
DENVER	5283	841.5	1016.7	83	54	68.2	- 3.3	93	24	48	31+	2	0	46	52	0.83	- 0.45	0.38	7	3	0.0	0	3.2	18	30	SW	6	10	12	9	5.2	65
GRAND JUNCTION	4855	855.1	1014.2	91	62	76.2	0.7	98	25	54	31	23	0	44	36	0.59	- 0.48	0.54	4	5	0.0	0	4.2	14	30	NW	29	16	9	6	4.5	77

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation ground	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F or above	Min. 32 F or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft	Mb	Mb	F	F	F	F	F		F				F		In	In	In			In	In	M.p.h		M.p.h							%
COLORADO																																
PUEBLO	4684	860.1	1016.7	85	59	71.8	-2.8	95	7	52	31+	9	0	48	48	1.07	-0.78	0.29	8	5	0.0	0	1.8	2	32	N	5+	8	15	8	5.5	67
CONNECTICUT																																
BRIDGEPORT	7	1016.9	1017.7	79	65	72.3	0.0	87	18	58	31	0	0	64	77	3.65	-0.80	2.12	13	3	0.0	0	2.1	21	25	27	4	4	7	20	7.1	
HARTFORD	169	1011.2	1017.5	80	60	70.2	-1.0	89	18	50	24	0	0	59	71	4.34	0.33	1.49	13	5	0.0	0	2.3	24	20	S	3	3	8	20	7.5	56
NEW HAVEN	6	1017.6		78	63	70.5	-0.1	85	10	54	24	0	0			3.25	-0.99	1.41	14		0.0	0			19	N	31	6	9	16	7.0	60
DELAWARE																																
WILMINGTON	74	1014.9	1017.9	81	65	72.8	-1.5	87	19	59	14	0	0	65	80	11.16	5.57	3.08	14	10	0.0	0	0.[illegible]	24	27	31	4	7	7	17	7.0	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.6	1018.0	85	67	76.2	-0.3	94	3	60	14	6	0	66	73	9.17	4.27	3.63	10	5	0.0	0	1.0	16	26	NW	4	8	4	19	7.0	46
FLORIDA																																
APALACHICOLA U	13			86	74	79.9	-1.6	90	31+	69	13	2	0			9.58	1.84	3.27	16	13	0.0	0			29	NW	1	5	12	14	6.8	50
DAYTONA BEACH	31	1016.9	1018.3	86	71	78.7	-2.0	90	10+	67	9	3	0	72	83	3.02	-3.35	0.77	12	15	0.0	0	3.4	14	22	11	22	0	18	13	6.8	
FORT MYERS	15	1017.3	1017.6	89	75	82.4	-0.3	92	3	72	9	17	0	74	81	15.86	8.48	6.73	16	26	0.0	0	2.5	12	32	12	8	0	22	9	6.5	
JACKSONVILLE	20	1016.9	1017.9	90	73	81.4	-0.9	96	27	68	14	21	0	71	77	12.31	5.46	3.67	15	10	0.0	0	2.2	17	30	S	8	3	17	11	6.8	49
KEY WEST	4	1016.3	1016.8	89	80	84.3	0.7	92	3+	74	9	9	0	74	71	3.98	-0.35	0.89	15	14	0.0	0	7.5	13	35	E	9	1	19	11	6.6	79
LAKELAND U	214			88	72	80.0	-1.9	94	27	69	15+	16	0			10.42	3.34	2.88	21		0.0	0						0	20	11	6.9	60
MIAMI	7	1016.9	1017.3	88	76	81.8	-0.5	91	1	70	9	6	0	71	74	8.13	1.16	2.50	18	13	0.0	0	5.0	12	23	18	9	1	20	10	6.8	
ORLANDO	108	1013.9	1018.2	91	73	82.0	-0.8	94	27	70	15+	27	0	72	79	6.83	-0.11	1.88	19	19	0.0	0	3.4	16	35	22	12	1	18	12	6.9	
PENSACOLA	112	1013.2	1017.3	86	71	78.3	-3.2	91	5	63	12	3	0			13.09	6.12	2.64	17		0.0	0	0.9	9	59	SW	1	3	8	20	7.5	43
TALLAHASSEE	55	1015.2	1017.4	90	72	80.7	-0.4	97	8	67	15+	21	0	72	81	9.03	2.10	2.26	13	19	0.0	0	0.7	11	24	15	27	3	14	14	6.8	
TAMPA	19	1017.3	1017.4	88	73	80.3	-1.7	92	20+	70	20	14	0	72	80	10.34	2.10	5.10	16	26	0.0	0	2.4	15	25	10	20	3	12	16	7.0	53
WEST PALM BEACH	15	1016.9	1017.7	89	73	80.9	-2.1	91	31	70	6+	10	0	70	72	6.65	-0.09	3.28	18	16	0.0	0	4.7	13	32	34	1	0	22	9	6.3	
GEORGIA																																
ATHENS	802	989.2	1017.8	85	66	75.1	-3.9	90	19+	58	13	4	0	66	79	5.91	2.28	2.44	14	9	0.0	0	0.0	1	26	2	8	6	13	12	6.5	
ATLANTA	1010	981.7	1017.9	82	66	74.0	-4.2	88	19+	59	29	0	0	65	78	8.69	5.09	3.30	15	7	0.0	0	0.3	24	29	SW	26	5	10	16	6.8	53
AUGUSTA	145	1012.2	1017.3	87	67	76.9	-3.3	92	19+	58	16+	7	0	66	76	8.00	4.11	2.96	13	14	0.0	0	0.6	13	28	31	4	5	14	12	6.6	
COLUMBUS	385			87	70	78.6	-2.1	94	18+	60	14	10	0	68	75	5.06	0.42	2.51	8		0.0	0	0.7	8	21	22	24+	6	12	13	6.3	
MACON	354	1004.7	1017.4	87	66	76.5	-4.8	93	19+	56	14	8	0	67	77	4.41	0.23	1.73	9	9	0.0	0	0.6	5	36	S	24	7	9	15	6.6	47
ROME	637			85	64	74.3	-4.1	92	1	55	14	5	0			8.46	4.70	4.78	12		0.0	0										
SAVANNAH	46	1015.6	1017.5	89	70	79.4	-1.6	94	8	62	15+	15	0	70	79	8.57	1.95	2.03	18	13	0.0	0	1.5	17	26	E	3	6	13	12	6.5	54
HAWAII																																
HILO	27	1015.2	1016.4	84	70	77.1	1.3	86	25+	67	29+	0	0	68	77	19.55	8.10	9.38	21	4	0.0	0	0.8	19	17	E	3	0	13	18	7.8	35
HONOLULU	7	1015.2	1015.7	89	75	82.1	2.7	91	29+	71	29+	12	0	68	65	2.53	1.64	1.25	10	1	0.0	0	11.5	6	26	NE	26+	5	15	11	6.2	64
KAHULUI	48	1012.9	1015.2	85	70	77.8	-1.2	88	24+	63	29	0	0	69	77	1.33	0.98	0.83	10	0	0.0	0	12.1	5	28	NE	6+	7	13	11	6.1	59
LIHUE	103	1011.9	1017.0	84	74	78.8	0.4	86	27+	68	29	0	0	71	80	1.98	-0.48	0.70	21	1	0.0	0	13.0	6	27	E	9	1	14	16	7.2	70
IDAHO																																
BOISE	2838	915.7	1013.4	95	62	78.0	5.9	103	20	49	8	27	0	43	31	T	-0.16	T	0	1	0.0	0	1.0	27	23	NW	29+	24	7	0	1.9	92
IDAHO FALLS 46W R	4934			90	47	68.8	2.2	95	23+	37	9	21	0			0.18	-0.30	0.12	4		0.0	0	1.9	26	37	W	19					
LEWISTON	1413			96	62	79.1	7.4	106	31	50	25	25	0			T	-0.43	T	0		0.0	0						24	5	2	1.9	
POCATELLO	4454	865.6	1015.2	92	50	71.0	0.9	97	23	37	9	26	0	39	35	0.13	-0.42	0.09	3	3	0.0	0	1.8	24	38	W	6	15	16	0	3.2	89
ILLINOIS																																
CAIRO U	314			83	65	73.8	-6.1	90	8	55	31	1	0			4.84	1.74	2.28	7		0.0	0			34	SW	8	13	8	10	4.9	71
CHICAGO O HARE	658	994.2	1018.3	77	55	66.2	-5.1	86	16+	42	13	0	0	58	76	2.60	-0.61	1.46	9	5	0.0	0	1.9	29	30	26	3	10	11	10	5.3	
CHICAGO MIDWAY	607	995.9		78	61	69.2	-5.0	88	2	51	12	0	0	57	66	2.07	-1.09	1.47	7	3	0.0	0	1.1	25	28	W	26	10	13	8	5.3	63
MOLINE	582	996.6	1018.1	79	57	67.7	-5.9	89	2	45	31	0	0	59	77	3.62	0.09	1.20	8	6	0.0	0	1.0	25	28	N	2	13	9	9	4.9	66
PEORIA	652	994.6	1018.5	78	58	68.1	-6.2	88	2	44	31	0	0	58	72	2.34	-0.54	0.76	8	6	0.0	0	0.4	27	30	NW	18	14	8	9	4.7	67
ROCKFORD	724	991.2	1018.1	77	55	66.1	-6.4	86	16+	44	12	0	0	58	78	3.71	-0.43	1.12	11	7	0.0	0	1.2	28	25	31	3	12	9	10	4.9	
SPRINGFIELD	588	996.3	1018.2	79	59	68.6	-6.6	88	7+	46	31+	0	0	60	75	2.51	-0.23	1.65	5	5	0.0	0	1.2	26	26	W	26	12	13	6	4.8	79
INDIANA																																
EVANSVILLE	381	1004.4	1018.3	82	58	70.1	-7.2	88	9+	50	22+	0	0	61	75	3.15	0.08	2.02	7	4	0.0	0	1.0	32	28	W	8	10	9	12	5.5	69
FORT WAYNE	791	988.8	1018.5	79	56	67.6	-4.9	91	2	46	13+	1	0	54	65	1.61	-1.43	0.61	9	3	0.0	0	2.4	26	28	NW	18	11	9	11	5.5	67

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 90 F or above	No. of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F	F	F	F		F				F	%	In	In	In			In	In	M p h		M p h							%
INDIANA																																
INDIANAPOLIS	792	989.5	1018.4	82	60	71.1	-2.6	91	2	52	31+	1	0	60	71	2.38	-0.65	1.65	6	4	0.0	0	1.9	28	25	NW	2	8	9	14	5.8	73
SOUTH BEND	773	990.2	1017.9	78	58	67.9	-4.1	89	2	47	12+	0	0	56	68	2.77	-0.78	0.89	10	4	0.0	0	2.6	28	25	32	3	11	9	11	5.3	
IOWA																																
BURLINGTON	692			78	58	68.4	-6.2	89	2	44	31	0	0	58	71	2.59	-1.02	0.83	7	6	0.0		0.6	26	25	36	18	14	7	10	4.8	
DES MOINES	938	984.1	1018.4	82	59	70.3	-3.8	90	16	45	31	1	0	56	65	0.79	-2.88	0.28	7	5	0.0	0	1.0	15	24	N	26	12	12	7	4.6	81
DUBUQUE	1056	979.7		76	55	65.7	-4.8	86	1	42	31	0	0			3.82	0.09	0.98	7		0.0	0						13	7	11	5.1	
SIOUX CITY	1095	978.0	1017.4	82	58	70.4	-4.7	91	17	43	31+	1	0	58	66	1.35	-1.31	0.42	9	8	0.0	0	2.1	15	45	SW	6	18	10	3	3.6	90
WATERLOO	868	986.5	1018.0	77	54	65.2	-6.5	85	16	38	31	0	0	57	76	3.95	0.53	1.34	7	4	0.0	0	0.8	19	46	21	1	14	9	8	4.6	
KANSAS																																
CONCORDIA	1470	965.1	1017.1	85	61	72.9	-6.1	93	28	49	31+	7	0	58	62	1.91	-1.24	1.62	5	7	0.0	0	4.0	15	23	N	26+	17	7	7	3.8	85
DODGE CITY	2582	927.5	1016.5	86	62	73.6	-5.6	97	29+	50	27	10	0	57	61	3.16	0.80	2.14	9	10	0.0	0	4.3	15	29	S	7	11	12	8	5.2	79
GOODLAND	3650	892.3	1016.9	86	56	71.2	-3.5	98	28	48	27	11	0	53	59	1.76	-0.52	0.53	7	7	0.0	0	4.3	16	29	25	5	16	9	6	4.1	
TOPEKA	876	986.5	1017.9	83	61	72.1	-6.3	93	2	47	31	4	0	60	68	1.84	-2.45	0.52	7	6	0.0	0	1.3	13	24	N	30+	12	11	8	5.0	77
WICHITA	1321	969.9	1016.9	88	61	74.7	-6.1	103	29	48	27	15	0	55	55	1.91	-0.96	1.16	6	6	0.0	0	4.0	13	33	NE	29	13	14	4	4.2	76
KENTUCKY																																
COVINGTON	869	987.1	1018.5	82	61	71.1	-3.0	87	8+	52	21	0	0	60	72	0.77	-1.83	0.30	6	3	0.0	0	1.2	26	21	27	27	8	14	9	5.7	
LEXINGTON	966	983.4	1018.7	80	62	70.6	-5.4	88	8	51	13	0	0	61	74	3.63	0.42	1.72	9	3	0.0	0	1.1	22	18	4	31	10	9	12	5.9	
LOUISVILLE	477	1000.7	1018.0	82	62	72.2	-4.0	91	8	53	22+	1	0	62	74	4.30	1.33	2.40	10	5	0.0	0	0.6	27	24	N	30	9	11	11	5.5	71
LOUISIANA																																
ALEXANDRIA	92	1012.9	1016.9	89	69	79.1	-3.0	96	10	59	12	14	0			3.77	0.29	0.90	11	8	0.0	0	0.8	2	24	25	5	5	6	20	7.0	
BATON ROUGE	64	1014.2	1017.1	89	71	80.1	-2.3	95	10+	59	12	20	0	68	71	4.11	-1.15	1.73	11	7	0.0	0	1.1	2	23	3	5	4	11	16	7.1	
LAKE CHARLES	9	1015.9	1017.0	88	72	80.1	-2.1	94	10+	61	12	16	0	72	80	6.21	1.41	2.00	9	10	0.0	0	0.7	10	24	1	10	4	10	17	7.2	
NEW ORLEANS	3	1015.9	1016.8	88	72	80.0	-1.9	95	6+	64	14	15	0	70	75	7.51	2.17	1.83	15	11	0.0	0	1.4	2	21	22	27	8	5	18	6.8	
SHREVEPORT	254	1007.5	1016.6	90	70	80.0	-3.8	100	9	59	13	17	0	67	69	4.67	2.12	3.42	5	5	0.0	0	2.9	12	32	15	21	7	12	12	5.7	66
MAINE																																
CARIBOU	624	992.9		75	54	64.2	1.6	83	17	44	31+	0	0			4.81	1.14	2.15	12		0.0	0						6	9	16	6.9	
PORTLAND	47	1014.9	1017.3	76	58	66.8	0.0	86	18	44	25	0	0	60	80	2.57	0.15	0.97	11	5	0.0	0	2.7	20	27	W	20	9	10	12	6.2	54
MARYLAND																																
BALTIMORE	148	1012.2	1017.8	82	65	73.4	-1.6	93	3	58	15+	1	0	65	80	8.87	3.68	2.90	12	6	0.0	0	1.2	24	36	SE	3	7	8	16	6.8	59
MASSACHUSETTS																																
BLUE HILL OBS R	629			77	61	69.1	-0.3	87	18	53	31	0	0			4.98	0.93	1.56	14		0.0	0			35	SW	4					48
BOSTON	15	1016.6	1017.5	78	64	70.9	-0.8	86	18	56	24	0	0	60	71	5.74	2.08	2.60	13	6	0.0	0	4.4	21	29	SW	4	8	5	18	7.0	54
NANTUCKET	43	1018.0	1018.3	72	60	65.7	-2.4	76	16+	50	24	0	0	64	96	6.74	3.06	1.47	13	3	0.0	0	3.7	19	30	SW	20	1	7	23	8.5	50
PITTSFIELD	1170			77	55	65.8	-0.4	84	18+	43	31	0	0			2.22	-1.68	0.70	14		0.0	0										
WORCESTER	986	982.1	1018.6	76	59	67.8	-0.5	84	18	49	31	0	0	59	76	3.47	-0.77	0.69	14	5	0.0	0	3.7	25	20	28	29	4	11	16	6.9	
MICHIGAN																																
ALPENA	689	992.2	1017.5	75	49	61.9	-2.6	87	16	36	23	0	0	52	74	3.17	0.14	1.07	10	5	0.0	0	1.2	26	33	NW	3	13	10	8	4.7	64
DETROIT	619			78	60	69.1	-3.7	88	17	49	12	0	0	57	66					7			1.8	30	21	29	27					
DETROIT M WAYNE CO	633	993.2	1017.2	79	56	67.3	-4.6	88	17	46	12	0	0	56	69	2.01	-0.83	0.41	11	4	0.0	0	1.7	29	29	SW	3	11	10	10	5.2	68
DETROIT WILLOW RUN	711	989.8	1017.8	78	55	66.6	-6.0	87	17+	43	12	0	0	53	64	1.69	-1.15	0.44	9	7	0.0	0	1.6	28	40	25	3	13	7	11	5.1	
FLINT	770	989.8	1017.5	77	53	64.8	-4.8	87	17	39	12	0	0	54	69	2.34	-0.83	1.12	9	3	0.0	0	2.2	27	23	27	26	10	14	7	5.1	
GRAND RAPIDS	784	988.8	1017.8	78	54	66.0	-4.4	89	17	43	31+	0	0	54	69	3.34	0.64	1.12	9	5	0.0	0	2.2	26	38	W	17	10	12	9	5.0	66
HOUGHTON LAKE	1149	976.6	1018.3	74	50	62.1		83	17+	36	23	0	0	53	74	1.66		0.54	9	8	0.0	0	2.3	27	21	24	3	13	10	8	4.8	
LANSING	841	986.1	1017.5	80	51	65.5	-4.7	91	17	38	23+	2	0	53	67	2.90	-0.15	2.09	8	3	0.0	0	2.6	28	30	W	26	10	14	7	5.1	74
MARQUETTE U	677			73	55	63.6	-2.2	88	25+	44	22+	0	0			2.80	-0.23	1.35	12		0.0	0			29	SW	25	13	9	9	5.0	70
MUSKEGON	627	994.9	1017.7	77	56	66.5	-3.8	85	16+	47	23	0	0	56	70	2.70	-0.21	0.95	13	9	0.0	0	2.2	26	29	22	17	11	10	10	4.9	
SAULT STE MARIE	721	990.9	1017.2	73	47	60.3	-3.7	83	16	37	31+	0	0	54	80	4.40	1.51	1.77	10	6	0.0	0	1.6	30	27	S	3	11	10	10	5.3	65
MINNESOTA																																
DULUTH	1428	966.8	1018.1	73	51	61.7	-2.1	85	15	37	31	0	0	51	69	2.31	-1.50	1.02	9	7	0.0	0	2.5	22	37	W	15	6	15	10	6.0	62
INTERNATIONAL FALLS	1179	974.6	1017.4	75	49	62.1	-1.0	89	15	35	31	0	0	53	73	1.85	-1.79	0.95	6	6	0.0	0	1.2	23	20	20	24+	7	16	8	5.5	
MINNEAPOLIS	834	987.5	1017.8	77	55	66.2	-3.8	89	16	39	19	0	0	55	70	2.79	-0.39	1.21	7	5	0.0	0	1.1	19	63	N	6	10	11	10	5.3	67

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 90 F or above	No of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: .01 inch or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F	F	F	F		F				F	%	In	In	In			In	In	M.p.h		M p h							%
MINNESOTA																																
ROCHESTER	1297	971.2	1018.5	76	53	64.2	- 5.6	87	1	38	31	0	0	54	73	3.52	- 0.27	2.24	7	6	0.0	0	3.2	22	41	21	1	12	9	10	5.0	
ST CLOUD	1034	979.7	1017.3	79	53	65.9	- 2.7	89	24+	40	19	0	0		67	4.72	0.99	4.20	8		0.0	0						14	10	7	4.5	
MISSISSIPPI																																
JACKSON	310	1005.8	1017.6	87	67	77.0	- 5.0	95	9	58	30+	11	0	68	81	3.49	0.16	1.57	11	6	0.0	0	1.4	5	26	NW	18	4	8	19	7.4	51
MERIDIAN	290	1006.8	1017.7	87	67	77.0	- 4.2	94	7	57	30+	7	0	67	76	6.69	3.15	3.25	12	7	0.0	0	1.5	35	22	1	11	5	8	18	7.4	
MISSOURI																																
COLUMBIA	778	989.8	1017.8	84	61	72.2	- 5.0	94	2	46	31	5	0	58	64	0.87	- 2.94	0.69	3	2	0.0	0	1.0	16	43	NW	3	13	10	8	4.7	80
KANSAS CITY	742	991.2	1017.8	86	64	75.1	- 4.7	94	3	50	31	11	0	60	61	0.31	- 3.46	0.24	3	1	0.0	0	1.0	14	23	N	30	12	9	10	4.9	72
ST JOSEPH	811			85	57	71.1	- 6.4	92	7	43	28+	6	0	61	74	0.79	- 3.42		4	4	0.0		0.6	16	21	16	8	12	13	6	4.4	
ST LOUIS	535	998.3	1018.5	83	62	72.4	- 4.4	92	7+	49	31	5	0	60	68	1.36	- 1.66	1.27	2	4	0.0	0	0.9	26	29	NW	20	11	13	7	5.1	76
SPRINGFIELD	1268	973.6	1018.3	87	58	72.3	- 5.7	96	29	44	12	10	0	57	65	1.02	- 2.30	0.73	8	9	0.0	0	1.7	14	20	N	26	13	10	8	4.8	67
MONTANA																																
BILLINGS	3567	894.3	1016.1	87	56	71.0	- 0.9	96	23	42	26	14	0	42	40	0.54	- 0.36	0.46	5	7	0.0	0	0.6	25	37	NW	27	19	10	2	2.7	85
GLASGOW	2284	935.3		86	55	70.5	2.7	97	23	43	26	9	0			0.18	- 1.31	0.18	1		0.0	0						12	12	7	4.3	
GREAT FALLS	3662	891.3	1015.7	88	54	71.0	4.2	97	19	47	2	15	0	36	30	0.23	- 1.03	0.12	3	4	0.0	0	1.9	26	29	W	23+	21	8	2	2.8	90
HAVRE	2582	925.2	1015.5	89	53	71.1	4.1	101	11	43	25	13	0	40	36	T	- 1.10	T	0	2	0.0	0	1.2	7	40	NW	7	17	13	1	3.3	88
HELENA	3828	883.8	1016.5	90	53	71.4	5.2	98	23	42	26	17	0	40	36	0.58	- 0.31	0.33	4	5	0.0	0	1.7	29	34	SW	27	23	7	1	2.1	90
KALISPELL	2965	913.0	1015.8	89	46	67.7	4.6	97	19+	38	26+	17	0	42	44	0.01	- 1.08	0.01	1	1	0.0	0	0.6	24	23	30	6	23	6	2	2.2	
MILES CITY	2629	924.1	1015.3	90	58	73.9	1.3	102	23	43	26	17	0	42	35	T	- 1.24		0	2	0.0		1.5	6								
MISSOULA	3190	906.5	1016.3	92	51	71.2	6.4	99	18+	40	25	20	0	38	33	T	- 0.72	T	0	2	0.0	0	1.0	30	26	W	21+	23	7	1	2.1	93
NEBRASKA																																
GRAND ISLAND	1841	952.3	1017.4	86	58	72.2	- 3.1	94	16+	43	31	16	0	56	62	1.30	- 1.05	0.45	7	8	0.0	0	3.4	17	35	32	26+	16	8	7	3.8	
LINCOLN U	1150			84	62	72.8	- 4.9	92	21	48	31	3	0			1.91	- 1.47	0.71	7		0.0	0			30	N	26	18	8	5	3.9	81
NORFOLK	1544			83	57	70.3	- 4.9	92	17	40	31	5	0			1.10	- 1.51	0.92	6		0.0	0						20	8	3	3.4	
NORTH PLATTE	2775	920.8	1017.1	84	53	68.8	- 5.7	97	28	39	19	8	0	52	59	0.06	- 2.07	0.05	2	6	0.0	0	3.4	13	31	NE	26	16	9	6	4.1	76
OMAHA	977	982.7	1017.8	84	59	71.7	- 4.5	93	29	43	27	3	0	59	68	1.53	- 2.45	0.72	8	6	0.0	0	2.3	16	29	NW	18	15	11	5	4.0	78
SCOTTSBLUFF	3957	883.2	1016.6	86	56	70.7	- 1.9	95	24+	46	26+	14	0	50	53	0.99	- 0.02	0.87	2	3	0.0	0	3.0	10	31	32	17	18	9	4	3.5	
VALENTINE	2587			86	55	70.2	- 2.7	99	28	39	19	12	0			1.82	- 0.47	0.66	10		0.0	0			56	SW	21	17	11	3	3.6	79
NEVADA																																
ELKO	5050	847.6	1014.6	96	54	75.0	8.1	102	16	45	8	29	0	39	32	0.08	- 0.22	0.08	1	6	0.0	0	1.1	19	21	7	30+	12	17	2	3.9	
ELY	6253	813.4	1015.0	87	50	68.1	2.0	92	17	40	31	7	0	41	43	0.41	- 0.08	0.23	5	15	0.0	0	4.9	20	30	N	18	8	20	3	5.2	64
LAS VEGAS	2162	936.7	1010.9	104	77	90.3	3.1	110	14	70	9	31	0	53	30	0.38	- 0.10	0.25	4	8	0.0	0	2.2	21	48	NW	8	18	12	1	3.4	83
RENO	4404	868.3	1015.3	93	49	71.0	5.5	100	14	39	6	26	0	47	47	1.22	1.05	0.41	7	9	0.0	0	1.5	26	32	SW	17+	23	5	3	3.0	92
WINNEMUCCA	4299	869.3	1014.0	95	52	73.7	6.1	100	17	44	30	27	0	36	27	T	- 0.15	T	0	4	0.0	0	1.0	25	30	SW	20	12	16	3	4.1	76
NEW HAMPSHIRE																																
CONCORD	342	1005.4	1017.8	79	55	67.2	- 0.2	87	18	44	24	0	0	59	79	1.97	- 0.99	1.09	12	4	0.0	0	1.7	22	21	W	31	5	12	14	6.7	59
MT WASHINGTON OBS	6262			53	42	47.4	- 0.3	60	17	26	31	0	2			5.36	- 1.29	1.36	17	1	0.0	0			59Y	W	22	1	7	23	8.6	24
NEW JERSEY																																
ATLANTIC CITY	64	1016.3	1018.5	80	63	71.5	- 2.2	90	19	55	16	1	0	65	83	11.98	7.08	5.81	17	9	0.0	0	2.9	20	21	18	3	6	8	17	7.3	44
ATLANTIC CITY U	11			79	68	73.5	- 0.2	85	20	63	15+	0	0			14.77	9.63	8.60	18						30	S	27+					
NEWARK	7	1016.9	1018.0	81	66	73.5	- 0.9	90	18	59	31	1	0	63	73	5.53	1.10	1.43	14	3	0.0	0	1.8	23	21	32	31+	7	8	16	7.1	
TRENTON U	56			81	66	73.6	- 0.3	88	19+	59	31	0	0			6.65	1.88	1.83	14		0.0	0			30	S	27	6	9	16	6.8	47
NEW MEXICO																																
ALBUQUERQUE	5311	842.5	1015.6	87	62	74.5	- 1.7	97	2+	55	24	9	0	51	50	3.30	1.97	1.22	14	17	0.0	0	3.2	11	45	N	19	12	12	7	4.7	74
CLAYTON	4969			82	56	69.0	- 4.3	93	7	47	30	8	0			2.25	0.16	0.79	11		0.0	0						11	11	9	5.4	
RATON	6379			78	51	64.4	- 3.8	89	25	42	22	0	0			4.39	1.76	0.91	16		0.0	0						8	17	6	5.4	
ROSWELL	3617	894.7		89	61	75.0	- 1.6	101	8	54	30	13	0	57	60	4.00	2.38	1.94	10	11	0.0	0	1.6	10	25	W	19+	12	9	10	4.9	73
SILVER CITY	5373			84	61	72.5	- 2.6	92	2	55	21+	2	0			3.34	0.94	1.06	14		0.0	0						5	20	6	5.4	
NEW YORK																																
ALBANY	275	1007.1	1017.8	80	58	69.3	- 0.7	89	16	45	24	0	0	60	75	2.17	- 0.90	0.62	13	2	0.0	0	2.6	22	26	N	4	2	12	17	7.5	55
BINGHAMTON	1590	960.4	1018.5	74	58	66.2	- 0.3	82	18	47	31	0	0	59	81	4.92	1.35	1.57	13	5	0.0	0	2.4	24	22	SW	3	3	8	20	7.3	54

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F or above	No. of days: Min. 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F	F.	F	F.	F		F.				F	%	In	In	In			In	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	992.2	1017.4	77	59	68.1	- 0.3	88	2	48	23	0	0	58	73	4.04	0.99	1.12	13	7	0.0	0	3.9	23	29	W	4	3	16	12	6.5	61
NEW YORK U	132	1014.6	1017.6	82	66	73.9	- 1.2	90	19	58	31+	1	0	63	73	5.94	1.50	2.13	14	6	0.0	0	0.9	18	32	SW	19					49
J.F. KENNEDY	13	1017.3	1018.1	78	65	71.4	- 3.1	85	10+	58	31+	0	0	63	79	7.36	2.39	1.99	14	4	0.0	0	3.1	20	29	29	5	4	10	17	7.2	
NEW YORK LA GUARDIA	11	1015.9	1017.8	80	68	73.7	- 1.7	87	18	59	31	0	0	64	75	7.03	1.95	2.08	13	5	0.0	0	1.1	21	36	NW	5	6	8	17	7.2	
ROCHESTER	547	998.3	1018.3	78	58	67.6	- 2.1	88	3+	47	24	0	0	58	75	4.64	1.92	1.71	10	7	0.0	0	3.3	24	22	W	4	9	11	11	6.2	59
SYRACUSE	410	1002.7	1017.4	76	57	66.6	- 3.6	83	18	48	31+	0	0	59	80	5.00	1.75	1.50	11	6	0.0	0	1.9	24	24	W	30	6	9	16	6.5	56
NORTH CAROLINA																																
ASHEVILLE	2140	943.8	1018.7	79	58	68.5	- 3.0	85	19+	50	29	0	0	62	84	11.28	6.34	4.12	14	8	0.0	0	0.5	35	17	34	11+	4	11	16	7.1	46
CAPE HATTERAS R	7	1018.0	1018.1	83	71	76.9	- 0.7	89	23	65	17	0	0	71	84	8.65	2.23	2.01	13	9	0.0	0	2.1	20	33	S	11	2	12	17	7.2	58
CHARLOTTE	736	990.9	1017.9	84	67	75.2	- 3.5	91	19	57	14	2	0	65	75	9.23	5.01	4.40	13	8	0.0	0	0.9	20	24	SW	9	2	14	15	7.1	74
GREENSBORO	897	987.1	1018.3	85	67	75.9	- 0.3	92	19	57	14	4	0	69	84	5.43	0.82	1.96	12	7	0.0	0	1.3	19	28	NW	7	5	8	18	7.2	37
RALEIGH	434	1002.4	1018.0	85	68	76.3	- 0.6	91	3	58	14	2	0	68	81	6.22	1.02	1.89	11	10	0.0	0	1.5	16	23	27	27	3	10	18	7.4	52
WILMINGTON	28	1016.9	1018.3	88	72	80.1	0.7	93	27+	64	16	17	0	71	75	8.13	1.27	2.98	15	8	0.0	0	1.2	17	24	SW	11	4	12	15	7.1	67
NORTH DAKOTA																																
BISMARCK	1647	958.0	1017.0	84	51	67.4	- 1.9	97	24+	40	9	8	0	45	52	1.21	- 0.52	0.50	7	6	0.0	0	0.8	5	40	SW	17	13	14	4	4.2	80
FARGO	896	984.4	1016.7	82	52	66.7	- 2.8	94	24	40	31	4	0	49	55	0.41	- 2.54	0.16	6	5	0.0	0	0.8	19	43	NW	3	13	12	6	4.2	80
WILLISTON	1899	948.5	1016.0	85	54	69.7	1.5	96	12	38	26	13	0	46	47	0.92	- 0.56	0.70	2	3	0.0	0	0.6	32	47	W	2	22	5	4	3.4	84
OHIO																																
AKRON	1208	974.3	1018.2	79	58	68.2	- 3.3	87	2	47	31	0	0	58	74	3.01	- 0.10	1.14	11	5	0.0	0	1.4	26	18	19	18	4	14	13	6.3	
CINCINNATI OBS	761			83	61	71.9	- 3.8	90	17+	51	12	2	0			0.65	- 2.63	0.32	8		0.0	0			15	SW	27					60
CLEVELAND	777	989.2	1018.2	79	59	68.8	- 1.6	90	2	44	12	1	0	57	69	1.85	- 1.43	0.54	9	4	0.0	0	1.6	25	23	NE	31	7	9	15	6.3	51
COLUMBUS	812	988.8	1018.5	79	58	68.3	- 4.9	87	8	45	12	0	0	60	77	1.51	- 1.35	0.84	6	4	0.0	0	1.3	26	22	W	20+	4	15	12	6.4	61
DAYTON	1002	982.7	1018.4	82	60	70.9	- 2.8	89	2	48	12	0	0	58	68	0.34	- 2.54	0.18	8	1	0.0	0	2.1	26	21	N	31	7	13	11	5.9	70
MANSFIELD	1295			78	57	67.6	- 2.6	87	2	46	12+	0	0	55	66	1.08	- 2.15	0.30	8	5	0.0	0	2.2	25				10	7	14	6.2	
TOLEDO	669	993.2	1018.3	77	54	65.4	- 5.5	87	17	44	31+	0	0	56	75	0.81	- 2.52	0.24	7	5	0.0	0	1.8	27	29	W	3	6	16	9	5.7	65
YOUNGSTOWN	1178	976.0	1018.3	77	55	65.7	- 4.3	86	2	42	12	0	0	57	77	2.02	- 1.48	0.64	10	4	0.0	0	1.1	25	21	32	9	7	11	13	6.5	
OKLAHOMA																																
OKLAHOMA CITY	1285	971.2	1016.5	92	67	79.3	- 3.5	103	2	54	13	20	0	59	54	1.40	- 1.12	1.00	5	5	0.0	0	3.7	12	28	NE	31	9	11	11	5.5	71
TULSA	650	993.2	1017.3	89	64	76.0	- 5.6	100	8	52	12	16	0	62	67	0.57	- 2.47	0.20	6	8	0.0	0	2.7	13	40	E	22	12	10	9	5.2	71
OREGON																																
ASTORIA	8	1016.9	1017.8	73	53	62.8	1.8	86	9	44	25	0	0	56	84	0.19	- 1.30	0.13	5	0	0.0	0	5.2	28	23	31	24	14	6	11	5.2	
BURNS U	4151	875.4	1015.5	91	54	72.3	5.1	97	20+	42	7	21	0	37	31	0.01	- 0.28	0.01	1		0.0	0	2.9	33				22	8	1	2.5	
EUGENE	359	1002.4	1015.7	90	54	72.0	6.1	99	15	46	24	19	0	51	54	0.00	- 0.40	0.00	0	0	0.0	0	2.8	33	24	21	28	17	12	2	3.0	
MEACHAM	4050	879.4	1014.5	84	59	71.3	9.6	97	17	46	24	11	0			0.01	- 0.52	0.01	1		0.0	0						22	4	5	2.4	
MEDFORD	1298	967.8	1014.4	99	57	78.0	7.3	107	19+	49	7	28	0	50	42	T	- 0.18	T	0	1	0.0	0	2.4	30	18	17	28+	27	1	3	1.4	
PENDLETON	1482	962.1	1014.5	96	63	79.7	7.8	105	17+	51	25	26	0	40	27	T	- 0.28	T	0	1	0.0	0	2.0	28	31	27	6	25	3	3	2.0	
PORTLAND	21	1014.6	1015.8	88	58	72.9	6.3	102	28+	51	24	13	0	53	55	T	- 0.65	T	0	1	0.0	0	5.5	33	28	NW	24	18	10	3	3.1	81
SALEM	196	1008.8	1016.0	91	52	71.6	5.5	102	9	43	24	19	0	51	54	T	- 0.45	T	0	1	0.0	0	3.6	34	21	1	24+	21	8	2	2.5	
SEXTON SUMMIT R	3836	886.2	1014.4	83	60	71.5	8.3	93	15	44	7	5	0			0.00	- 0.25	0.00	0		0.0	0			28	34	13	28	1	2	1.1	
PACIFIC AREA																																
CANTON ISLAND	8			87	78	82.4	- 1.1	89	26	73	9	0	0			2.34	- 0.16	0.85	9		0.0	0						14	11	6	4.7	
TAGUAC GUAM R	361			85	72	78.8	- 0.5	88	19+	69	9+	0	0			23.07	10.23	5.94	25		0.0	0			19	N	10					44
JOHNSTON	7	1012.2	1012.9	87	79	82.5	1.0	88	25+	75	22	0	0	73	76	1.53	- 0.73	0.63	14	0	0.0	0	14.8	10	33	SE	30	5	13	13	6.3	72
KOROR R	94	1005.4	1009.1	86	75	80.6	- 0.4	89	29+	71	27	0	0	75	85	17.11	1.35	3.10	23	6	0.0	0	5.8	24	25	NW	31	0	0	31	9.8	56
KWAJALEIN	8	1008.8	1009.4	87	77	82.1	0.2	89	24+	74	27+	0	0	75	80	6.11	- 3.48	0.88	20	1	0.0	0	5.5	11	26	17	1	0	7	24	8.8	
MAJURO	10	1009.5	1009.8	87	78	82.2	2.0	88	27+	73	16	0	0	74	76	7.99	- 3.69	1.66	23	1	0.0	0	5.6	9	23	E	24	2	7	22	8.1	67
MARCUS ISLAND	20	1008.8	1010.6	88	77	82.4	- 0.1	90	31+	73	24	3	0	76	81	1.35	- 5.84	0.26	15	0	0.0	0	2.2	15	30	W	1	8	11	12	6.0	85
PAGO PAGO	12	1012.9	1012.9	82	73	77.6		86	31	65	5	0	0	72	83	13.02		6.10	21	0	0.0	0	12.2	11	40	SE	10	5	12	14	6.9	72
PONAPE R	123	1003.7	1009.3	88	72	80.0	0.6	90	26+	69	8+	6	0	75	88	20.32	4.00	3.10	25	4	0.0	0	2.2	15	18	S	26	0	9	22	8.6	43
TRUK MOEN ISLAND	5	1008.8	1009.3	86	75	80.1	- 0.3	89	21	72	14	0	0	75	84	17.36	4.55	2.49	24	1	0.0	0	3.3	25	26	SW	3	0	8	23	8.7	57
WAKE	11	1010.5	1010.6	87	78	82.4	0.0	89	25+	72	27	0	0	74	79	8.71	1.63	2.41	21	2	0.0	0	7.7	11	43	S	5	0	4	27	9.2	57
YAP R	62	1006.4	1008.2	87	75	80.6	- 0.7	90	10	72	14	1	0	75	86	16.45	1.75	2.45	24	2	0.0	0	3.2	24	21	SW	23	0	0	31	10.0	54

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground) Ft	Pressure: Station Mb	Pressure: Sea level Mb	Temp: Average maximum F	Temp: Average minimum F	Temp: Average F	Temp: Departure from normal F	Temp: Highest F	Date	Temp: Lowest F	Date	No. of days: Max 90 F or above	No. of days: Min 32 F or below	Average dew point F	Average relative humidity %	Precip: Total In	Precip: Departure from normal In	Precip: Greatest in 24 hours In	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total In	Snow, Sleet: Maximum depth on ground In	Wind: Resultant speed M.p.h.	Wind: Resultant direction	Fastest mile: Speed M.p.h.	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine %
PENNSYLVANIA																																
ALLENTOWN	387	1004.1	1018.0	79	60	69.1	- 2.9	86	18	48	31	0	0	60	75	5.00	0.53	1.62	10	6	0.0	0	1.0	27	35	15	4	5	11	15	6.9	
ERIE	731	991.5	1017.9	75	58	66.6	- 3.2	86	2	48	31+	0	0	58	75	4.48	1.50	1.47	11	6	0.0	0	2.7	23	23	22	3	10	11	10	5.7	
HARRISBURG	338	1005.1	1017.9	80	63	71.8	- 2.3	87	9+	55	31	0	0	62	74	5.61	1.96	3.14	11	4	0.0	0	0.9	29	28	NE	3	6	6	19	7.2	55
PHILADELPHIA	5	1016.9	1018.0	83	67	75.1	1.5	90	19+	61	14	2	0	64	72	7.08	2.45	2.06	13	8	0.0	0	1.5	25	29	W	27	5	6	20	7.3	55
PITTSBURGH	1137	974.9	1018.3	78	59	68.8	- 2.0	86	2	51	31	0	0	59	75	2.67	- 0.64	1.22	11	4	0.0	0	1.7	25	25	24	2	4	9	18	7.4	50
READING U	266			81	65	72.9	- 1.9	89	18	57	31	0	0			4.71	0.66	1.28	10		0.0	0			44	N	20	6	12	13	6.6	50
SCRANTON	930	984.8	1018.6	78	60	68.9	- 1.1	86	18	48	31	0	0	61	78	5.20	1.62	1.10	12	3	0.0	0	1.2	19	29	S	20	3	12	16	7.0	54
WILLIAMSPORT	524	999.3	1018.1	78	60	69.4	- 2.2	86	4	49	31	0	0	64	86	4.97	1.35	0.97	14	5	0.0	0	1.1	24	21	14	3+	2	13	16	7.6	
RHODE ISLAND																																
BLOCK ISLAND	110			73	65	68.8	- 0.8	79	4	54	23	0	0			2.75	- 1.11	0.67	12		0.0	0						1	8	22	8.4	
PROVIDENCE	51	1015.6	1017.9	79	63	70.6	0.1	87	18	51	24	0	0	62	76	3.24	- 0.72	1.00	15	5	0.0	0	3.6	21	23	31	1	6	3	22	7.5	43
SOUTH CAROLINA																																
CHARLESTON	40	1015.9	1017.5	88	71	79.5	- 0.2	97	8	62	14+	16	0	71	80	3.74	- 2.87	1.34	13	8	0.0	0	1.9	17	38Y	S	1	5	10	16	6.7	66
CHARLESTON U	9			86	74	79.8	- 1.2	92	8+	64	13	6	0			5.02	- 1.05	2.07	10		0.0	0			28	SE	24					
COLUMBIA	213	1009.8	1018.0	85	66	75.7	- 4.8	92	19+	56	15+	5	0	68	85	11.16	5.42	4.05	12	12	0.0	0	0.6	10	23	20	2	4	12	15	6.9	63
GNVLE-SPARTANBURG	957	984.1	1018.1	83	65	74.2	- 4.0	91	3	58	29	2	0	65	76	7.51	3.00	4.49	13	9	0.0	0	0.3	10	21	N	31	6	10	15	6.5	55
SOUTH DAKOTA																																
ABERDEEN	1296	970.2	1016.6	84	52	68.0	- 3.5	96	24	37	31	9	0	49	54	1.40	- 0.76	1.04	7	9	0.0	0	1.5	7	26	36	17	15	13	3	3.5	
HURON	1282	970.5	1016.4	87	54	70.3	- 2.5	96	1	39	31	12	0	53	59	1.03	- 1.04	0.31	10	10	0.0	0	2.1	14	30	NE	25	18	11	2	3.2	82
RAPID CITY	3162	907.9	1016.9	85	56	70.6	- 1.4	100	24	43	26	12	0	44	42	0.95	- 0.27	0.36	7	8	0.0	0	1.8	33	37	W	5	16	13	2	3.5	77
SIOUX FALLS	1418	966.5	1017.2	84	56	69.9	- 1.9	95	1	40	31+	7	0	53	59	3.46	- 0.13	1.68	6	10	0.0	0	1.8	17	23	36	25+	19	9	3	3.6	
TENNESSEE																																
BRISTOL	1507	965.1	1018.9	81	60	70.7	- 4.1	87	3	51	14	0	0	63	82	3.68	- 0.12	1.15	11	4	0.0	0	0.4	36	15	27	10	4	12	15	6.7	
CHATTANOOGA	665	993.2	1017.7	83	64	73.6	- 6.2	90	8+	55	14	2	0	66	81	2.67	- 1.09	1.13	16	5	0.0	0	0.3	6	20	NE	11	6	7	18	7.0	40
KNOXVILLE	980	983.1	1017.5	82	65	73.2	- 4.2	89	8	57	28+	0	0	65	80	4.06	0.60	1.60	8	3	0.0	0	1.2	30	22	SW	19	5	7	19	7.0	57
MEMPHIS	258	1008.1	1018.2	85	67	76.0	- 4.5	93	8	56	28	5	0	64	68	5.17	2.20	2.15	10	8	0.0	0	1.2	7	42	NE	3	6	9	16	6.5	70
NASHVILLE	590	996.3	1017.8	82	63	72.6	- 6.6	91	1	51	14	2	0	64	78	2.06	- 0.80	0.93	9	5	0.0	0	0.5	30	19	NW	8+	8	10	13	6.4	63
OAK RIDGE R	905			82	64	72.8	- 3.3	89	4	54	28+	0	0			2.22	- 2.40	1.39	11		0.0	0			30Y		8	5	5	21	7.5	
TEXAS																																
ABILENE	1762	955.3	1015.4	92	69	80.2	- 2.8	100	4	58	13	23	0	61	56	0.54	- 0.93	0.29	4	2	0.0	0	3.7	17	25	E	22+	11	12	8	5.5	73
AMARILLO	3604	894.7	1015.3	87	64	75.0	- 4.5	100	8	55	31	13	0	56	56	1.81	- 0.77	0.52	9	11	0.0	0	4.9	18	39	NE	8	10	8	13	5.8	64
AUSTIN	597	994.2	1015.9	94	71	82.6	- 2.1	101	10+	61	13	26	0	64	60	3.71	1.77	2.02	6	6	0.0	0	3.5	16	43	SE	31	7	14	10	5.7	75
BROWNSVILLE	19	1014.2	1014.9	90	74	82.0	- 2.1	96	10+	63	14	16	0	72	75	5.95	3.18	2.02	12	4	0.0	0	6.7	13	33	SE	2	10	5	16	6.4	70
CORPUS CHRISTI	41	1014.2	1015.6	90	73	81.4	- 2.8	98	10	64	13	17	0	71	75	5.36	2.59	1.43	10	4	0.0	0	6.8	12	31	S	28	6	6	19	7.2	58
DALLAS	481	999.0	1015.9	95	74	84.2	- 0.8	103	9+	62	13+	26	0	62	51	0.12	- 1.81	0.07	2	4	0.0	0	4.8	13	25	S	17	13	10	8	4.6	75
DEL RIO	1026	979.0	1014.5	95	72	83.3	- 2.5	102	10+	66	25	27	0	62	55	1.00	- 0.52	0.41	5	3	0.0	0	7.8	12	32	6	25	6	12	13	5.9	
EL PASO	3918	884.2	1013.1	90	67	78.6	- 1.8	99	1	61	25	19	0	54	46	0.54	- 0.65	0.18	9	7	0.0	0	3.1	8	38	NW	16	11	13	7	4.9	73
FORT WORTH	537	995.9	1015.9	95	71	83.1	- 2.3	103	9	56	13	26	0	63	54	0.48	- 1.20	0.23	4	3	0.0	0	3.4	15	23	27	19	14	8	9	4.8	
GALVESTON U	7			85	76	80.7	- 2.6	93	10	68	13+	2	0			5.74	1.35	1.99	12		0.0	0			23	NE	12+					50
HOUSTON U	41			89	74	81.7	- 2.4	98	10+	68	13	15	0			1.88	- 1.67	0.67	9		0.0	0										
HOUSTON	50	1014.2	1016.3	90	73	81.1	- 2.1	97	10	64	13	16	0	70	74	1.60	- 2.67	0.67	10	6	0.0	0	2.6	14	23	4	12	4	12	15	6.8	56
LUBBOCK	3254	906.5	1015.7	87	63	74.9	- 3.9	99	8	55	30	11	0	56	57	0.71	- 0.97	0.32	6	8	0.0	0	2.3	14	23	17	18	8	12	11	5.8	
MIDLAND	2851	918.1	1014.4	90	66	77.7	- 4.5	100	8	56	18	18	0	55	49	0.17	- 1.31	0.06	6	4	0.0	0	5.5	12	33	3	26	8	15	8	5.3	
PORT ARTHUR	16	1015.9	1016.7	90	72	80.9	- 1.4	96	30+	62	13+	15	0	69	73	8.63	3.14	3.27	13	9	0.0	0	1.0	12	38	NE	5	5	13	13	6.6	62
SAN ANGELO	1903	949.5	1014.6	95	71	83.0	- 2.1	104	9	63	14	27	0	58	47	1.43	0.16	1.25	4	1	0.0	0	3.3	16	23	15	18	9	16	6	5.3	
SAN ANTONIO	788	988.5	1015.9	94	72	82.7	- 1.1	101	10+	62	13	25	0	65	63	3.17	0.81	1.48	6	2	0.0	0	3.9	13	28	SE	17	8	13	10	5.7	69
VICTORIA	104	1011.5	1015.7	92	73	82.7	- 0.7	100	10	63	13	20	0	69	71	3.03	- 0.10	0.89	7	4	0.0	0	3.8	14	37Y	S	18	2	15	14	7.2	
WACO	501	998.0	1015.6	97	73	85.2	- 0.3	104	9+	60	14+	31	0	64	53	0.43	- 1.25	0.20	4	3	0.0	0	4.8	14	24	4	31	10	18	3	4.5	
WICHITA FALLS	994	980.0	1015.6	97	68	82.7	- 3.0	106	8+	55	13	30	0	59	48	0.22	- 1.57	0.14	2	5	0.0	0	3.9	13	30	5	30	8	12	11	5.8	
UTAH																																
MILFORD	5028	849.3		95	57	75.7	3.5	99	25+	50	20+	28	0			0.32	- 0.41	0.11	8		0.0	0						15	13	3	4.5	
SALT LAKE CITY	4220	873.4	1013.8	96	61	78.6	4.1	100	17	55	10	31	0	45	33	0.07	- 0.80	0.04	4	6	0.0	0	3.5	15	33	SW	4	13	16	2	3.8	89
WENDOVER	4237			91	69	79.9	2.7	95	17+	63	22	22	0			0.01	- 0.35	0.01	1		0.0	0										

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max 90 F or above	Temperature: No of days: Min 32 F or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 01 inch or more	Precipitation: No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear 0-3	No of days (sunrise to sunset): Partly cloudy 4-7	No of days (sunrise to sunset): Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	Ft	Mb	Mb	F	F	F	F	F		F				F	%	In.	In	In			In	In	M.p.h		M.p.h							%
VERMONT																																
BURLINGTON	332	1004.4	1016.7	77	57	67.0	0.3	85	17	44	24+	0	0	58	75	3.79	0.42	1.04	13	4	0.0	0	2.8	19	28	SW	3	3	14	14	6.9	68
VIRGINIA																																
LYNCHBURG	916	985.1		82	62	72.1	-2.7	89	19+	55	29+	0	0	63	80	11.27	6.86	4.47	13	11	0.0	0	0.7	24	34	NW	19	7	9	15	6.6	54
NORFOLK	22	1016.9	1018.1	82	68	75.2	-2.3	90	19+	62	17+	3	0	68	80	11.19	5.22	4.14	16	10	0.0	0	2.1	16	33	N	24	4	9	18	7.4	64
RICHMOND	164	1012.2	1018.1	85	66	75.5	-0.5	94	19+	56	14	6	0	68	84	6.65	1.11	2.39	11	7	0.0	0	1.7	19	27	SW	4	5	10	16	7.1	62
ROANOKE	1149	976.6	1018.1	83	63	72.6	-2.8	90	3	55	29+	1	0	61	69	6.36	1.73	2.07	13	5	0.0	0	0.9	33	16	2	31+	6	12	13	6.7	
WALLOPS ISLAND	9	1018.6	1019.0	76	65	70.4		84	20	59	15	0	0	67	93	7.25		2.72	15	10	0.0	0	2.8	17	41Y	E	27	7	6	18	6.7	
WASHINGTON																																
OLYMPIA	195	1009.8	1017.0	87	51	68.8	5.4	98	28	43	24	13	0	54	66	T	-0.89	T	0	0	0.0	0	0.9	24	21	24	20+	18	8	5	3.7	
QUILLAYUTE	179	1010.5	1017.9	74	51	62.6	2.9	91	9	43	24	1	0	55	81	0.62	-1.46	0.37	8	0	0.0	0	2.5	29	18	NW	24	13	8	10	5.1	64
SEATTLE TACOMA	400	1001.0	1017.1	84	58	71.1	7.0	98	16	52	8	4	0	53	59	0.02	-0.93	0.02	1	0	0.0	0	2.0	33	22	23	20	15	12	4	3.8	74
SPOKANE	2356	932.3	1014.2	91	58	74.5	6.5	101	18	45	25	16	0	37	28	T	-0.41	T	0	0	0.0	0	3.7	19	26	S	21	23	7	1	2.2	89
STAMPEDE PASS R	3958	883.2		75	55	64.8	9.2	86	19+	41	24	0	0			0.47	-1.57	0.25	3		0.0	0						17	9	5	3.5	
WALLA WALLA U	949			95	67	80.9	7.1	105	17+	54	25	24	0			T	-0.30	T	0		0.0	0			19	W	6	23	5	3	2.1	94
YAKIMA	1052	976.6	1014.2	93	54	73.3	4.7	102	18	46	26+	21	0	47	42	0.01	-0.19	0.01	1	0	0.0	0	4.3	30	23	29	6	23	3	5	2.4	
WEST INDIES																																
SAN JUAN P.R.	13	1014.9	1017.3	88	76	82.2	1.3	92	23	75	18+	3	0	73	74	4.20	-2.93	1.80	19	1	0.0	0	8.8	9	26	E	9	3	24	4	5.5	80
SWAN ISLAND	28			87	78	82.4	-0.7	89	30+	72	7+	0	0			3.88	0.22	1.78	18		0.0	0						1	10	20	7.9	
WEST VIRGINIA																																
BECKLEY	2504	931.9	1018.7	75	56	65.4		83	3	44	14	0	0	59	81	3.81		1.29	14	6	0.0	0	2.2	23	24	23	9	4	8	19	7.3	
CHARLESTON	939	984.4	1018.1	80	60	70.2	-3.6	87	3	50	14+	0	0	62	81	1.85	-2.10	0.45	12	3	0.0	0	0.9	24	29	28	4	3	11	17	7.3	
ELKINS	1970	948.9	1019.4	76	54	65.4	-3.4	86	2	45	14	0	0	59	86	5.10	0.87	2.22	11	5	0.0	0	1.2	28	20	35	19	1	10	20	7.9	
HUNTINGTON	827	988.5	1018.3	81	60	70.4	-3.6	86	16+	50	14	0	0	61	77	1.48	-1.34	0.54	10	2	0.0	0	1.0	22	21	26	19+	4	12	15	6.8	
PARKERSBURG U	615			80	61	70.8	-3.6	87	16+	52	14	0	0			3.72	-0.06	1.16	10		0.0	0			24	SW	2					50
WISCONSIN																																
GREEN BAY	682	992.2	1017.8	76	52	63.9	-5.0	86	17+	38	22	0	0	54	71	2.43	-0.32	1.07	7	5	0.0	0	1.6	26	29	SW	17	11	12	8	4.9	68
LA CROSSE	651	993.6	1018.1	80	56	67.9	-3.7	90	16+	42	31	2	0	56	71	2.44	-1.19	1.01	5	3	0.0	0	1.3	16	23	32	26+	13	8	10	5.0	
MADISON	858	987.1	1018.4	75	49	62.0	-7.5	84	16	37	31	0	0	53	74	2.71	-0.66	0.89	9	6	0.0	0	1.7	28	33	W	3	11	9	11	5.1	66
MILWAUKEE	672	993.6	1018.6	76	56	66.0	-1.8	87	17+	48	31+	0	0	57	75	1.23	-1.83	0.79	7	3	0.0	0	1.1	27	29	N	30	13	8	10	4.9	66
WYOMING																																
CASPER	5338	842.2	1016.5	86	52	69.0	-1.1	95	24	41	31+	11	0	38	37	0.41	-0.31	0.29	4	6	0.0	0	0.9	32	39	32	4	19	10	2	3.3	
CHEYENNE	6126	818.2	1018.1	81	52	66.0	-1.7	92	24	44	26	1	0	42	47	0.99	-0.45	0.64	6	8	0.0	0	1.9	29	46	N	17	12	14	5	4.6	65
LANDER	5563	834.1	1016.7	85	54	69.2	0.4	89	27+	45	31+	0	0	42	40	0.11	-0.36	0.06	5	12	0.0	0	3.0	26	42	NW	13	12	17	2	4.0	82
SHERIDAN	3964	882.5	1017.2	86	50	67.8	-1.7	95	23	41	26	9	0	41	40	0.70	-0.20	0.53	4	5	0.0	0	0.2	27	37	SE	6	19	8	4	3.6	83

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear 0-3	No. of days: Partly cloudy 4-7	No. of days: Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
ALABAMA																																
BIRMINGHAM	189	995.6	1018.0	28.9	18.3	23.4	-3.8	32.2	1	12.8	29	1	0	18.9	80	276	152	77	14	9	0	0	0.6	3	12.1	SW	26	5	7	19	7.3	43
HUNTSVILLE	183	995.3	1018.0	27.8	18.3	23.2	-3.6	31.7	1	12.8	14	0	0	18.3	76	158	75	32	14	8	0	0	0.3	2	9.4	24	3	8	4	19	7.2	
MOBILE	64	1009.1	1017.0	31.1	22.2	26.6	-1.3	34.4	7+	15.6	12	14	0	21.7	80	225	61	69	16	17	0	0	0.8	5	8.0	20	2	4	7	20	7.4	
MONTGOMERY	59	1010.5	1017.5	30.6	21.1	25.8	-1.8	33.9	1	17.8	14+	9	0	20.0	74	68	-36	27	9	8	0	0	0.1	3	10.7	S	1	4	10	17	7.1	46
ALASKA												B																				
ANCHORAGE	35	1005.4	1010.2	17.8	11.7	14.6	1.3	21.1	28+	5.0	28	2	0	8.9	71	75	10	17	17	0	0	0	1.8	16	11.6	17	16+	0	5	26	9.1	24
ANNETTE	34	1013.2	1017.1	20.6	11.7	16.1	1.4	28.3	28	9.4	24	14	0	11.7	78	260	70	64	13	0	0	0	1.4	17	13.0	18	19	5	7	19	7.2	
BARROW	9	1010.2	1010.7	5.0	0.0	2.3	-1.0	16.1	17	-3.9	31	0	18	1.1	93	8	-15	2	9	0	25	T	0.4	9	13.0	21	28	2	3	26	8.6	
BARTER ISLAND	12	1010.2	1011.8	5.6	0.0	2.7	-1.8	18.9	17	-3.3	31+	0	24	0.0	83	9	-18	4	5	0	T	T	1.0	7	13.0	27	13+	1	5	25	8.7	
BETHEL	38	1001.4	1007.0	16.7	8.3	12.4	1.1	25.6	8	2.2	27	2	0	9.4	83	51	-56	18	17	1	0	0	0.8	15	18.3	16	15	0	6	25	8.6	
COLD BAY	29	1003.1	1006.8	13.3	8.3	10.7	0.0	19.4	15	3.3	28	0	0	7.8	84	120	12	19	18	0	0	0	1.4	24	20.6	14	12	1	1	29	9.3	
FAIRBANKS	133	991.5	1008.3	19.4	9.4	14.6	2.2	28.3	7	3.9	25	9	0	9.4	74	157	102	87	12	0	0	0	0.2	31	9.4	23	12	4	7	20	7.4	
JUNEAU	4	1015.2	1015.9	17.2	8.9	12.8	0.6	23.3	4	4.4	16	5	0	10.6	89	139	11	27	18	0	0	0	2.1	10	12.5	12	8	3	2	26	8.6	26
KING SALMON	15	1004.7	1006.7	17.2	8.3	12.6	0.0	22.2	14	2.8	28	1	0	7.8	77	80	-7	23	18	1	0	0	2.2	14	16.1	8	6	1	3	27	9.0	
KOTZEBUE	3	1007.8	1008.2	13.9	7.2	10.6	0.3	24.4	5	2.2	30+	4	0	6.1	74	34	-21	19	9	0	0	0	1.0	1	16.5	16	16	3	11	17	7.4	
MC GRATH	105	995.3	1008.0	17.8	7.8	12.7	0.4	25.0	8	1.1	28	7	0	8.3	76	87	-10	22	17	3	0	0	0.6	21	13.0	20	12	0	10	21	8.5	
NOME	4	1006.1	1006.9	13.9	5.6	9.7	0.3	26.1	7	0.0	21	2	1	2.8	63	71	-25	36	11	0	0	0	0.5	5	12.1	16	17+	2	5	24	8.3	23
ST. PAUL ISLAND	7	1005.1	1006.2	11.7	7.8	9.7	1.1	14.4	7	1.1	18	0	0	7.8	89	66	-18	15	18	0	0	0	1.1	24	13.9	9	19	0	3	28	9.4	
SHEMYA	37	1004.7	1008.5	11.7	8.3	10.2	0.3	15.0	2	6.7	19+	0	0	8.9	95	53	-1	15	21	0	0	0	2.1	25	16.1	22	12	0	6	25	8.9	
YAKUTAT	9	1013.2	1014.2	15.0	8.3	11.6	-0.6	19.4	29+	3.3	28	0	0	10.6	93	359	82	55	21	0	0	0	1.6	12	9.4	15	9	1	1	29	9.5	
ARIZONA																																
FLAGSTAFF	2131	792.8	1018.0	26.1	9.4	18.0	0.3	28.9	26+	5.6	23	0	0	9.4	66	68	-4	14	17	23	0	0	0.2	23	8.9	31	14	5	17	9	6.0	
PHOENIX	340	972.2	1009.9	39.4	26.1	32.8	1.9	43.3	26	23.3	17	31	0	14.4	35	1	-28	T	2	8	0	0	0.8	10	17.0Y	NE	14	17	6	8	4.0	84
TUCSON	788	925.5	1011.1	35.6	22.8	29.2	0.8	40.0	26	20.6	25+	30	0	14.4	46	51	-22	16	11	10	0	0	1.6	14	17.0	E	2	16	8	7	4.1	83
WINSLOW	1492	854.7	1015.2	32.8	16.1	24.2	-1.2	35.6	26+	12.8	21	21	0	9.4	44	28	-9	12	9	14	0	0	0.6	14	15.6	30	23	12	10	9	4.9	
YUMA	59	1002.0	1009.1	40.6	27.2	34.1	0.9	44.4	27	24.4	25+	31	0	16.7	39	9	-3	6	3	4	0	0	2.1	18	21.9	E	31	21	5	5	3.3	84
ARKANSAS																																
FORT SMITH	136	1001.0	1017.2	31.7	18.3	24.8	-3.1	37.2	7	10.6	13	11	0	17.2	66	42	-33	17	8	5	0	0	1.6	6	8.5	N	9	10	9	12	5.7	63
LITTLE ROCK	78	1008.5	1017.8	30.6	18.3	24.2	-3.2	35.0	9+	11.1	29+	6	0	17.8	70	44	-28	28	6	8	0	0	0.8	7	10.7	NE	30	7	13	11	5.6	77
TEXARKANA	119	1004.4	1017.2	32.2	20.0	26.1	-2.0	36.7	30+	12.2	13	15	0	18.9	69	47	-30	20	9	9	0	0	0.9	12								
CALIFORNIA																																
BAKERSFIELD	145	993.9	1011.0	38.9	23.3	30.9	3.3	43.9	31	20.0	9+	31	0	11.1	32	0	0	0	0	1	0	0	1.4	33	10.3	14	31	25	6	0	1.3	
BISHOP	1252	875.0		36.7	14.4	25.5	2.0	38.9	18+	11.1	7	31	0			1	-2	1	2		0	0						12	18	1	3.7	
BLUE CANYON	1609			27.8	17.8	22.6	3.3	30.6	14	13.3	7	0	0			5	4	4	3		0	0			7.6	9	23	22	6	3	2.3	
EUREKA U	13			16.1	11.7	13.8	0.1	18.9	28+	10.0	20+	0	0			T	-3	T	0		0	0			7.6	NW	6+	4	10	17	7.2	44
FRESNO	100	999.3	1010.9	38.3	18.9	28.7	2.6	42.2	15	15.0	29	31	0	15.0	47	T	0	T	0	0	0	0	1.3	29	7.2	NW	19	25	5	1	1.5	94
LONG BEACH	10	1011.5	1013.0	32.2	21.1	26.7	4.3	40.6	30	18.9	10	17	0	17.2	63	T	-1	T	0	0	0	0	1.3	25	8.9	19	15	21	8	2	2.4	
LOS ANGELES	30	1009.1	1012.6	26.1	19.4	22.7	2.1	32.8	31	17.8	28+	1	0	17.2	74	0	-1	0	0	0	0	0	3.0	25	10.3Y	W	29+	16	11	4	3.2	
LOS ANGELES U	82			31.7	21.1	26.2	3.4	39.4	31	18.9	10	10	0			T	-1	T	0		0	0			6.7	SW	30+	23	8	0	2.4	83
MT SHASTA R	1080			32.8	11.1	21.9	2.7	36.7	18	7.2	8+	23	0			4	-1	4	1		0	0										
OAKLAND	2	1013.9	1014.2	21.7	13.9	17.7	-0.2	26.1	29	11.7	12	0	0	13.3	80	T	-1	T	0	0	0	0	3.4	29	8.9	28	22+	18	10	3	3.0	
RED BLUFF	104	999.0	1011.3	38.9	19.4	29.0	1.8	43.3	14	16.7	31+	31	0	10.6	36	T	-2	T	0	1	0	0	0.4	18	11.2	SE	25	24	6	1	1.7	94
SACRAMENTO	5	1010.8	1011.6	37.2	15.6	26.1	2.7	41.7	18	12.2	20	29	0	13.3	54	0	-1	0	0	0	0	0	2.0	21	7.6	SW	27+	25	5	1	1.5	99
SANDBERG R	1377			31.7	19.4	25.4	2.5	36.7	14	13.9	7	16	0			T	-2	T	0		0	0			16.1	7	30	19	12	0	2.5	
SAN DIEGO	4	1011.5	1012.6	26.1	20.0	22.8	0.7	30.6	31	17.8	4	0	0	17.8	76	4	2	4	1	2	0	0	2.1	28	8.5	NW	27	16	8	7	4.2	67
SAN FRANCISCO	2	1013.5	1014.1	22.2	12.2	17.1	0.0	26.7	29	10.6	12	0	0	11.1	74	T	-1	T	0	0	0	0	5.9	31	14.3	WNW	30	21	8	2	2.4	
SAN FRANCISCO U	16			17.8	12.8	15.1	-0.1	22.2	29	10.6	12	0	0			T	-1	T	0		0	0			12.1	W	30+					66
SANTA CATALINA	478			28.9	19.4	23.9	2.6	39.4	29	12.8	20	8	0			0	-2	0	0	0	0	0						24	4	3	2.1	
SANTA MARIA	72			23.9	12.2	17.9	1.1	28.3	18	9.4	30+	0	0			T	-1	T	0		0	0						18	12	1	3.3	
STOCKTON	7	1011.2	1012.1	37.2	17.8	27.3	2.8	41.7	18	14.4	10+	30	0	10.6	40	0	0	0	0	0	0	0	3.1	32	8.0	32	18	24	5	2	1.6	
COLORADO																																
ALAMOSA	2297	778.9		24.4	7.8	15.9	-1.3	28.9	25+	2.2	22	0	0			83	58	21	21		0	0						7	16	8	5.6	
COLORADO SPRINGS	1873	817.5	1018.6	25.6	12.2	18.9	-1.7	32.8	25	6.1	31	2	0	8.9	59	78	24	21	14	8	0	0	1.6	3	14.3	34	18	7	13	11	5.8	
DENVER	1610	841.5	1016.7	28.3	12.2	20.1	-1.8	33.9	24	8.9	31+	2	0	7.8	52	21	-11	10	7	3	0	0	1.4	18	13.4	SW	6	10	12	9	5.2	65
GRAND JUNCTION	1480	855.1	1014.2	32.8	16.7	24.6	0.4	36.7	25	12.2	31	23	0	6.7	36	15	-12	14	4	5	0	0	1.9	14	13.4	NW	29	16	9	6	4.5	77
PUEBLO	1428	860.1	1016.7	29.4	15.0	22.1	-1.6	35.0	7	11.1	31+	9	0	8.9	48	27	-20	7	8	5	0	0	0.8	2	14.3	N	5+	8	15	8	5.5	67

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb.	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M p s							%
CONNECTICUT																																
BRIDGEPORT	2	1016.9	1017.7	26.1	18.3	22.4	0.0	30.6	18	14.4	31	0	0	17.8	77	93	- 20	54	13	3	0	0	0.9	21	11.2	27	4	4	7	20	7.1	
HARTFORD	52	1011.2	1017.5	26.7	15.6	21.2	-0.6	31.7	18	10.0	24	0	0	15.0	71	110	8	38	13	5	0	0	1.0	24	8.9	S	3	3	8	20	7.5	56
NEW HAVEN	2	1017.6		25.6	17.2	21.4	-0.1	29.4	10	12.2	24	0	0			83	- 25	36	14		0	0			8.5	N	31	6	9	16	7.0	60
DELAWARE																																
WILMINGTON	23	1014.9	1017.9	27.2	18.3	22.7	-0.8	30.6	19	15.0	14	0	0	18.3	80	283	141	78	14	10	0	0	0.4	24	12.1	31	4	7	7	17	7.0	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.6	1018.0	29.4	19.4	24.6	-0.2	34.4	3	15.6	14	6	0	18.9	73	233	108	92	10	5	0	0	0.4	16	11.6	NW	4	8	4	19	7.0	46
FLORIDA																																
APALACHICOLA U	4			30.0	23.3	26.6	-0.9	32.2	31+	20.6	13	2	0			243	47	83	16	13	0	0			13.0	NW	1	5	12	14	6.8	50
DAYTONA BEACH	9	1016.9	1018.3	30.0	21.7	25.9	-1.1	32.2	10+	19.4	9	3	0	22.2	83	77	- 85	20	12	15	0	0	1.5	14	9.8	11	22	0	18	13	6.8	
FORT MYERS	5	1017.3	1017.6	31.7	23.9	28.0	-0.2	33.3	3	22.2	9	17	0	23.3	81	403	215	171	16	26	0	0	1.1	12	14.3	12	8	0	22	9	6.5	
JACKSONVILLE	6	1016.9	1017.9	32.2	22.8	27.4	-0.5	35.6	27	20.0	14	21	0	21.7	77	313	139	93	15	10	0	0	1.0	17	13.4	S	8	3	17	11	6.8	49
KEY WEST	1	1016.3	1016.8	31.7	26.7	29.1	0.4	33.3	3+	23.3	9	9	0	23.3	71	101	- 9	23	15	14	0	0	3.4	13	15.6	E	9	1	19	11	6.6	79
LAKELAND U	65			31.1	22.2	26.7	-1.1	34.4	27	20.6	15+	16	0			265	85	73	21		0	0						0	20	11	6.9	60
MIAMI	2	1016.9	1017.3	31.1	24.4	27.7	-0.3	32.8	1	21.1	9	6	0	21.7	74	207	29	64	18	13	0	0	2.2	12	10.3	18	9	1	20	10	6.8	
ORLANDO	33	1013.9	1018.2	32.8	22.8	27.8	-0.4	34.4	27	21.1	15+	27	0	22.2	79	173	- 3	48	19	19	0	0	1.5	16	15.6	22	12	1	18	12	6.9	
PENSACOLA	34	1013.2	1017.3	30.0	21.7	25.7	-1.8	32.8	5	17.2	12	3	0			332	155	67	17		0	0	0.4	9	26.4	SW	1	3	8	20	7.5	43
TALLAHASSEE	17	1015.2	1017.4	32.2	22.2	27.1	-0.2	36.1	8	19.4	15+	21	0	22.2	81	229	53	57	13	19	0	0	0.3	11	10.7	15	27	3	14	14	6.8	
TAMPA	6	1017.3	1017.4	31.1	22.8	26.8	-0.9	33.3	20+	21.1	20	14	0	22.2	80	263	53	130	16	26	0	0	1.1	15	11.2	10	20	3	12	16	7.0	53
WEST PALM BEACH	5	1016.9	1017.7	31.7	22.8	27.2	-1.2	32.8	31	21.1	6+	10	0	21.1	72	169	- 2	83	18	16	0	0	2.1	13	14.3	34	1	0	22	9	6.3	
GEORGIA																																
ATHENS	244	989.2	1017.8	29.4	18.9	23.9	-2.2	32.2	19+	14.4	13	4	0	18.9	79	150	58	62	14	9	0	0	0.0	1	11.6	2	8	6	13	12	6.5	
ATLANTA	308	981.7	1017.9	27.8	18.9	23.3	-2.3	31.1	19+	15.0	29	0	0	18.3	78	221	129	84	15	7	0	0	0.1	24	13.0	SW	26	5	10	16	6.8	53
AUGUSTA	44	1012.2	1017.3	30.6	19.4	24.9	-1.8	33.3	19+	14.4	16+	7	0	18.9	76	203	104	75	13	14	0	0	0.3	13	12.5	31	4	5	14	12	6.6	
COLUMBUS	117			30.6	21.1	25.9	-1.2	34.4	18+	15.6	14	10	0	20.0	75	129	11	64	8		0	0	0.3	8	9.4	22	24+	6	12	13	6.3	
MACON	108	1004.7	1017.4	30.6	18.9	24.7	-2.7	33.9	19+	13.3	14	8	0	19.4	77	112	6	44	9	9	0	0	0.3	5	16.1	S	24	7	9	15	6.6	47
ROME	194			29.4	17.8	23.5	-2.3	33.3	1	12.8	14	5	0			215	119	121	12		0	0										
SAVANNAH	14	1015.6	1017.5	31.7	21.1	26.3	-0.9	34.4	8	16.7	15+	15	0	21.1	79	218	50	52	18	13	0	0	0.7	17	11.6	E	3	6	13	12	6.5	54
HAWAII																																
HILO	8	1015.2	1016.4	28.9	21.1	25.1	0.7	30.0	25+	19.4	29+	0	0	20.0	77	497	206	238	21	4	0	0	0.4	19	7.6	E	3	0	13	18	7.8	35
HONOLULU	2	1015.2	1015.7	31.7	23.9	27.8	1.5	32.8	29+	21.7	29+	12	0	20.0	65	64	42	32	10	1	0	0	5.1	6	11.6	NE	26+	5	15	11	6.2	64
KAHULUI	15	1012.9	1015.2	29.4	21.1	25.4	-0.7	31.1	24+	17.2	29	0	0	20.6	77	34	25	21	10	0	0	0	5.4	5	12.5	NE	6+	7	13	11	6.1	59
LIHUE	31	1011.9	1017.0	28.9	23.3	26.0	0.2	30.0	27+	20.0	29	0	0	21.7	80	50	- 12	18	21	1	0	0	5.8	6	12.1	E	9	1	14	16	7.2	70
IDAHO																																
BOISE	865	915.7	1013.4	35.0	16.7	25.6	3.3	39.4	20	9.4	8	27	0	6.1	31	T	- 4	T	0	1	0	0	0.4	27	10.3	NW	29+	24	7	0	1.9	92
IDAHO FALLS 46W R	1504			32.2	8.3	20.4	1.2	35.0	23+	2.8	9	21	0			5	- 8	3	4		0	0	0.8	26	16.5	W	19					
LEWISTON	431			35.6	16.7	26.2	4.1	41.1	31	10.0	25	25	0			T	- 11	T	0		0	0						24	5	2	1.9	
POCATELLO	1358	865.6	1015.2	33.3	10.0	21.7	0.5	36.1	23	2.8	9	26	0	3.9	35	3	- 11	2	3	3	0	0	0.8	24	17.0	W	6	15	16	0	3.2	89
ILLINOIS																																
CAIRO U	96			28.3	18.3	23.2	-3.4	32.2	8	12.8	31	1	0			123	44	58	7		0	0			15.2	SW	8	13	8	10	4.9	71
CHICAGO O HARE	201	994.2	1018.3	25.0	12.8	19.0	-2.8	30.0	16+	5.6	13	0	0	14.4	76	66	- 15	37	9	5	0	0	0.8	29	13.4	26	3	10	11	10	5.3	
CHICAGO MIDWAY	185	995.9		25.6	16.1	20.7	-2.8	31.1	2	10.6	12	0	0	13.9	66	53	- 28	37	7	3	0	0	0.5	25	12.5	W	26	10	13	8	5.3	63
MOLINE	177	996.6	1018.1	26.1	13.9	19.8	-3.3	31.7	2	7.2	31	0	0	15.0	77	92	2	30	8	6	0	0	0.4	25	12.5	N	2	13	9	9	4.9	66
PEORIA	199	994.6	1018.5	25.6	14.4	20.1	-3.4	31.1	2	6.7	31	0	0	14.4	72	59	- 14	19	8	6	0	0	0.2	27	13.4	NW	18	14	8	9	4.7	67
ROCKFORD	221	991.2	1018.1	25.0	12.8	18.9	-3.6	30.0	16+	6.7	12	0	0	14.4	78	94	- 11	28	11	7	0	0	0.5	28	11.2	31	3	12	9	10	4.9	
SPRINGFIELD	179	996.3	1018.2	26.1	14.4	20.3	-3.7	31.1	7+	7.8	31+	0	0	15.6	75	64	- 6	42	5	5	0	0	0.5	26	11.6	W	26	12	13	6	4.8	79
INDIANA																																
EVANSVILLE	116	1004.4	1018.3	27.8	14.4	21.2	-4.0	31.1	9+	10.0	22+	0	0	16.1	75	80	2	51	7	4	0	0	0.4	32	12.5	W	8	10	9	12	5.5	69
FORT WAYNE	241	988.8	1018.5	26.1	13.3	19.8	-2.7	32.8	2	7.8	13+	1	0	12.2	65	41	- 36	15	9	3	0	0	1.1	26	12.5	NW	18	11	9	11	5.5	67
INDIANAPOLIS	241	989.5	1018.4	27.8	15.6	21.7	-1.4	32.8	2	11.1	31+	1	0	15.6	71	60	- 17	42	6	4	0	0	0.8	28	11.2	NW	2	8	9	14	5.8	73
SOUTH BEND	236	990.2	1017.9	25.6	14.4	19.9	-2.3	31.7	2	8.3	12+	0	0	13.3	68	70	- 20	23	10	4	0	0	1.2	28	11.2	32	3	11	9	11	5.3	
IOWA																																
BURLINGTON	211			25.6	14.4	20.2	-3.4	31.7	2	6.7	31	0	0	14.4	71	66	- 26	21	7	6	0		0.3	26	11.2	36	18	14	7	10	4.8	
DES MOINES	286	984.1	1018.4	27.8	15.0	21.3	-2.1	32.2	16	7.2	31	1	0	13.3	65	20	- 73	7	7	5	0	0	0.4	15	10.7	N	26	12	12	7	4.6	81

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile 1.6 kilometers: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths, sunrise to sunset	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
IOWA																																
DUBUQUE	322	979.7		24.4	12.8	18.7	-2.7	30.0	1	5.6	31	0	0			97	2	25	7		0	0						13	7	11	5.1	
SIOUX CITY	334	978.0	1017.4	27.8	14.4	21.3	-2.6	32.8	17	6.1	31+	1	0	14.4	66	34	- 33	11	9	8	0	0	0.9	15	20.1	SW	6	18	10	3	3.6	90
WATERLOO	265	986.5	1018.0	25.0	12.2	18.4	-3.6	29.4	16	3.3	31	0	0	13.9	76	100	13	34	7	4	0	0	0.4	19	20.6	21	1	14	9	8	4.6	
KANSAS																																
CONCORDIA	448	965.1	1017.1	29.4	16.1	22.7	-3.4	33.9	28	9.4	31+	7	0	14.4	62	49	- 31	41	5	7	0	0	1.8	15	10.3	N	26+	17	7	7	3.8	85
DODGE CITY	787	927.5	1016.5	30.0	16.7	23.1	-3.1	36.1	29+	10.0	27	10	0	13.9	61	80	20	54	9	10	0	0	1.9	15	13.0	S	7	11	12	8	5.2	79
GOODLAND	1113	892.3	1016.9	30.0	13.3	21.8	-1.9	36.7	28	8.9	27	11	0	11.7	59	45	- 13	13	7	7	0	0	1.9	16	13.0	25	5	16	9	6	4.1	
TOPEKA	267	986.5	1017.9	28.3	16.1	22.3	-3.5	33.9	2	8.3	31	4	0	15.6	68	47	- 62	13	7	6	0	0	0.6	13	10.7	N	30+	12	11	8	5.0	77
WICHITA	403	969.9	1016.9	31.1	16.1	23.7	-3.4	39.4	29	8.9	27	15	0	12.8	55	49	- 24	29	6	6	0	0	1.8	13	14.8	NE	29	13	14	4	4.2	76
KENTUCKY																																
COVINGTON	265	987.1	1018.5	27.8	16.1	21.7	-1.7	30.6	8+	11.1	21	0	0	15.6	72	20	- 46	8	6	3	0	0	0.5	26	9.4	27	27	8	14	9	5.7	
LEXINGTON	294	983.4	1018.7	26.7	16.7	21.4	-3.0	31.1	8	10.6	13	0	0	16.1	74	92	11	44	9	3	0	0	0.5	22	8.0	4	31	10	9	12	5.9	
LOUISVILLE	145	1000.7	1018.0	27.8	16.7	22.3	-2.2	32.8	8	11.7	22+	1	0	16.7	74	109	34	61	10	6	0	0	0.3	27	10.7	N	30	9	11	11	5.5	71
LOUISIANA																																
ALEXANDRIA	28	1012.9	1016.9	31.7	20.6	26.2	-1.7	35.6	10	15.0	12	14	0			96	7	23	11	8	0	0	0.4	2	10.7	25	5	5	6	20	7.0	
BATON ROUGE	20	1014.2	1017.1	31.7	21.7	26.7	-1.3	35.0	10+	15.0	12	20	0	20.0	71	104	- 29	44	11	7	0	0	0.5	2	10.3	3	5	4	11	16	7.1	
LAKE CHARLES	3	1015.9	1017.0	31.1	22.2	26.7	-1.2	34.4	10+	16.1	12	16	0	22.2	80	158	36	51	9	10	0	0	0.3	10	10.7	1	10	4	10	17	7.2	
NEW ORLEANS	1	1015.9	1016.8	31.1	22.2	26.7	-1.1	35.0	6+	17.8	14	15	0	21.1	75	191	55	46	15	11	0	0	0.6	2	9.4	22	27	8	5	18	6.8	
SHREVEPORT	77	1007.5	1016.6	32.2	21.1	26.7	-2.1	37.8	9	15.0	13	17	0	19.4	69	119	54	87	5	5	0	0	1.3	12	14.3	15	21	7	12	12	5.7	66
MAINE																																
CARIBOU	190	992.9		23.9	12.2	17.9	0.9	28.3	17	6.7	31+	0	0			122	29	55	12		0	0						6	9	16	6.9	
PORTLAND	14	1014.9	1017.3	24.4	14.4	19.3	0.0	30.0	18	6.7	25	0	0	15.6	80	65	4	25	11	5	0	0	1.2	20	12.1	W	20	9	10	12	6.2	54
MARYLAND																																
BALTIMORE	45	1012.2	1017.8	27.8	18.3	23.0	-0.9	33.9	3	14.4	15+	1	0	18.3	80	225	93	74	12	6	0	0	0.5	24	16.1	SE	3	7	8	16	6.8	59
MASSACHUSETTS																																
BLUE HILL OBS R	192			25.0	16.1	20.6	-0.2	30.6	18	11.7	31	0	0			126	24	40	14		0	0			15.6	SW	4					48
BOSTON	5	1016.6	1017.5	25.6	17.8	21.6	-0.4	30.0	18	13.3	24	0	0	15.6	71	146	53	66	13	6	0	0	2.0	21	13.0	SW	4	8	5	18	7.0	54
NANTUCKET	13	1018.0	1018.3	22.2	15.6	18.7	-1.3	24.4	16+	10.0	24	0	0	17.8	96	171	78	37	13	3	0	0	1.7	19	13.4	SW	20	1	7	23	8.5	50
PITTSFIELD	357			25.0	12.8	18.8	-0.2	28.9	18+	6.1	31	0	0			56	- 43	18	14		0	0										
WORCESTER	301	982.1	1018.6	24.4	15.0	19.9	-0.3	28.9	18	9.4	31	0	0	15.0	76	88	- 20	18	14	5	0	0	1.7	25	8.9	28	29	4	11	16	6.9	
MICHIGAN																																
ALPENA	210	992.2	1017.5	23.9	9.4	16.6	-1.4	30.6	16	2.2	23	0	0	11.1	74	81	4	27	10	5	0	0	0.5	26	14.8	NW	3	13	10	8	4.7	64
DETROIT	189			25.6	15.6	20.6	-2.1	31.1	17	9.4	12	0	0	13.9	66					7			0.8	30	9.4	29	27					
DETROIT M WAYNE CO	193	993.2	1017.2	26.1	13.3	19.6	-2.6	31.1	17	7.8	12	0	0	13.3	69	51	- 21	10	11	4	0	0	0.8	29	13.0	SW	3	11	10	10	5.2	68
DETROIT WILLOW RUN	217	989.8	1017.8	25.6	12.8	19.2	-3.3	30.6	17+	6.1	12	0	0	11.7	64	43	- 29	11	9	7	0	0	0.7	28	17.9	25	3	13	7	11	5.1	
FLINT	235	989.8	1017.5	25.0	11.7	18.2	-2.7	30.6	17	3.9	12	0	0	12.2	69	59	- 21	28	9	3	0	0	1.0	27	10.3	27	26	10	14	7	5.1	
GRAND RAPIDS	239	988.8	1017.8	25.6	12.2	18.9	-2.4	31.7	17	6.1	31+	0	0	12.2	69	85	16	28	9	5	0	0	1.0	26	17.0	W	17	10	12	9	5.0	66
HOUGHTON LAKE	350	976.6	1018.3	23.3	10.0	16.7		28.3	17+	2.2	23	0	0	11.7	74	42		14	9	8	0	0	1.0	27	9.4	24	3	13	10	8	4.8	
LANSING	256	986.1	1017.5	26.7	10.6	18.6	-2.6	32.8	17	3.3	23+	2	0	11.7	67	74	- 4	53	8	3	0	0	1.2	28	13.4	W	26	10	14	7	5.1	74
MARQUETTE U	206			22.8	12.8	17.6	-1.2	31.1	25+	6.7	22+	0	0			71	- 6	34	12		0	0			13.0	SW	25	13	9	9	5.0	70
MUSKEGON	191	994.9	1017.7	25.0	13.3	19.2	-2.1	29.4	16+	8.3	23	0	0	13.3	70	69	- 5	24	13	9	0	0	1.0	26	13.0	22	17	11	10	10	4.9	
SAULT STE MARIE	220	990.9	1017.2	22.8	8.3	15.7	-2.1	28.3	16	2.8	31+	0	0	12.2	80	112	38	45	10	6	0	0	0.7	30	12.1	S	3	11	10	10	5.3	65
MINNESOTA																																
DULUTH	435	966.8	1018.1	22.8	10.6	16.5	-1.2	29.4	15	2.8	31	0	0	10.6	69	59	- 38	26	9	7	0	0	1.1	22	16.5	W	15	6	15	10	6.0	62
INTERNATIONAL FALLS	359	974.6	1017.4	23.9	9.4	16.7	-0.6	31.7	15	1.7	31	0	0	11.7	73	47	- 45	24	6	6	0	0	0.5	23	8.9	20	24+	7	16	8	5.5	
MINNEAPOLIS	254	987.5	1017.8	25.0	12.8	19.0	-2.1	31.7	16	3.9	19	0	0	12.8	70	71	- 10	31	7	5	0	0	0.5	19	28.2	N	6	10	11	10	5.3	67
ROCHESTER	395	971.2	1018.5	24.4	11.7	17.9	-3.1	30.6	1	3.3	31	0	0	12.2	73	89	- 7	57	7	6	0	0	1.4	22	18.3	21	1	12	9	10	5.0	
ST CLOUD	315	979.7	1017.3	26.1	11.7	18.8	-1.5	31.7	24+	4.4	19	0	0		67	120	25	107	8		0	0						14	10	7	4.5	
MISSISSIPPI																																
JACKSON	94	1005.8	1017.6	30.6	19.4	25.0	-2.8	35.0	9	14.4	30+	11	0	20.0	81	89	4	40	11	6	0	0	0.6	5	11.6	NW	18	4	8	19	7.4	51
MERIDIAN	88	1006.8	1017.7	30.6	19.4	25.0	-2.3	34.4	7	13.9	30+	7	0	19.4	76	170	80	83	12	7	0	0	0.7	35	9.8	1	11	5	8	18	7.4	

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No of days: Max 32.2 °C or above	Temperature: No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C	C	C	C	C		C				C	%	Mm	Mm.	Mm			Mm	Mm	M p s		M p s							%
MISSOURI																																
COLUMBIA	237	989.8	1017.8	28.9	16.1	22.3	-2.8	34.4	2	7.8	31	5	0	14.4	64	22	- 75	18	3	2	0	0	0.4	16	19.2	NW	3	13	10	8	4.7	80
KANSAS CITY	226	991.2	1017.8	30.0	17.8	23.9	-2.6	34.4	3	10.0	31	11	0	15.6	61	8	- 88	6	3	1	0	0	0.4	14	10.3	N	30	12	9	10	4.9	72
ST JOSEPH	247			29.4	13.9	21.7	-3.6	33.3	7	6.1	28+	6	0	16.1	74	20	- 87		4	4	0		0.3	16	9.4	16	8	12	13	6	4.4	
ST LOUIS	163	998.3	1018.5	28.3	16.7	22.4	-2.4	33.3	7+	9.4	31	5	0	15.6	68	35	- 42	32	2	4	0	0	0.4	26	13.0	NW	20	11	13	7	5.1	76
SPRINGFIELD	386	973.6	1018.3	30.6	14.4	22.4	-3.2	35.6	29	6.7	12	10	0	13.9	65	26	- 58	19	8	9	0	0	0.8	14	8.9	N	26	13	10	8	4.8	67
MONTANA																																
BILLINGS	1087	894.3	1016.1	30.6	13.3	21.7	-0.5	35.6	23	5.6	26	14	0	5.6	40	14	- 9	12	5	7	0	0	0.3	25	16.5	NW	27	19	10	2	2.7	85
GLASGOW	696	935.3		30.0	12.8	21.4	1.5	36.1	23	6.1	26	9	0			5	- 33	5	1		0	0						12	12	7	4.3	
GREAT FALLS	1116	891.3	1015.7	31.1	12.2	21.7	2.3	36.1	19	8.3	2	15	0	2.2	30	6	- 26	3	3	4	0	0	0.8	26	13.0	W	23+	21	8	2	2.8	90
HAVRE	787	925.2	1015.5	31.7	11.7	21.7	2.3	38.3	11	6.1	25	13	0	4.4	36	T	- 28	T	0	2	0	0	0.5	7	17.9	NW	7	17	13	1	3.3	88
HELENA	1167	883.8	1016.5	32.2	11.7	21.9	2.9	36.7	23	5.6	26	17	0	4.4	36	15	- 8	8	4	5	0	0	0.8	29	15.2	SW	27	23	7	1	2.1	90
KALISPELL	904	913.0	1015.8	31.7	7.8	19.8	2.6	36.1	19+	3.3	26+	17	0	5.6	44	T	- 27	T	1	1	0	0	0.3	24	10.3	30	6	23	6	2	2.2	
MILES CITY	801	924.1	1015.3	32.2	14.4	23.3	0.7	38.9	23	6.1	26	17	0	5.6	35	T	- 31		0	2	0		0.7	6								
MISSOULA	972	906.5	1016.3	33.3	10.6	21.8	3.6	37.2	18+	4.4	25	20	0	3.3	33	T	- 18	T	0	2	0	0	0.4	30	11.6	W	21+	23	7	1	2.1	93
NEBRASKA																																
GRAND ISLAND	561	952.3	1017.4	30.0	14.4	22.3	-1.7	34.4	16+	6.1	31	16	0	13.3	62	33	- 27	11	7	8	0	0	1.5	17	15.6	32	26+	16	8	7	3.8	
LINCOLN U	351			28.9	16.7	22.7	-2.7	33.3	21	8.9	31	3	0			49	- 37	18	7		0	0			13.4	N	26	18	8	5	3.9	81
NORFOLK	471			28.3	13.9	21.3	-2.7	33.3	17	4.4	31	5	0			28	- 38	21	6		0	0						20	8	3	3.4	
NORTH PLATTE	846	920.8	1017.1	28.9	11.7	20.4	-3.2	36.1	28	3.9	19	8	0	11.1	59	2	- 53	1	2	6	0	0	1.5	13	13.9	NE	26	16	9	6	4.1	76
OMAHA	298	982.7	1017.8	28.9	15.0	22.1	-2.5	33.9	29	6.1	27	3	0	15.0	68	39	- 62	18	8	6	0	0	1.0	16	13.0	NW	18	15	11	5	4.0	78
SCOTTSBLUFF	1206	883.2	1016.6	30.0	13.3	21.5	-1.1	35.0	24+	7.8	26+	14	0	10.0	53	25	- 1	22	2	3	0	0	1.3	10	13.9	32	17	18	9	4	3.5	
VALENTINE	789			30.0	12.8	21.2	-1.5	37.2	28	3.9	19	12	0			46	- 12	17	10		0	0			25.0	SW	21	17	11	3	3.6	79
NEVADA																																
ELKO	1539	847.6	1014.6	35.6	12.2	23.9	4.5	38.9	16	7.2	8	29	0	3.9	32	2	- 6	2	1	6	0	0	0.5	19	9.4	7	30+	12	17	2	3.9	
ELY	1906	813.4	1015.0	30.6	10.0	20.1	1.1	33.3	17	4.4	31	7	0	5.0	43	10	- 2	6	5	15	0	0	2.2	20	13.4	N	18	8	20	3	5.2	64
LAS VEGAS	659	936.7	1010.9	40.0	25.0	32.4	1.7	43.3	14	21.1	9	31	0	11.7	30	10	- 3	6	4	8	0	0	1.0	21	21.5	NW	8	18	12	1	3.4	83
RENO	1342	868.3	1015.3	33.9	9.4	21.7	3.1	37.8	14	3.9	6	26	0	8.3	47	31	27	10	7	9	0	0	0.7	26	14.3	SW	17+	23	5	3	3.0	92
WINNEMUCCA	1310	869.3	1014.0	35.0	11.1	23.2	3.4	37.8	17	6.7	30	27	0	2.2	27	T	- 4	T	0	4	0	0	0.4	25	13.4	SW	20	12	16	3	4.1	76
NEW HAMPSHIRE																																
CONCORD	104	1005.4	1017.8	26.1	12.8	19.6	-0.1	30.6	18	6.7	24	0	0	15.0	79	50	- 25	28	12	4	0	0	0.8	22	9.4	W	31	5	12	14	6.7	59
MT WASHINGTON OBS	1909			11.7	5.6	8.6	-0.2	15.6	17	- 3.3	31	0	2			136	- 33	35	17	1	0	0			26.4Y	W	22	1	7	23	8.6	24
NEW JERSEY																																
ATLANTIC CITY	20	1016.3	1018.5	26.7	17.2	21.9	-1.2	32.2	19	12.8	16	1	0	18.3	83	304	180	148	17	9	0	0	1.3	20	9.4	18	3	6	8	17	7.3	44
ATLANTIC CITY U	3			26.1	20.0	23.1	-0.1	29.4	20	17.2	15+	0	0			375	245	218	18						13.4	S	27+					
NEWARK	2	1016.9	1018.0	27.2	18.9	23.1	-0.5	32.2	18	15.0	31	1	0	17.2	73	140	28	36	14	3	0	0	0.8	23	9.4	32	31+	7	8	16	7.1	
TRENTON U	17			27.2	18.9	23.1	-0.2	31.1	19+	15.0	31	0	0			169	48	46	14		0	0			13.4	S	27	6	9	16	6.8	47
NEW MEXICO																																
ALBUQUERQUE	1619	842.5	1015.6	30.6	16.7	23.6	-0.9	36.1	2+	12.8	24	9	0	10.6	50	84	50	31	14	17	0	0	1.4	11	20.1	N	19	12	12	7	4.7	74
CLAYTON	1515			27.8	13.3	20.6	-2.4	33.9	7	8.3	30	8	0			57	4	20	11		0	0						11	11	9	5.4	
RATON	1944			25.6	10.6	18.0	-2.1	31.7	25	5.6	22	0	0			112	45	23	16		0	0						8	17	6	5.4	
ROSWELL	1102	894.7		31.7	16.1	23.9	-0.9	38.3	8	12.2	30	13	0	13.9	60	102	60	49	10	11	0	0	0.7	10	11.2	W	19+	12	9	10	4.9	73
SILVER CITY	1638			28.9	16.1	22.5	-1.4	33.3	2	12.8	21+	2	0			85	24	27	14		0	0						5	20	6	5.4	
NEW YORK																																
ALBANY	84	1007.1	1017.8	26.7	14.4	20.7	-0.4	31.7	16	7.2	24	0	0	15.6	75	55	- 23	16	13	2	0	0	1.2	22	11.6	N	4	2	12	17	7.5	55
BINGHAMTON	485	960.4	1018.5	23.3	14.4	19.0	-0.2	27.8	18	8.3	31	0	0	15.0	81	125	34	40	13	5	0	0	1.1	24	9.8	SW	3	3	8	20	7.3	54
BUFFALO	215	992.2	1017.4	25.0	15.0	20.1	-0.2	31.1	2	8.9	23	0	0	14.4	73	103	25	28	13	7	0	0	1.7	23	13.0	W	4	3	16	12	6.5	61
NEW YORK U	40	1014.6	1017.6	27.8	18.9	23.3	-0.7	32.2	19	14.4	31+	1	0	17.2	73	151	38	54	14	6	0	0	0.4	18	14.3	SW	19					49
J.F. KENNEDY	4	1017.3	1018.1	25.6	18.3	21.9	-1.7	29.4	10+	14.4	31+	0	0	17.2	79	187	61	51	14	4	0	0	1.4	20	13.0	29	5	4	10	17	7.2	
NEW YORK LA GUARDIA	3	1015.9	1017.8	26.7	20.0	23.2	-0.9	30.6	18	15.0	31	0	0	17.8	75	179	50	53	13	5	0	0	0.5	21	16.1	NW	5	6	8	17	7.2	
ROCHESTER	167	998.3	1018.3	25.6	14.4	19.8	-1.2	31.1	3+	8.3	24	0	0	14.4	75	118	49	43	10	7	0	0	1.5	24	9.8	W	4	9	11	11	6.2	59
SYRACUSE	125	1002.7	1017.4	24.4	13.9	19.2	-2.0	28.3	18	8.9	31+	0	0	15.0	80	127	44	38	11	6	0	0	0.8	24	10.7	W	30	6	9	16	6.5	56
NORTH CAROLINA																																
ASHEVILLE	652	943.8	1018.7	26.1	14.4	20.3	-1.7	29.4	19+	10.0	29	0	0	16.7	84	287	161	105	14	8	0	0	0.2	35	7.6	34	11+	4	11	16	7.1	46
CAPE HATTERAS R	2	1018.0	1018.1	28.3	21.7	24.9	-0.4	31.7	23	18.3	17	0	0	21.7	84	220	57	51	13	9	0	0	0.9	20	14.8	S	11	2	12	17	7.2	58
CHARLOTTE	224	990.9	1017.9	28.9	19.4	24.0	-1.9	32.8	19	13.9	14	2	0	18.3	75	234	127	112	13	8	0	0	0.4	20	10.7	SW	9	2	14	15	7.1	74

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days sunrise to sunset: Clear 0-3	Partly cloudy 4-7	Cloudy 8-10	Sky cover tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p s		M p s							%
NORTH CAROLINA																																
GREENSBORO	273	987.1	1018.3	29.4	19.4	24.4	-0.2	33.3	19	13.9	14	4	0	20.6	84	138	21	50	12	7	0	0	0.6	19	12.5	NW	7	5	8	18	7.2	37
RALEIGH	132	1002.4	1018.0	29.4	20.0	24.6	-0.3	32.8	3	14.4	14	2	0	20.0	81	158	26	48	11	10	0	0	0.7	16	10.3	27	27	3	10	18	7.4	52
WILMINGTON	9	1016.9	1018.3	31.1	22.2	26.7	0.4	33.9	27+	17.8	16	17	0	21.7	75	207	32	76	15	8	0	0	0.5	17	10.7	SW	11	4	12	15	7.1	67
NORTH DAKOTA																																
BISMARCK	502	958.0	1017.0	28.9	10.6	19.7	-1.1	36.1	24+	4.4	9	8	0	7.8	52	31	- 13	13	7	6	0	0	0.4	5	17.9	SW	17	13	14	4	4.2	80
FARGO	273	984.4	1016.7	27.8	11.1	19.3	-1.6	34.4	24	4.4	31	4	0	9.4	55	10	- 65	4	6	5	0	0	0.4	19	19.2	NW	3	13	12	6	4.2	80
WILLISTON	579	948.5	1016.0	29.4	12.2	20.9	0.8	35.6	12	3.3	26	13	0	7.8	47	23	- 14	18	2	3	0	0	0.3	32	21.0	W	2	22	5	4	3.4	84
OHIO																																
AKRON	368	974.3	1018.2	26.1	14.4	20.1	-1.8	30.6	2	8.3	31	0	0	14.4	74	76	- 3	29	11	5	0	0	0.6	26	8.0	19	18	4	14	13	6.3	
CINCINNATI OBS	232			28.3	16.1	22.2	-2.1	32.2	17+	10.6	12	2	0			17	- 67	8	8		0	0			6.7	SW	27					60
CLEVELAND	237	989.2	1018.2	26.1	15.0	20.4	-0.9	32.2	2	6.7	12	1	0	13.9	69	47	- 36	14	9	4	0	0	0.7	25	10.3	NE	31	7	9	15	6.3	51
COLUMBUS	247	988.8	1018.5	26.1	14.4	20.2	-2.7	30.6	8	7.2	12	0	0	15.6	77	38	- 34	21	6	4	0	0	0.6	26	9.8	W	20+	4	15	12	6.4	61
DAYTON	305	982.7	1018.4	27.8	15.6	21.6	-1.6	31.7	2	8.9	12	0	0	14.4	68	9	- 65	5	8	1	0	0	0.9	26	9.4	N	31	7	13	11	5.9	70
MANSFIELD	395			25.6	13.9	19.8	-1.4	30.6	2	7.8	12+	0	0	12.8	66	27	- 55	8	8	5	0	0	1.0	25				10	7	14	6.2	
TOLEDO	204	993.2	1018.3	25.0	12.2	18.6	-3.1	30.6	17	6.7	31+	0	0	13.3	75	21	- 64	6	7	5	0	0	0.8	27	13.0	W	3	6	16	9	5.7	65
YOUNGSTOWN	359	976.0	1018.3	25.0	12.8	18.7	-2.4	30.0	2	5.6	12	0	0	13.9	77	51	- 38	16	10	4	0	0	0.5	25	9.4	32	9	7	11	13	6.5	
OKLAHOMA																																
OKLAHOMA CITY	392	971.2	1016.5	33.3	19.4	26.3	-1.9	39.4	2	12.2	13	20	0	15.0	54	36	- 28	25	5	5	0	0	1.7	12	12.5	NE	31	9	11	11	5.5	71
TULSA	198	993.2	1017.3	31.7	17.8	24.4	-3.1	37.8	8	11.1	12	16	0	16.7	67	14	- 63	5	6	8	0	0	1.2	13	17.9	E	22	12	10	9	5.2	71
OREGON																																
ASTORIA	2	1016.9	1017.8	22.8	11.7	17.1	1.0	30.0	9	6.7	25	0	0	13.3	84	5	- 33	3	5	0	0	0	2.3	28	10.3	31	24	14	6	11	5.2	
BURNS U	1265	875.4	1015.5	32.8	12.2	22.4	2.8	36.1	20+	5.6	7	21	0	2.8	31	T	- 7	T	1		0	0	1.3	33				22	8	1	2.5	
EUGENE	109	1002.4	1015.7	32.2	12.2	22.2	3.4	37.2	15	7.8	24	19	0	10.6	54	0	- 10	0	0	0	0	0	1.3	33	10.7	21	28	17	12	2	3.0	
MEACHAM	1234	879.4	1014.5	28.9	15.0	21.8	5.3	36.1	17	7.8	24	11	0			T	- 13	T	1		0	0						22	4	5	2.4	
MEDFORD	396	967.8	1014.4	37.2	13.9	25.6	4.1	41.7	19+	9.4	7	28	0	10.0	42	T	- 5	T	0	1	0	0	1.1	30	8.0	17	28+	27	1	3	1.4	
PENDLETON	452	962.1	1014.5	35.6	17.2	26.5	4.3	40.6	17+	10.6	25	26	0	4.4	27	T	- 7	T	0	1	0	0	0.9	28	13.9	27	6	25	3	3	2.0	
PORTLAND	6	1014.6	1015.8	31.1	14.4	22.7	3.5	38.9	28+	10.6	24	13	0	11.7	55	T	- 17	T	0	1	0	0	2.5	33	12.5	NW	24	18	10	3	3.1	81
SALEM	60	1008.8	1016.0	32.8	11.1	22.0	3.1	38.9	9	6.1	24	19	0	10.6	54	T	- 11	T	0	1	0	0	1.6	34	9.4	1	24+	21	8	2	2.5	
SEXTON SUMMIT R	1169	886.2	1014.4	28.3	15.6	21.9	4.6	33.9	15	6.7	7	5	0			0	- 6	0	0		0	0			12.5	34	13	28	1	2	1.1	
PACIFIC AREA																																
CANTON ISLAND	2			30.6	25.6	28.0	-0.6	31.7	26	22.8	9	0	0			59	- 4	22	9		0	0						14	11	6	4.7	
TAGUAC GUAM R	110			29.4	22.2	26.0	-0.3	31.1	19+	20.6	9+	0	0			586	260	151	25		0	0			8.5	N	10					44
JOHNSTON	2	1012.2	1012.9	30.6	26.1	28.1	0.6	31.1	25+	23.9	22	0	0	22.8	76	39	- 19	16	14	0	0	0	6.6	10	14.8	SE	30	5	13	13	6.3	72
KOROR R	29	1005.4	1009.1	30.0	23.9	27.0	-0.2	31.7	29+	21.7	27	0	0	23.9	85	435	34	79	23	6	0	0	2.6	24	11.2	NW	31	0	0	31	9.8	56
KWAJALEIN	2	1008.8	1009.4	30.6	25.0	27.8	0.1	31.7	24+	23.3	27+	0	0	23.9	80	155	- 88	22	20	1	0	0	2.5	11	11.6	17	1	0	7	24	8.8	
MAJURO	3	1009.5	1009.8	30.6	25.6	27.9	1.1	31.1	27+	22.8	16	0	0	23.3	76	203	- 94	42	23	1	0	0	2.5	9	10.3	E	24	2	7	22	8.1	67
MARCUS ISLAND	6	1008.8	1010.6	31.1	25.0	28.0	-0.1	32.2	31+	22.8	24	3	0	24.4	81	34	-148	7	15	0	0	0	1.0	15	13.4	W	1	8	11	12	6.0	85
PAGO PAGO	4	1012.9	1012.9	27.8	22.8	25.3		30.0	31	18.3	5	0	0	22.2	83	331		155	21	0	0	0	5.5	11	17.9	SE	10	5	12	14	6.9	72
PONAPE R	37	1003.7	1009.3	31.1	22.2	26.7	0.3	32.2	26+	20.6	8+	6	0	23.9	88	516	102	79	25	4	0	0	1.0	15	8.0	S	26	0	9	22	8.6	43
TRUK MOEN ISLAND	2	1008.8	1009.3	30.0	23.9	26.7	-0.2	31.7	21	22.2	14	0	0	23.9	84	441	116	63	24	1	0	0	1.5	25	11.6	SW	3	0	8	23	8.7	57
WAKE	3	1010.5	1010.6	30.6	25.6	28.0	0.0	31.7	25+	22.2	27	0	0	23.3	79	221	41	61	21	2	0	0	3.4	11	19.2	S	5	0	4	27	9.2	57
YAP R	19	1006.4	1008.2	30.6	23.9	27.0	-0.4	32.2	10	22.2	14	1	0	23.9	86	418	44	62	24	2	0	0	1.4	24	9.4	SW	23	0	0	31	10.0	54
PENNSYLVANIA																																
ALLENTOWN	118	1004.1	1018.0	26.1	15.6	20.6	-1.6	30.0	18	8.9	31	0	0	15.6	75	127	13	41	10	6	0	0	0.4	27	15.6	15	4	5	11	15	6.9	
ERIE	223	991.5	1017.9	23.9	14.4	19.2	-1.8	30.0	2	8.9	31+	0	0	14.4	75	114	38	37	11	6	0	0	1.2	23	10.3	22	3	10	11	10	5.7	
HARRISBURG	103	1005.1	1017.9	26.7	17.2	22.1	-1.3	30.6	9+	12.8	31	0	0	16.7	74	142	50	80	11	4	0	0	0.4	29	12.5	NE	3	6	6	19	7.2	55
PHILADELPHIA	2	1016.9	1018.0	28.3	19.4	23.9	0.8	32.2	19+	16.1	14	2	0	17.8	72	180	62	52	13	8	0	0	0.7	25	13.0	W	27	5	6	20	7.3	55
PITTSBURGH	347	974.9	1018.3	25.6	15.0	20.4	-1.1	30.0	2	10.6	31	0	0	15.0	75	68	- 16	31	11	4	0	0	0.8	25	11.2	24	2	4	9	18	7.4	50
READING U	81			27.2	18.3	22.7	-1.1	31.7	18	13.9	31	0	0			120	17	33	10		0	0			19.7	N	20	6	12	13	6.6	50
SCRANTON	283	984.8	1018.6	25.6	15.6	20.5	-0.6	30.0	18	8.9	31	0	0	16.1	78	132	41	28	12	3	0	0	0.5	19	13.0	S	20	3	12	16	7.0	54
WILLIAMSPORT	160	999.3	1018.1	25.6	15.6	20.8	-1.2	30.0	4	9.4	31	0	0	17.8	86	126	34	25	14	5	0	0	0.5	24	9.4	14	3+	2	13	16	7.6	
RHODE ISLAND																																
BLOCK ISLAND	34			22.8	18.3	20.4	-0.4	26.1	4	12.2	23	0	0			70	- 28	17	12		0	0						1	8	22	8.4	
PROVIDENCE	16	1015.6	1017.9	26.1	17.2	21.4	0.1	30.6	18	10.6	24	0	0	16.7	76	82	- 18	25	15	5	0	0	1.6	21	10.3	31	1	6	3	22	7.5	43

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M p.s		M p s							%
SOUTH CAROLINA																																
CHARLESTON	12	1015.9	1017.5	31.1	21.7	26.4	-0.1	36.1	8	16.7	14+	16	0	21.7	80	95	- 73	34	13	8	0	0	0.8	17	17.0Y	S	1	5	10	16	6.7	66
CHARLESTON U	3			30.0	23.3	26.6	-0.7	33.3	8+	17.8	13	6	0			128	- 27	53	10		0	0			12.5	SE	24					
COLUMBIA	65	1009.8	1018.0	29.4	18.9	24.3	-2.7	33.3	19+	13.3	15+	5	0	20.0	85	283	138	103	12	12	0	0	0.3	10	10.3	20	2	4	12	15	6.9	63
GNVLE SPARTANBURG	292	984.1	1018.1	28.3	18.3	23.4	-2.2	32.8	3	14.4	29	2	0	18.3	76	191	76	114	13	9	0	0	0.1	10	9.4	N	31	6	10	15	6.5	55
SOUTH DAKOTA																																
ABERDEEN	395	970.2	1016.6	28.9	11.1	20.0	-1.9	35.6	24	2.8	31	9	0	9.4	54	36	- 19	26	7	9	0	0	0.7	7	11.6	36	17	15	13	3	3.5	
HURON	391	970.5	1016.4	30.6	12.2	21.3	-1.4	35.6	1	3.9	31	12	0	11.7	59	26	- 26	8	10	10	0	0	0.9	14	13.4	NE	25	18	11	2	3.2	82
RAPID CITY	964	907.9	1016.9	29.4	13.3	21.4	-0.8	37.8	24	6.1	26	12	0	6.7	42	24	- 7	9	7	8	0	0	0.8	33	16.5	W	5	16	13	2	3.5	77
SIOUX FALLS	432	966.5	1017.2	28.9	13.3	21.1	-1.1	35.0	1	4.4	31+	7	0	11.7	59	88	- 3	43	6	10	0	0	0.8	17	10.3	36	25+	19	9	3	3.6	
TENNESSEE																																
BRISTOL	459	965.1	1018.9	27.2	15.6	21.5	-2.3	30.6	3	10.6	14	0	0	17.2	82	93	- 3	29	11	4	0	0	0.2	36	6.7	27	10	4	12	15	6.7	
CHATTANOOGA	203	993.2	1017.7	28.3	17.8	23.1	-3.4	32.2	8+	12.8	14	2	0	18.9	81	68	- 28	29	16	5	0	0	0.1	6	8.9	NE	11	6	7	18	7.0	40
KNOXVILLE	299	983.1	1017.5	27.8	18.3	22.9	-2.3	31.7	8	13.9	28+	0	0	18.3	80	103	15	41	8	3	0	0	0.5	30	9.8	SW	19	5	7	19	7.0	57
MEMPHIS	79	1008.1	1018.2	29.4	19.4	24.4	-2.5	33.9	8	13.3	28	5	0	17.8	68	131	56	55	10	8	0	0	0.5	7	18.8	NE	3	6	9	16	6.5	70
NASHVILLE	180	996.3	1017.8	27.8	17.2	22.6	-3.7	32.8	1	10.6	14	2	0	17.8	78	52	- 20	24	9	5	0	0	0.2	30	8.5	NW	8+	8	10	13	6.4	63
OAK RIDGE R	276			27.8	17.8	22.7	-1.8	31.7	4	12.2	28+	0	0			56	- 61	35	11		0	0			13.4Y		8	5	5	21	7.5	
TEXAS																																
ABILENE	537	955.3	1015.4	33.3	20.6	26.8	-1.6	37.8	4	14.4	13	23	0	16.1	56	14	- 24	7	4	2	0	0	1.7	17	11.2	E	22+	11	12	8	5.5	73
AMARILLO	1098	894.7	1015.3	30.6	17.8	23.9	-2.5	37.8	8	12.8	31	13	0	13.3	56	46	- 20	13	9	11	0	0	2.2	18	17.4	NE	8	10	8	13	5.8	64
AUSTIN	182	994.2	1015.9	34.4	21.7	28.1	-1.2	38.3	10+	16.1	13	26	0	17.8	60	94	45	51	6	6	0	0	1.6	16	19.2	SE	31	7	14	10	5.7	75
BROWNSVILLE	6	1014.2	1014.9	32.2	23.3	27.8	-1.2	35.6	10+	17.2	14	16	0	22.2	75	151	81	51	12	4	0	0	3.0	13	14.8	SE	2	10	5	16	6.4	70
CORPUS CHRISTI	12	1014.2	1015.6	32.2	22.8	27.4	-1.6	36.7	10	17.8	13	17	0	21.7	75	136	66	36	10	4	0	0	3.0	12	13.9	S	28	6	6	19	7.2	58
DALLAS	147	999.0	1015.9	35.0	23.3	29.0	-0.4	39.4	9+	16.7	13+	26	0	16.7	51	3	- 46	2	2	4	0	0	2.1	13	11.2	S	17	13	10	8	4.6	75
DEL RIO	313	979.0	1014.5	35.0	22.2	28.5	-1.4	38.9	10+	18.9	25	27	0	16.7	55	25	- 13	10	5	3	0	0	3.5	12	14.3	6	25	6	12	13	5.9	
EL PASO	1194	884.2	1013.1	32.2	19.4	25.9	-1.0	37.2	1	16.1	25	19	0	12.2	46	14	- 17	5	9	7	0	0	1.4	8	17.0	NW	16	11	13	7	4.9	73
FORT WORTH	164	995.9	1015.9	35.0	21.7	28.4	-1.3	39.4	9	13.3	13	26	0	17.2	54	12	- 30	6	4	3	0	0	1.5	15	10.3	27	19	14	8	9	4.8	
GALVESTON U	2			29.4	24.4	27.1	-1.4	33.9	10	20.0	13+	2	0			146	34	51	12		0	0			10.3	NE	12+					50
HOUSTON U	12			31.7	23.3	27.6	-1.3	36.7	10+	20.0	13	15	0			48	- 42	17	9		0	0										
HOUSTON	15	1014.2	1016.3	32.2	22.8	27.3	-1.2	36.1	10	17.8	13	16	0	21.1	74	41	- 68	17	10	6	0	0	1.2	14	10.3	4	12	4	12	15	6.8	56
LUBBOCK	992	906.5	1015.7	30.6	17.2	23.8	-2.2	37.2	8	12.8	30	11	0	13.3	57	18	- 25	8	6	8	0	0	1.0	14	10.3	17	18	8	12	11	5.8	
MIDLAND	869	918.1	1014.4	32.2	18.9	25.4	-2.5	37.8	8	13.3	18	18	0	12.8	49	4	- 33	2	6	4	0	0	2.5	12	14.8	3	26	3	15	8	5.3	
PORT ARTHUR	5	1015.9	1016.7	32.2	22.2	27.2	-0.8	35.6	30+	16.7	13+	15	0	20.6	73	219	80	83	13	9	0	0	0.4	12	17.0	NE	5	5	13	13	6.6	62
SAN ANGELO	580	949.5	1014.6	35.0	21.7	28.3	-1.2	40.0	9	17.2	14	27	0	14.4	47	36	4	32	4	1	0	0	1.5	16	10.3	15	18	9	16	6	5.3	
SAN ANTONIO	240	988.5	1015.9	34.4	22.2	28.2	-0.6	38.3	10+	16.7	13	25	0	18.3	63	81	21	38	6	2	0	0	1.7	13	12.5	SE	17	8	13	10	5.7	69
VICTORIA	32	1011.5	1015.7	33.3	22.8	28.2	-0.4	37.8	10	17.2	13	20	0	20.6	71	77	- 3	23	7	4	0	0	1.7	14	16.5Y	S	18	2	15	14	7.2	
WACO	153	998.0	1015.6	36.1	22.8	29.6	-0.2	40.0	9+	15.6	14+	31	0	17.8	53	11	- 32	5	4	3	0	0	2.1	14	10.7	4	31	10	18	3	4.5	
WICHITA FALLS	303	980.0	1015.6	36.1	20.0	28.2	-1.7	41.1	8+	12.8	13	30	0	15.0	48	6	- 40	4	2	5	0	0	1.7	13	13.4	5	30	8	12	11	5.8	
UTAH																																
MILFORD	1533	849.3		35.0	13.9	24.3	1.9	37.2	25+	10.0	20+	28	0			8	- 10	3	8		0	0						15	13	3	4.5	
SALT LAKE CITY	1286	873.4	1013.8	35.6	16.1	25.9	2.3	37.8	17	12.8	10	31	0	7.2	33	2	- 20	1	4	6	0	0	1.6	15	14.8	SW	4	13	16	2	3.8	89
WENDOVER	1291			32.8	20.6	26.6	1.5	35.0	17+	17.2	22	22	0			T	- 9	T	1		0	0										
VERMONT																																
BURLINGTON	101	1004.4	1016.7	25.0	13.9	19.4	0.2	29.4	17	6.7	24+	0	0	14.4	75	96	11	26	13	4	0	0	1.3	19	12.5	SW	3	3	14	14	6.9	68
VIRGINIA																																
LYNCHBURG	279	985.1		27.8	16.7	22.3	-1.5	31.7	19+	12.8	29+	0	0	17.2	80	286	174	114	13	11	0	0	0.3	24	15.2	NW	19	7	9	15	6.6	54
NORFOLK	7	1016.9	1018.1	27.8	20.0	24.0	-1.3	32.2	19+	16.7	17+	3	0	20.0	80	284	133	105	16	10	0	0	0.9	16	14.8	N	24	4	9	18	7.4	64
RICHMOND	50	1012.2	1018.1	29.4	18.9	24.2	-0.3	34.4	19+	13.3	14	6	0	20.0	84	169	28	61	11	7	0	0	0.8	19	12.1	SW	4	5	10	16	7.1	62
ROANOKE	350	976.6	1018.1	28.3	17.2	22.6	-1.6	32.2	3	12.8	29+	1	0	16.1	69	162	44	52	13	5	0	0	0.4	33	7.2	2	31+	6	12	13	6.7	
WALLOPS ISLAND	3	1018.6	1019.0	24.4	18.3	21.3		28.9	20	15.0	15	0	0	19.4	93	184		69	15	10	0	0	1.3	17	18.3Y	E	27	7	6	18	6.7	
WASHINGTON																																
OLYMPIA	59	1009.8	1017.0	30.6	10.6	20.4	3.0	36.7	28	6.1	24	13	0	12.2	66	T	- 23	T	0	0	0	0	0.4	24	9.4	24	20+	18	8	5	3.7	
QUILLAYUTE	55	1010.5	1017.9	23.3	10.6	17.0	1.6	32.8	9	6.1	24	1	0	12.8	81	16	- 37	9	8	0	0	0	1.1	29	8.0	NW	24	13	8	10	5.1	64
SEATTLE TACOMA	122	1001.0	1017.1	28.9	14.4	21.7	3.9	36.7	16	11.1	8	4	0	11.7	59	1	- 24	1	1	0	0	0	0.9	33	9.8	23	20	15	12	4	3.8	74
SPOKANE	718	932.3	1014.2	32.8	14.4	23.6	3.6	38.3	18	7.2	25	16	0	2.8	28	T	- 10	T	0	0	0	0	1.7	19	11.6	S	21	23	7	1	2.2	89
STAMPEDE PASS P	1206	883.2		23.9	12.8	18.2	5.1	30.0	19+	5.0	24	0	0			12	- 40	6	3		0	0						17	9	5	3.5	
WALLA WALLA U	289			35.0	19.4	27.2	3.9	40.6	17+	12.2	25	24	0			T	- 8	T	0		0	0			8.5	W	6	23	5	3	2.1	94

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C	C.	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	976.6	1014.2	33.9	12.2	22.9	2.6	38.9	18	7.8	26+	21	0	8.3	42	T	- 5	T	1	0	0	0	1.9	30	10.3	29	6	23	3	5	2.4	
WEST INDIES																																
SAN JUAN P.R.	4	1014.9	1017.3	31.1	24.4	27.9	0.7	33.3	23	23.9	18+	3	0	22.8	74	107	- 74	46	19	1	0	0	3.9	9	11.6	E	9	3	24	4	5.5	80
SWAN ISLAND	9			30.6	25.6	28.0	-0.4	31.7	30+	22.2	7+	0	0			99	6	45	18		0	0						1	10	20	7.9	
WEST VIRGINIA																																
BECKLEY	763	931.9	1018.7	23.9	13.3	18.6		28.3	3	6.7	14	0	0	15.0	81	97		33	14	6	0	0	1.0	23	10.7	23	9	4	8	19	7.3	
CHARLESTON	286	984.4	1018.1	26.7	15.6	21.2	-2.0	30.6	3	10.0	14+	0	0	16.7	81	47	- 53	11	12	3	0	0	0.4	24	13.0	28	4	3	11	17	7.3	
ELKINS	600	948.9	1019.4	24.4	12.2	18.6	-1.9	30.0	2	7.2	14	0	0	15.0	86	130	22	56	11	5	0	0	0.5	28	8.9	35	19	1	10	20	7.9	
HUNTINGTON	252	988.5	1018.3	27.2	15.6	21.3	-2.0	30.0	16+	10.0	14	0	0	16.1	77	38	- 34	14	10	2	0	0	0.4	22	9.4	26	19+	4	12	15	6.8	
PARKERSBURG U	187			26.7	16.1	21.6	-2.0	30.6	16+	11.1	14	0	0			94	- 2	29	10		0	0			10.7	SW	2					50
WISCONSIN																																
GREEN BAY	208	992.2	1017.8	24.4	11.1	17.7	-2.8	30.0	17+	3.3	22	0	0	12.2	71	62	- 8	27	7	5	0	0	0.7	26	13.0	SW	17	11	12	8	4.9	68
LA CROSSE	198	993.6	1018.1	26.7	13.3	19.9	-2.1	32.2	16+	5.6	31	2	0	13.3	71	62	- 30	26	5	3	0	0	0.6	16	10.3	32	26+	13	8	10	5.0	
MADISON	262	987.1	1018.4	23.9	9.4	16.7	-4.2	28.9	16	2.8	31	0	0	11.7	74	69	- 17	23	9	6	0	0	0.8	28	14.8	W	3	11	9	11	5.1	66
MILWAUKEE	205	993.6	1018.6	24.4	13.3	18.9	-1.0	30.6	17+	8.9	31+	0	0	13.9	75	31	- 46	20	7	3	0	0	0.5	27	13.0	N	30	13	8	10	4.9	66
WYOMING																																
CASPER	1627	842.2	1016.5	30.0	11.1	20.6	-0.6	35.0	24	5.0	31+	11	0	3.3	37	10	- 8	7	4	6	0	0	0.4	32	17.4	32	4	19	10	2	3.3	
CHEYENNE	1867	818.2	1018.1	27.2	11.1	18.9	-0.9	33.3	24	6.7	26	1	0	5.6	47	25	- 11	16	6	8	0	0	0.8	29	20.6	N	17	12	14	5	4.6	65
LANDER	1696	834.1	1016.7	29.4	12.2	20.7	0.2	31.7	27+	7.2	31+	0	0	5.6	40	3	- 9	2	5	12	0	0	1.3	26	18.8	NW	13	12	17	2	4.0	82
SHERIDAN	1208	882.5	1017.2	30.0	10.0	19.9	-0.9	35.0	23	5.0	26	9	0	5.0	40	18	- 5	13	4	5	0	0	0.1	27	16.5	SE	6	19	8	4	3.6	83

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1 C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

AUGUST 1967

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	[illegible]
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	[illegible]	372	493
ANNETTE	128	342	45[illegible]
BARROW	887	1735	1643
BARTER ISLAND	866	1618	15[illegible]0
BETHEL	325	679	713
COLD BAY	417	786	899
FAIRBANKS	213	391	503
JUNEAU	303	643	639
KING SALMON	313	628	635
KOTZEBUE	430	803	827
MC GRATH	304	576	546
NOME	475	1023	977
ST. PAUL ISLAND	474	985	1144
SHEMYA	451	1016	1052
YAKUTAT	370	758	655
ARIZONA			
FLAGSTAFF	33	44	114
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	0	0	
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	[illegible]
TEXARKANA	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	0	0	
BLUE CANYON	0	0	84
EUREKA U	249	506	527
FRESNO	0	0	0
LONG BEACH	0	0	0
LOS ANGELES	0	1	35
LOS ANGELES U	0	0	0
MT SHASTA R	2	5	59
OAKLAND	36	90	103
RED BLUFF	0	0	0
SACRAMENTO	0	0	0
SANDBERG U	0	0	0
SAN DIEGO	0	0	6
SAN FRANCISCO	63	148	159
SAN FRANCISCO U	173	357	366
SANTA CATALINA	1	20	16
SANTA MARIA	24	64	1[illegible]2
STOCKTON	0	0	0
COLORADO			
ALAMOSA	135	158	164
COLORADO SPRINGS	52	58	34
DENVER	16	20	15
GRAND JUNCTION	0	0	0
PUEBLO	15	15	0
CONNECTICUT			
BRIDGEPORT	2	2	0
HARTFORD	10	10	6
NEW HAVEN	9	9	12
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASH NATL AP	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	[illegible]
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	0	0	0
IDAHO FALLS 46W R	7	7	50
LEWISTON	0	0	0
POCATELLO	3	3	0

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ILLINOIS			
CAIRO U	2	2	[illegible]
CHICAGO O HARE	53	92	12
CHICAGO MIDWAY	16	42	
MOLINE	23	54	9
PEORIA	30	40	6
ROCKFORD	51	93	15
SPRINGFIELD	34	43	0
INDIANA			
EVANSVILLE	11	12	[illegible]
FORT WAYNE	31	58	9
INDIANAPOLIS	9	12	[illegible]
SOUTH BEND	30	61	6
IOWA			
BURLINGTON	28	45	0
DES MOINES	18	32	9
DUBUQUE	54	93	43
SIOUX CITY	21	35	9
WATERLOO	75	122	21
KANSAS			
CONCORDIA	7	14	0
DODGE CITY	6	6	0
GOODLAND	12	22	6
TOPEKA	7	8	0
WICHITA	1	3	
KENTUCKY			
COVINGTON	2	2	
LEXINGTON	4	5	0
LOUISVILLE	0	0	[illegible]
LOUISIANA			
ALEXANDRIA	[illegible]	[illegible]	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	[illegible]	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	56	69	1[illegible]3
PORTLAND	27	42	65
MARYLAND			
BALTIMORE	0	[illegible]	0
MASSACHUSETTS			
BLUE HILL OBS R	18	19	22
BOSTON	4	4	[illegible]
NANTUCKET	27	41	34
PITTSFIELD	40	53	84
WORCESTER	26	32	40
MICHIGAN			
ALPENA	130	214	173
DETROIT	19	53	0
DETROIT M WAYNE CO	29	61	11
DETROIT WILLOW RUN	41	70	0
FLINT	70	118	33
GRAND RAPIDS	47	85	35
HOUGHTON LAKE	116	185	138
LANSING	66	104	28
MARQUETTE U	118	203	140
MUSKEGON	32	48	40
SAULT STE MARIE	160	306	201
MINNESOTA			
DULUTH	144	224	183
INTERNATIONAL FALLS	127	203	183
MINNEAPOLIS	65	101	53
ROCHESTER	91	140	59
ST CLOUD	70	114	75
MISSISSIPPI			
JACKSON	[illegible]	0	
MERIDIAN	0	0	[illegible]
MISSOURI			
COLUMBIA	9	10	[illegible]
KANSAS CITY	3	3	[illegible]
ST JOSEPH	17	21	6
ST LOUIS	7	10	0
SPRINGFIELD	10	14	0
MONTANA			
BILLINGS	17	18	21
GLASGOW	12	31	78
GREAT FALLS	8	13	81
HAVRE	11	18	81
HELENA	1	[illegible]	90
KALISPELL	22	54	149
MILES CITY	5	10	12
MISSOULA	4	6	108
NEBRASKA			
GRAND ISLAND	15	19	[illegible]
LINCOLN U	9	11	[illegible]
NORFOLK	32	47	9
NORTH PLATTE	29	46	6
OMAHA	15	23	6
SCOTTSBLUFF	24	24	0
VALENTINE	34	60	21

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
NEVADA			
ELKO	0		4[illegible]
ELY	[illegible]	13	71
LAS VEGAS	0	0	0
RENO	3	4	[illegible]
WINNEMUCCA	0	[illegible]	34
NEW HAMPSHIRE			
CONCORD	34	42	56
MT WASHINGTON OBS	540	[illegible]	[illegible]
NEW JERSEY			
ATLANTIC CITY	1	1	
ATLANTIC CITY U	[illegible]		
NEWARK	1	1	
TRENTON U	1	1	[illegible]
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	21	31	6
RATON	65	67	37
ROSWELL	[illegible]	2	[illegible]
SILVER CITY	1	1	[illegible]
NEW YORK			
ALBANY	19	19	[illegible]
BINGHAMTON	40	66	67
BUFFALO	26	38	56
NEW YORK U	4	4	[illegible]
J.F. KENNEDY	4	4	[illegible]
NEW YORK LA GUARDIA	1	1	[illegible]
ROCHESTER	28	53	40
SYRACUSE	35	59	34
NORTH CAROLINA			
ASHEVILLE	2	9	
CAPE HATTERAS R	0	0	[illegible]
CHARLOTTE	0	0	[illegible]
GREENSBORO	0	0	
RALEIGH	0	0	[illegible]
WILMINGTON	[illegible]	0	
NORTH DAKOTA			
BISMARCK	42	98	62
FARGO	49	114	65
WILLISTON	27	71	74
OHIO			
AKRON	[illegible]	39	[illegible]
CINCINNATI OBS	3	6	
CLEVELAND	13	40	21
COLUMBUS	23	30	6
DAYTON	13	16	[illegible]
MANSFIELD	28	49	31
TOLEDO	57	84	16
YOUNGSTOWN	48	82	[illegible]
OKLAHOMA			
OKLAHOMA CITY	0	0	
TULSA	0	0	0
OREGON			
ASTORIA	68	186	276
BURNS U	6	6	49
EUGENE	1	6	68
MEACHAM	42	69	2[illegible]8
MEDFORD	0	0	
PENDLETON	0	0	
PORTLAND	0	3	[illegible]
SALEM	2	13	68
SEXTON SUMMIT R	25	78	102
PENNSYLVANIA			
ALLENTOWN	[illegible]	2	
ERIE	[illegible]	57	[illegible]
HARRISBURG	5	5	[illegible]
PHILADELPHIA	0	0	0
PITTSBURGH	13	21	[illegible]
PITTSBURGH U	10	19	6
READING U	5	5	[illegible]
SCRANTON	17	22	19
WILLIAMSPORT	12	17	9
RHODE ISLAND			
BLOCK ISLAND	9	11	16
PROVIDENCE	7	7	16
SOUTH CAROLINA			
CHARLESTON	0	[illegible]	0
CHARLESTON U	0	0	[illegible]
COLUMBIA	0	[illegible]	
GNVLE-SPARTANBURG	0	0	0
SOUTH DAKOTA			
ABERDEEN	39	74	[illegible]
HURON	24	62	21
RAPID CITY	1[illegible]	50	14
SIOUX FALLS	32	68	44
TENNESSEE			
BRISTOL	4	14	
CHATTANOOGA	0	1	
KNOXVILLE	0	1	[illegible]
MEMPHIS	0	0	
NASHVILLE	3	3	0
OAK RIDGE R	0	[illegible]	[illegible]

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
TEXAS			
ABILENE	0	[illegible]	0
AMARILLO	[illegible]	1	0
AUSTIN		[illegible]	0
BROWNSVILLE			
CORPUS CHRISTI			0
DALLAS	0	0	[illegible]
DEL RIO	[illegible]	[illegible]	
EL PASO			[illegible]
FORT WORTH			0
GALVESTON U			0
HOUSTON U	0		
HOUSTON	[illegible]	[illegible]	0
LUBBOCK	4	4	0
MIDLAND		[illegible]	0
PORT ARTHUR	[illegible]		0
SAN ANGELO	0	[illegible]	
SAN ANTONIO	0	[illegible]	
VICTORIA	0	[illegible]	0
WACO	0	0	
WICHITA FALLS	0	0	0
UTAH			
MILFORD	0	0	0
SALT LAKE CITY	[illegible]	0	0
WENDOVER	0	0	0
VERMONT			
BURLINGTON	[illegible]	46	93
VIRGINIA			
LYNCHBURG	0		0
NORFOLK	0	0	0
RICHMOND		0	0
ROANOKE	0	0	0
WALLOPS ISLAND	[illegible]	3	
WASHINGTON			
OLYMPIA	[illegible]	64	1[illegible]9
QUILLAYUTE	[illegible]	[illegible]	334
SEATTLE TACOMA	0	16	118
SPOKANE	2	10	34
STAMPEDE PASS R	[illegible]	344	564
WALLA WALLA U	0	0	0
YAKIMA	0	4	[illegible]
WEST VIRGINIA			
BECKLEY	49	86	34
CHARLESTON	[illegible]	1	[illegible]
ELKINS	[illegible]	7	[illegible]
HUNTINGTON	4	11	[illegible]
PARKERSBURG U	4	[illegible]	
WISCONSIN			
GREEN BAY	[illegible]	14[illegible]	78
LA CROSSE	42	63	31
MADISON	[illegible]	1[illegible]1	65
MILWAUKEE	55	99	90
WYOMING			
CASPER	21	27	22
CHEYENNE	45	57	[illegible]
LANDER	[illegible]	[illegible]	[illegible]
SHERIDAN	21	[illegible]	[illegible]

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

AUGUST 1967

STATE	TORNADOES: NUMBER	TORNADOES: DAYS	TORNADOES: DEATHS	TORNADOES: INJURIES	TORNADOES: †DAMAGE	HAILSTORMS: DEATHS	HAILSTORMS: INJURIES	HAILSTORMS: †DAMAGE PROPERTY	HAILSTORMS: †DAMAGE CROPS	WINDSTORMS: DEATHS	WINDSTORMS: INJURIES	WINDSTORMS: †DAMAGE PROPERTY	WINDSTORMS: †DAMAGE CROPS	LIGHTNING: DEATHS	LIGHTNING: INJURIES	LIGHTNING: †DAMAGE PROPERTY	LIGHTNING: †DAMAGE CROPS	‡ HEAVY SNOWSTORMS AND BLIZZARDS: DEATHS	‡ HEAVY SNOWSTORMS AND BLIZZARDS: INJURIES	‡ HEAVY SNOWSTORMS AND BLIZZARDS: †DAMAGE PROPERTY	‡ HEAVY SNOWSTORMS AND BLIZZARDS: †DAMAGE CROPS	# ICE STORMS: DEATHS	# ICE STORMS: INJURIES	# ICE STORMS: †DAMAGE PROPERTY	# ICE STORMS: †DAMAGE CROPS	∅ ALL OTHER: DEATHS	∅ ALL OTHER: INJURIES	∅ ALL OTHER: †DAMAGE PROPERTY	∅ ALL OTHER: †DAMAGE CROPS
Alabama										0	0	4	0													0	0	5	5
Alaska *																													
Arizona	2	2	0	0	0					0	2	5	0	0	2	2	0									0	0	6	5
Arkansas *																													
California *																													
Colorado						0	0	4	5	0	0	3	3	1	2	0	0												
Connecticut *																													
Delaware	1	1	0	0	[illegible]					0	0	3	3	0	0	4	0									3	0	5	4
Florida	2	2	0	0	1					0	3	5	0	3	0	4	0												
Georgia	2	2	0	0	4																					0	0	R6	5
Hawaii																										0	0	4	C
Idaho												2	C															2	
Illinois	1	1	0	0	3	0	0	4	6	0	0	4	1	0	0	5	0												
Indiana						0	0	3	3					1	1	4	0												
Iowa						0	0	5	5	0	0	5	5													0	0	4	4
Kansas	1	1	0	0	[illegible]	0	0	1	[illegible]	[illegible]	0	1	4	1	0	5	4												
Kentucky						0	0	[illegible]	2	0	0	4	C	0	0	4	0									0	1	F 6	C
Louisiana										0	3	4	3	0	1	0	0									0	0	4	0
Maine										0	[illegible]	4	0	0	0	3	0									0	0	R3	0
Maryland	[illegible]	2	0	0	1					0	[illegible]	1	[illegible]	0	0	5	0									1	0	5	4
Massachusetts						0	0	1	0	0	0	2	0	0	0	4	0									0	0	R4	0
Michigan										0	2	3	0	0	0	5	0												
Minnesota	1	1	0	0	0	[illegible]	0	3	[illegible]	0	0	4	1	0	0	5	0									1	0	4	0
Mississippi										0	0	4	0	0	1	2	0												
Missouri	3	2	0	0	2	0	0	3	3																				
Montana						0	[illegible]	1	6																				
Nebraska	1	1	0	0	4	0	0	5	6	0	0	4	0																
Nevada																										0	0	4	3
New Hampshire										1	2	4	0	0	0	4	0												
New Jersey								3		1		5		1	1											1			
New Mexico						0	0	[illegible]	[illegible]																	0	0	5	4
New York												4		2		4										1		4	
North Carolina						0	0	4	6	0	0	4	4	0	2	5	0									1	0	5	6
North Dakota	1	1	0	0	4	0	0	3	[illegible]	0	0	4	4	0	0	0	4									0	0	0	4
Ohio						0	0		[illegible]	0	0	5	[illegible]	0	0	4													
Oklahoma						0	0	3	4	0	0	3	4	0	1	4	0									0	0	0	4
Oregon														0	3-4	5	3												
Pacific Area *																													
Pennsylvania	1	1	0	[illegible]	3	0	[illegible]	0	4	0	[illegible]	5	0	4	11	5	0									3	1	7	0
Puerto Rico *																													
Rhode Island *																													
South Carolina						0	0	0	5	0	0	4	2	0	0	4	0									1	0	6	4
South Dakota	[illegible]	2	0	0	4	0	0	5	5					0	0	6	0												
Tennessee						0	0	3	3	0	0	4	4	0	0	3	0									0	0	°5	C
Texas	5	3	0	0	3																								
Utah *																													
Vermont										0	0	2	0																
U. S. Virgin Is. *																													
Virginia						0	0	3	5	[illegible]	3	4	0	0	2	4	0									0	0	4	3
Washington N																													
West Virginia														1	0	3	0												
Wisconsin	3	2	2	5	5	0	0	4	5	0	1	5	5	0	0	5	0												
Wyoming														0	5	2	0												

C Crop damage
Includes crop damage
R Rains
F Flooding
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

AUGUST 1967

Elmer R. Nelson, Office of Hydrology

The most significant flooding during August occurred in Alaska. Flooding of disastrous proportions occurred in Fairbanks and the small community of Nenana during the period of August 12-20. Fairbanks, much of which lies in the flood plain between the Chena and the Tanana Rivers, was almost completely inundated. Virtually every home and business house suffered major damage. All communications were severed. All roads and the Alaska railroad leading from Fairbanks were impassable. All utilities were out. Fire equipment was rendered useless. The town of Nenana was evacuated on Sunday, August 13. Only 6 residents remained out of 300. Red Cross officials estimated 10 to 11 thousand persons were cared for in 5 shelters. Shuttle flights carried many refugees to Anchorage and to Seattle, Wash. Preliminary estimates of property damage range from $150 to $200 million. At least 7 deaths from drowning were reported.

The flooding was the result of record rainfall over the basin above Fairbanks. The total rainfall reported at Fairbanks during the period August 9-15 was 6.10 inches. This was nearly three times the normal (2.20 inches) for the entire month of August. The heavy rainfall resulted from two strong and very deep flows of air. One, a cold flow from the Arctic basin over northern Alaska and the other an unusually warm and moist flow from the central Pacific over southern Alaska. The confluence of these air flows was over central Alaska, causing a strong frontal zone and the resulting heavy rainfall. The rainfall in the Fairbanks area was augmented by orographic effects in the headwaters of the Chena and tributaries of the Tanana Rivers.

The Chena River crested at Fairbanks, at a stage of 18.82 feet on the morning of August 15. This was 6.7 feet above flood stage and 2.9 feet higher than the previous maximum high stage, which occurred during May 1937, due to an ice jam. A nearly comparable flood occurred in August 1930 when it reached a crest of 15.2 feet. The Tanana River crested about 5.5 feet above flood stage at Nenana. The highest previous water level on the Tanana River at Nenana was recorded in May 1948, when the river crested at a stage of 15.9 feet, 3.3 feet above flood stage.

ATLANTIC SLOPE DRAINAGE

Heavy rain (3 to 3.5 inches) on the 3d and 4th resulted in light flooding on the Millstone and Raritan Rivers in northern New Jersey. Flood crests were less than 1 foot above flood stage. Little or no damage resulted from this overflow. Flooding from small creeks in the Milford, N. J., area, mainly the Quiquayamissacong Creek, caused damage estimated at $40,000 to Highway 519 and several thousand dollars damage to buildings and equipment in the area. Some damages resulted from flooding along Ferndale Creek in upper Bucks County, Pa. The heavy rains on the 3d and 4th caused only a minor rise along the mainstem of the Delaware River. Heavy rains in southern New Jersey and northern Delaware during the night of the 9-10th caused moderate rises in creeks. Twenty-five families were evacuated from their homes in the Blackwood Lake area. Many bridges were washed out or damaged in Gloucester County, N. J. In northern Delaware, small communities in west Wilmington, Del., sustained $100,000 damage when 50 families were evacuated from their homes along Little Mill Creek. Heavy rains on the 27th caused some flooding over the lower Neshaminy Basin in lower Bucks County, Pa., Assunpink Creek at Trenton, N. J., rose rapidly during the night and crested 3.7 feet above flood stage on the 28th.

Heavy local rains on the 3d and 4th produced excessive runoff in the Harrisburg, Pa., area, causing widespread local flooding of streets and low portions of highways. Flash flooding was reported on Stone Creek at Huntington, Pa. Considerable crop damage occurred in low-lying areas along Route 320 into Lewistown, Pa. Crop damage along Tunkhannock Creek, in the vicinity of Hop Botton, Pa., where 4 inches of rain was reported on the evening of the 27th, was estimated at $500,000.

Severe flash flooding occurred in the Four Mile Run drainage of Arlington and Alexandria, Va., on August 24-25. Damages were heavy and estimated at $500,000. Flash flooding on streams in Fairfax County, Va., caused an additional $50,000 damage. This same storm caused some flash flooding in Washington, D. C., and in adjacent areas of Maryland. Minor flooding occurred on the Rappahannock River at Remington, Va., on the 25th.

Thundershowers over the Delaware River tributaries in Pennsylvania and over the Lehigh River Basin, during August, produced local flooding of some small creeks. Heavy damage was reported in Bangor in Northampton County.

Occasional heavy showers during the period from the 20th to the 27th resulted in some flooding in the Roanoke, Tar, Neuse, and Cape Fear River Basins, in eastern North Carolina, during the latter part of the month. Precipitation ranged from 4 to 11 inches. Because of the erratic intensity and pattern of the showers, effects on river stages were quite variable. The Dan River crested 0.6 foot above flood stage at Randolph, Va., on the 26th. The Roanoke River crested 0.4 foot above flood stage at Alta Vista, Va., on the 25th and 2.1 feet above flood stage at Randolph, Va., on the 26th. There was no other flooding in the Roanoke Basin. There was no flooding in the upper reaches of the Tar, Neuse, and Cape Fear Rivers. In the lower reaches of the Tar and Neuse Rivers, the crests averaged 1.5 feet above flood stage and on the lower Cape Fear 5 to 6 feet above flood stage. All streams were within their banks by the 29th.

There were three periods of shallow flooding on the Lumber River at Lumberton, N. C., during the first 3 weeks of August. This flooding was due to scattered, heavy thundershowers. Heavy rains, beginning on the 20th and continuing for 5 to 6 days, resulted in the first flooding since March 1966 on the Rocky River at Norwood, N. C., and on the Pee Dee River at Cheraw and Peedee, S. C. The Rocky River crested 8 to 10 feet above flood stage on the 25th and the Pee Dee River, less than 2 feet above flood stage on the 25th and 29th. The Lumber River crested over 3 feet above flood stage at Lumberton, N. C., on the 25th. No damage was reported from the flooding.

The Broad River at Blair, S. C., crested at a stage of 26.7 feet, 12.7 feet above flood stage on the 25th. This was the highest stage at Blair since 1964. Upstream at Gaffney, S. C., the crest was 2.7 feet above flood stage. The crests along the Saluda River ranged from 2.8 feet above flood stage at Pelzer, S. C., to 5.3 feet above flood stage at Chappells, S. C. Flooding was heavy along the lower Catawba River and on the upper Wateree River. The Wateree River at Camden, S. C., crested at a stage of 32.2 feet on the 24th, 9.2 feet above flood stage. This was the highest stage since 1944. The Congaree River at Columbia, S. C., crested 4.7 feet above flood stage on the 25th. The upper Santee River crested near flood stage at Rimini, S. C., on the 29th. Downstream below Lake Marion flooding increased during

the last few days of the month, cresting at Jamestown, S. C., about 7 feet above flood stage. The North Fork of the Edisto at Orangeburg, S. C., crested 1 foot above flood stage on the 29th. The greatest damage occurred around Wateree Lake with damage to homes, and marine installation. Crop and pasture damage occurred along the Broad, Congaree, Wateree, and Santee Rivers. Total damage was estimated near $500,000.

The Savannah River at Clyo, Ga., went above flood stage at the end of the month and continued in flood until Sept. 13. It crested 1 foot above flood stage on Sept. 6-8. No damage was reported from the flooding during August.

Minor flooding occurred on the Ocmulgee River at Macon, Ga., and on the Satilla River at Atkinson, Ga., during the latter part of the month. There were two periods of light overflow on the Satilla. The first occurred on the 20th-23d and the second began on the 31st and continued into September. No damage resulted from the minor overflows.

EAST GULF OF MEXICO DRAINAGE

Some flooding occurred on the Hillsborough River at State Park, Fla., on the 17th and 18th, and on the Alafia River at Lithia, Fla., on the 14th and 18th. The Hillsborough River crested 1 foot above flood stage on the 17th and the Alafia River 3 to 4 feet above flood stage on the 15th.

Unusually heavy rains in the headwater area of the Chattahoochee River in Georgia on the 23-25th caused some damages from the accumulation of water in low places. Some people had to evacuate from their homes for a brief period. Five to more than 10 inches of rain was reported during a 24-hour period and up to 15 inches or more during 48 hours.

Minor flooding occurred on the Etowah River at Canton, Ga., on the 24th-26th. The crest on the morning of the 25th was 4.5 feet above flood stage. This flooding was due to rainfall exceeding 4 inches. Damage was negligible with overflow confined to lowlands.

Moderate to occasionally heavy rainfall on the upper Tombigbee on the 3d and 4th caused minor flooding at Fulton and Amory, Miss. No damage was reported.

MISSISSIPPI SYSTEM

Missouri Basin.--Minor flooding occurred on the Solomon River at Glasco, Kans., on July 31 and August 1. This flooding was due to heavy rain (2 to 4 inches) on July 27-28th. Damage was negligible.

Ohio Basin.--Scattered heavy rains fell in the upper reaches of the Green River on July 31 and August 1, causing a rapid rise in the river and flooding from Greensburg to Brownsville, Ky. Greensburg reported a 24-hour rainfall of 7.86 inches on the 1st. This rain caused considerable damage in the Greensburg-Munfordville-Brownsville reach of the river with the heaviest loss in the Greensburg area. The total damages were estimated at over $2.5 million.

Heavy rain from the 20th through the 24th in western North Carolina caused flooding along the French Broad River in the reach from Rosman to Blantyre, N. C. The rainfall ranged from 8.5 to 10 inches and was the heaviest on the 21st through the 23d. The actual damage due to flooding from Rosman to Asheville was minor, but the consistent rainy, cloudy, and cool weather caused considerable damage to crops. The flood waters covered some of the research crop (about 60 acres) at the Mountain Horticulture Research Station up to 48 hours or longer. There were some land slides and erosion of land over the French Broad Basin from Rosman to Asheville. Some roads and highways were blocked for intervals due to high water in relatively low areas. The total damages were estimated at over $1 million.

Arkansas Basin.--Minor flooding occurred in south-central Kansas on the Little Arkansas River at Sedgwick, Kans., on the 7th. This flooding was due to heavy rainfall during the 24-hour period ending on the morning of the 7th. Potwin, Kans., reported 3.78 inches during this period. The Little Arkansas River at Sedgwick, Kans., crested 1.8 feet above flood stage. No significant damage resulted from the temporary minor flooding.

Minor flooding was reported on the Cimarron River at Waynoka, Okla., for a few hours on the 9th. This flooding was due to rainfall averaging about 1.5 inches above Waynoka, Okla., on the 9th. Fort Supply Reservoir, south of the Cimarron Basin, reported 4.35 inches.

Heavy rains, totaling 2.5 to 5 inches during the evening of the 8th, caused local flash flooding in creeks and tributaries of the Canadian River above Fort Supply, Okla., and in the Wolf Creek area near Fargo, Okla. Flash flooding occurred in downtown Thomas, Okla., during the afternoon of the 16th and in Chickasha, Okla., during the afternoon of the 17th due to 2 to 4 inches of rain in these areas.

WEST GULF OF MEXICO DRAINAGE

Flash flooding occurred in south Texas on the 18th due to heavy showers, ranging from 4 to 6 inches. At Cotulla, Tex., several homes were flooded. At least 8 persons were forced to leave their homes. At Falfurrias, Tex., some downtown stores and roads were flooded. Damage was confined to a few homes, stores, and erosion of highway shoulders.

Great Basin.--Numerous flash floods, produced by locally heavy thundershowers, occurred in the Great Basin, mostly in Utah, during August. Flash floods were reported on the following streams:

1. East Fork of Sevier River, Piute County, Utah on August 6.
2. Upper Coal Creek Canyon, Utah on August 6.
3. Beaver River near Black Rock, Utah on August 6.
4. Beaver River at Minersville, Utah on August 10.
5. Ferron Creek at Ferron, Utah on August 28.
6. Beatty, Nev., on August 30.

The most damaging of these floods occurred near Black Rock, Utah on the Beaver River where a 29-car freight train was derailed. Damages to roadbed and loss of cargo was estimated at $350,000.

A flash flood occurred in a hollow at Beatty, Nev., on August 30. Waves 6 to 7 feet high were reported across the highway. At least 3 homes were destroyed. The total damages were estimated at $45,000.

GULF OF CALIFORNIA DRAINAGE

Colorado Basin.--Major flooding occurred in the San Francisco and Gila Basins in east-central Arizona on August 12. This flooding was due to severe thunderstorms that moved northeastward across the Gila Valley late on the evening of the 11th. Runoff was heavy as the ground was wet from rains of a few days before. The rainfall was the heaviest in the upper San Francisco Basin. The Fritz Ranch reported 2.79 inches on the 12th and 13th after a previous 3-day total of 1.35 inches. Clifton, Ariz., reported 2.30 inches and Duncan, Ariz., 1.35 inches on the 12th. Damages from flooding, primarily to crops, were estimated at nearly $1 million.

FLOOD STAGE DATA

(All dates in August unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ATLANTIC SLOPE DRAINAGE	Ft.			Ft.	
Millstone: Blackwells Mills, N.J.	7	3	4	7.9	3-4
Raritan: Manville, N. J.	13	4	4	13.2	4
Bound Brook, N. J.	8	4	4	8.6	4
Assunpink Creek: Trenton, N. J.	5	27	28	8.65	28
Rappahannock: Remington, Va.	15	25	25	15.95	25
Dan: Danville, Va.	11	24	24	11.6	24
Roanoke: Alta Vista, Va.	18	25	25	18.4	25
Randolph, Va.	21	25	26	#23.1	26
Tar: Greenville, N. C.	13	23	27	14.6	28,29
Neuse: Smithfield, N. C.	13	28	29	#14.4	29
Goldsboro, N. C.	14	25	29	15.2	26
Cape Fear: Wm.O.Huske L&D#3, N.C.	42	24	28	47.7	26
Elizabethtown, N. C.	20	25	29	#24.8	27
Rocky: Norwood, N. C.	15	24	26	E24.0	25
Pee Dee: Cheraw, S. C.	30	25	26	31.3	25
Peedee, S. C.	19	26	31	20.8	29
Lumber: Lumberton, N. C.	8	5	7	8.4	6
		13	14	8.2	14
		17	20	8.9	19
		23	1/	11.25	25
Saluda: Pelzer, S. C.	9	25	26	11.8	25
Chappells, S. C.	14	24	28	19.3	26
Broad: Gaffney, S. C.	10	23	25	12.7	24
Blair, S. C.	14	23	28	26.7	25
Wateree: Camden, S. C.	23	24	27	32.2	24
Congaree: Columbia, S. C.	19	24	27	23.7	25
Santee: Jamestown, S. C.	10	31	1/		
ATLANTIC SLOPE DRAINAGE	Ft			Ft	
North Fork Edisto: Orangeburg, S. C.	8	26	30	8.6	27
				9.0	29
Savannah: Clyo, Ga.	11	31	Sep. 13	12.0	Sep. 6-8
Ocmulgee: Macon, Ga.	18	26	26	18.1	26
Satilla: Atkinson, Ga.	13	20	23	13.0	20,21
		31	1/		
EAST GULF OF MEXICO DRAINAGE					
Hillsborough: State Park, Fla.	10	17	18	11.0	17
Alafia: Lithia, Fla.	E14-15	14	18	18.25	15
Etowah: Canton, Ga.	17	24	26	21.5	25
Tombigbee: Fulton, Miss.	16	5	5	16.3	5
Amory, Miss.	20	4	5	21.4	5
MISSISSIPPI SYSTEM					
Missouri Basin					
Solomon: Glasco, Kans.	22	Jul. 31	1	22.2	Jul. 31
Ohio Basin					
Green: Munfordville, Ky.	28	2	4	35.0	3
Lock 6, Brownsville, Ky.	18	3	4	19.4	4
French Broad: Rosman, N. C.	8	23	23	9.4	23
Blantyre, N. C.	17	23	25	20.7	24
Arkansas Basin					
Little Arkansas: Sedgwick, Kans.	18	7	7	19.8	7
Cimarron: Waynoka, Okla	8	9	9	9.1	9

* Provisional
\# Highest stage observed
E Estimated
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

AUGUST 1967

ALBANY, N. Y. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	16.7	15.5	21	1.1
1000	31	155	16.7	14.9	21	1.4
950	31	594	16.6	12.1	25	2.9
900	31	1,054	14.2	10.0	27	4.8
850	31	1,535	11.4	6.6	27	5.2
800	31	2,041	9.0	.9	26	6.2
750	31	2,572	6.8	-4.2	25	8.4
700	31	3,139	4.0	-8.8	25	9.7
650	31	3,734	1.0	-12.7	25	10.6
600	31	4,378	-2.6	-19.0	25	11.6
550	31	5,054	-6.5	-23.2	25	12.7
500	31	5,804	-10.9	-27.4	25	14.8
450	31	6,599	-16.1	-31.4	25	16.9
400	31	7,484	-22.1	-36.7	24	19.8
350	31	8,452	-29.2	-43.0	24	23.2
300	31	9,535	-37.5	-49.7	24	26.4
250	31	10,769	-46.9		24	30.3
200	31	12,214	-56.3		25	31.2
175	31	13,058	-57.6		25	27.0
150	31	14,031	-58.0		25	22.9
125	31	15,176	-59.3		25	19.6
100	31	16,572	-59.1		25	13.6
80	31	17,976	-57.4		25	6.5
70	31	18,821	-56.1		24	3.5
60	31	19,804	-55.1		20	1.0
50	31	20,974	-53.2		10	2.4
40	30	22,417	-51.5		09	4.5
30	30	24,296	-49.0		08	7.0
25	30	25,497	-47.4		09	7.4
20	29	26,977	-45.2		09	8.2
15	28	28,909	-42.7		09	9.8
10	26	31,671	-38.8		10	9.0
7	16	34,133	-35.5		10	11.7
5						

ALBUQUERQUE, N. MEX. 843 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	18.2	11.4	08	1.7
1000	31	122				
950	31	571				
900	31	1,045				
850	31	1,544				
800	31	2,064	17.0	8.0	12	1.4
750	31	2,605	13.9	5.1	25	1.1
700	31	3,191	10.2	2.1	27	1.3
650	31	3,795	5.9	-1.1	30	1.1
600	31	4,454	1.4	-4.9	35	1.9
550	31	5,138	-3.5	-9.8	36	2.8
500	31	5,895	-8.5	-15.7	35	2.8
450	31	6,698	-13.4	-21.6	34	2.9
400	31	7,594	-19.2	-30.1	35	3.1
350	31	8,573	-26.3	-36.5	34	4.3
300	31	9,668	-34.9	-44.4	32	6.1
250	31	10,914	-44.5		31	9.0
200	31	12,377	-54.3		30	11.7
175	31	13,223	-59.2		30	12.5
150	31	14,178	-63.9		31	11.2
125	31	15,283	-68.3		32	8.4
100	30	16,614	-69.5		35	4.5
80	30	17,956	-65.1		05	4.1
70	30	18,776	-62.0		07	5.1
60	30	19,735	-59.2		08	5.9
50	30	20,882	-57.2		09	7.9
40	30	22,300	-54.5		09	9.6
30	29	24,154	-51.4		09	10.8
25	29	25,342	-49.4		09	10.9
20	27	26,813	-47.3		09	11.5
15	26	28,726	-44.5		09	13.8
10	19	31,467	-40.1		09	16.0
7	5	33,917	-35.8			
5						

AMARILLO, TEXAS 895 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	17.8	13.2	19	2.0
1000	31	131				
950	31	581				
900	31	1,052				
850	31	1,537	18.8	10.2	21	5.7
800	31	2,057	16.2	8.0	24	5.1
750	31	2,603	12.4	6.2	27	3.7
700	31	3,179	8.5	2.4	29	3.3
650	31	3,787	4.3	-2.7	31	2.6
600	31	4,435	.2	-8.3	34	2.8
550	31	5,120	-4.4	-14.2	34	2.5
500	31	5,673	-8.8	-20.3	33	3.0
450	31	6,676	-13.9	-26.2	32	3.6
400	31	7,567	-19.9	-34.0	33	4.6
350	31	8,543	-27.1	-39.4	33	6.0
300	31	9,635	-35.7	-45.5	33	7.7
250	31	10,877	-45.4		32	10.1
200	31	12,333	-55.0		32	12.5
175	31	13,177	-59.4		32	13.3
150	31	14,132	-63.7		32	12.1
125	31	15,239	-67.5		33	8.8
100	31	16,580	-67.4		34	5.4
80	31	17,934	-63.8		03	3.8
70	31	18,758	-60.9		06	4.4
60	31	19,719	-58.9		08	5.9
50	31	20,867	-56.9		09	7.9
40	29	22,291	-54.0		09	9.6
30	29	24,149	-50.9		09	10.3
25	28	25,339	-49.0		09	10.8
20	28	26,809	-47.1		08	12.4
15	26	28,723	-44.5		09	13.6
10	9	31,451	-42.0			
7						
5						

ANCHORAGE, ALASKA 1036 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	13.0	8.2	16	3.0
1000	31	93			15	4.0
950	31	527	11.9	6.6	15	4.8
900	31	976	8.8	4.7	15	5.1
850	31	1,446	5.6	2.6	15	5.5
800	31	1,940	2.6	.5	15	6.2
750	31	2,456	-.5	-2.2	16	6.5
700	31	3,010	-3.4	-5.8	17	5.8
650	31	3,590	-6.3	-10.4	17	5.0
600	31	4,216	-9.7	-14.6	17	5.1
550	31	4,877	-13.9	-21.0	17	4.8
500	31	5,601	-18.4	-26.2	17	4.9
450	31	6,375	-23.5	-31.4	18	4.1
400	31	7,231	-29.7	-37.6	18	4.2
350	31	8,169	-36.8	-43.2	18	4.2
300	31	9,217	-44.9		21	3.6
250	31	10,414	-52.9		24	4.3
200	31	11,845	-53.5		24	6.9
175	31	12,709	-51.4		24	6.8
150	31	13,711	-50.5		24	7.0
125	30	14,895	-50.8		24	6.2
100	30	16,348	-50.6		23	5.0
80	30	17,803	-50.1		24	4.1
70	30	18,675	-49.8		23	3.7
60	30	19,685	-49.4		24	3.2
50	30	20,880	-49.1		24	1.8
40	30	22,345	-48.7		23	1.0
30	26	24,243	-47.9		04	.5
25	24	25,449	-46.9		07	.9
20	24	26,931	-45.5		07	.9
15	21	28,660	-43.4		06	1.6
10	6	31,548	-41.5			
7						
5						

* ANNETTE, ALASKA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	13.4	10.8	13	1.0
1000	31	148	13.7	10.7	14	1.5
950	31	584	12.3	8.[illegible]	16	3.6
900	31	1,033	10.1	6.2	18	4.9
850	31	1,507	7.7	1.7	20	5.5
800	31	2,005	5.4	-2.0	20	6.5
750	31	2,534	3.0	-6.9	21	7.9
700	31	3,088	.1	-12.0	21	8.7
650	31	3,676	-3.2	-16.1	21	9.7
600	31	4,308	-6.9	-18.6	21	10.6
550	31	4,978	-10.9	-22.4	22	12.0
500	31	5,710	-15.9	-26.1	22	12.2
450	31	6,491	-21.3	-30.4	22	12.8
400	31	7,356	-27.3	-36.1	22	12.1
350	31	8,303	-34.6	-42.3	22	12.1
300	31	9,362	-42.7	-46.7	22	12.1
250	31	10,569	-51.2		22	12.6
200	31	11,999	-55.7		23	12.3
175	31	12,653	-54.1		23	11.9
150	31	13,844	-53.4		24	11.2
125	31	15,017	-53.7		24	10.3
100	31	16,451	-53.6		24	8.8
80	31	17,886	-53.2		24	6.8
70	31	18,745	-53.1		25	5.3
60	31	19,740	-52.8		25	3.4
50	30	20,913	-52.1		25	1.2
40	29	22,361	-51.2		04	.3
30	29	24,237	-49.7		07	.8
25	29	25,433	-48.3		07	1.3
20	29	26,908	-46.2		07	1.7
15	29	28,630	-43.4		06	3.3
10	27	31,599	-39.0		09	5.0
7	26	34,066	-35.2		09	5.7
5	16	36,430	-31.4		09	6.6

ATHENS, GEORGIA 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	19.2	17.7	04	.7
1000	31	155				
950	31	598	20.5	16.2	21	.2
900	31	1,066	18.3	13.6	22	1.8
850	31	1,554	15.4	10.2	23	2.5
800	31	2,067	12.6	5.7	24	3.8
750	31	2,604	9.6	1.8	25	4.8
700	31	3,177	6.9	-2.4	26	5.2
650	31	3,778	3.6	-7.5	26	4.9
600	31	4,429	.1	-12.0	26	6.3
550	31	5,116	-4.0	-15.7	25	7.0
500	31	5,868	-8.2	-21.3	25	7.5
450	31	6,673	-13.4	-26.5	25	7.7
400	31	7,565	-19.1	-31.3	25	8.6
350	31	8,546	-26.0	-37.4	25	10.3
300	31	9,643	-34.4	-46.1	26	10.4
250	31	10,890	-44.4		26	13.3
200	30	12,350	-55.4		26	14.7
175	30	13,191	-6[illegible].5		27	13.9
150	30	14,140	-64.1		27	11.8
125	30	15,252	-65.6		26	7.9
100	30	16,609	-65.2		25	3.3
80	29	17,977	-62.5		10	1.5
70	29	18,804	-60.7		09	4.3
60	29	19,769	-58.2		09	6.6
50	29	20,924	-55.7		09	9.0
40	29	22,352	-53.3		09	10.5
30	28	24,214	-50.1		09	13.2
25	28	25,410	-48.2		09	13.0
20	28	26,886	-46.2		09	13.3
15	26	28,814	-43.8		09	14.0
10	22	31,561	-40.0		09	18.3
7	12	33,999	-35.7			
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* BARROW, ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	1.3	.6	22	.3
1000	31	89	1.3	.0	21	.6
950	31	505	1.8	-2.0	24	2.3
900	31	938	.2	-3.8	24	3.0
850	31	1,395	-2.0	-7.0	24	3.6
800	31	1,875	-4.1	-9.7	25	4.1
750	31	2,385	-6.8	-13.3	25	4.9
700	31	2,917	-9.8	-17.5	25	5.5
650	31	3,486	-12.6	-22.5	25	6.6
600	31	4,094	-16.0	-25.8	25	7.5
550	31	4,744	-20.0	-30.6	25	8.6
500	31	5,447	-24.5	-35.1	25	9.2
450	31	6,207	-30.0	-40.5	25	10.3
400	31	7,037	-36.0	-44.6	25	11.6
350	31	7,952	-42.6	-45.6	25	14.4
300	31	8,979	-48.3		25	16.2
250	31	10,171	-50.8		25	16.0
200	31	11,634	-47.3		25	11.5
175	31	12,519	-46.6		25	9.9
150	31	13,542	-46.7		25	8.5
125	31	14,750	-46.8		25	6.5
100	31	16,230	-46.6		25	5.9
80	31	17,712	-46.4		25	4.3
70	31	18,597	-46.3		26	3.8
60	31	19,621	-46.3		26	1.9
50	31	20,832	-46.2		26	1.2
40	31	22,315	-46.0		27	.6
30	31	24,232	-45.2		32	.4
25	30	25,458	-44.1		02	.5
20	29	26,967	-42.3		08	.9
15	24	28,945	-39.5		09	1.3
10	10	31,742	-36.0			
7						
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BARTER IS., ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	1.7	-.3	15	.6
1000	31	92	2.2	.2	18	.7
950	31	511	4.4	-.7	27	1.9
900	31	949	3.2	-3.9	27	4.0
850	31	1,411	.8	-6.4	27	5.6
800	31	1,897	-1.6	-9.3	26	6.4
750	31	2,405	-4.6	-11.5	26	7.6
700	31	2,949	-7.5	-16.3	26	9.2
650	31	3,518	-10.7	-20.7	26	9.2
600	31	4,135	-14.1	-26.0	26	10.9
550	31	4,787	-18.1	-30.3	26	12.4
500	31	5,497	-22.7	-34.4	26	14.3
450	31	6,[illegible]54	-27.8	-39.9	26	16.3
400	31	7,100	-33.8	-44.5	26	18.7
350	31	8,023	-40.2	-46.5	26	21.4
300	31	9,060	-46.8		26	22.8
250	31	10,253	-52.3		26	22.5
200	31	11,704	-49.0		26	17.5
175	31	12,584	-47.8		26	14.1
150	31	13,602	-47.4		25	11.4
125	31	14,806	-47.4		26	10.1
100	31	16,281	-47.3		26	7.2
80	31	17,759	-46.9		26	4.8
70	31	18,643	-46.8		26	4.4
60	31	19,664	-46.6		27	2.9
50	31	20,875	-46.4		27	2.2
40	31	22,357	-46.1		29	.6
30	31	24,273	-45.3		34	.8
25	30	25,487	-44.2		04	1.0
20	28	26,991	-42.5		09	1.2
15	26	28,936	-40.7		20	.3
10	22	31,704	-37.1		26	.7
7	13	34,211	-33.6			
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BETHEL, ALASKA 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	10.4	9.3	35	.3
1000	30	69			23	1.4
950	30	494	9.9	6.4	15	1.7
900	30	944	7.3	3.9	17	3.0
850	30	1,413	4.6	1.4	16	3.1
800	30	1,906	1.7	-1.7	17	3.2
750	30	2,420	-1.1	-6.5	16	3.4
700	30	2,973	-3.3	-12.4	16	3.5
650	30	3,549	-6.7	-16.3	16	3.2
600	30	4,177	-10.2	-21.0	17	3.7
550	30	4,837	-14.2	-25.1	18	4.0
500	30	5,561	-18.7	-29.4	18	4.5
450	30	6,329	-24.1	-33.8	19	4.8
400	30	7,188	-30.1	-39.6	20	4.4
350	30	8,125	-37.3	-43.6	21	5.0
300	30	9,172	-45.2		21	5.7
250	30	10,369	-52.8		22	6.5
200	30	11,806	-51.4		24	6.5
175	30	12,677	-49.6		24	6.6
150	30	13,687	-49.6		25	5.9
125	29	14,885	-49.8		25	5.7
100	29	16,345	-49.7		25	4.5
80	29	17,806	-49.2		25	3.1
70	29	18,682	-49.0		25	2.5
60	29	19,694	-48.7		25	1.8
50	29	20,893	-48.5		24	1.3
40	29	22,362	-48.0		29	.1
30	29	24,263	-46.9		10	.7
25	27	25,477	-45.9		06	.5
20	27	26,966	-44.6		07	1.5
15	26	28,903	-42.5		08	2.1
10	23	31,660	-39.1		09	2.3
7	8	34,118	-36.5			
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BISMARCK, N. DAK. 958 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	505	12.3	8.2	04	.4
1000	31	143				
950	31	578	14.1	8.0	11	.9
900	31	1,038	17.6	5.8	23	1.7
850	31	1,525	15.0	2.9	30	3.1
800	31	2,035	12.0	-.6	31	5.7
750	31	2,567	8.2	-3.8	31	6.4
700	31	3,139	4.7	-7.8	31	7.7
650	31	3,735	.8	-11.9	31	9.1
600	31	4,377	-3.5	-16.2	31	10.4
550	31	5,052	-6.0	-22.2	30	11.0
500	31	5,794	-12.7	-28.5	31	11.8
450	31	6,583	-18.1	-33.3	31	12.6
400	31	7,460	-24.4	-39.3	30	14.3
350	31	8,420	-31.5	-46.1	30	16.7
300	31	9,492	-39.8	-52.1	29	18.3
250	31	10,715	-48.4		30	19.6
200	31	12,157	-55.6		30	22.7
175	31	13,007	-56.0		30	21.0
150	31	13,985	-57.3		30	17.9
125	31	15,133	-58.5		30	14.8
100	31	16,532	-59.0		31	10.2
80	31	17,938	-57.1		32	6.0
70	31	18,784	-56.0		32	4.5
60	31	19,768	-54.5		34	3.7
50	31	20,941	-52.4		36	2.5
40	30	22,390	-50.5		06	3.1
30	30	24,276	-47.9		07	3.3
25	30	25,482	-46.4		08	4.8
20	30	26,969	-44.7		08	5.6
15	28	28,907	-41.9		08	6.9
10	26	31,681	-38.2		08	7.1
7	13	34,146	-34.0			
5	5	36,509	-30.5			

BOISE, IDAHO 917 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	868	18.8	4.9	14	2.3
1000	31	107				
950	31	552				
900	31	1,025	22.7	4.4	13	1.0
850	31	1,523	23.3	1.5	36	.5
800	31	2,048	19.9	-.7	29	.8
750	31	2,596	15.9	-2.9	25	2.1
700	31	3,181	11.2	-5.6	25	3.3
650	31	3,791	6.1	-8.8	25	5.4
600	31	4,444	.5	-11.7	25	6.9
550	31	5,128	-5.1	-16.3	25	8.2
500	31	5,878	-10.5	-24.3	26	8.0
450	31	6,675	-16.3	-30.1	25	8.8
400	31	7,557	-22.7	-35.5	26	11.3
350	31	8,524	-29.7	-41.6	26	13.8
300	31	9,605	-38.1	-48.4	26	16.4
250	31	10,836	-47.2		26	19.4
200	31	12,285	-55.2		26	21.1
175	31	13,133	-57.6		26	20.6
150	31	14,099	-60.5		26	16.6
125	31	15,228	-63.1		27	11.8
100	31	16,598	-63.5		27	5.3
80	30	17,969	-62.1		28	1.4
70	29	18,797	-60.2		36	.8
60	28	19,763	-58.0		07	1.5
50	28	20,918	-55.7		08	2.8
40	28	22,347	-53.2		08	3.6
30	28	24,213	-50.1		08	5.1
25	27	25,407	-48.9		08	6.4
20	24	26,876	-47.0		08	7.9
15	21	28,791	-44.1		09	9.5
10	16	31,561	-39.3		09	10.2
7	5	34,005	-35.5			
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* BOOTHVILLE, LA. 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	24.5	23.1	07	.6
1000	31	141	24.8	23.0	08	.6
950	31	591	22.1	19.4	16	.8
900	31	1,061	19.3	15.2	19	1.7
850	31	1,551	16.6	12.0	19	1.8
800	31	2,066	13.8	7.7	20	1.6
750	31	2,606	11.0	3.3	26	1.5
700	31	3,182	7.8	-.2	26	1.6
650	31	3,786	4.1	-3.4	27	2.0
600	31	4,438	.6	-7.1	29	2.5
550	31	5,126	-3.0	-12.1	29	2.4
500	31	5,883	-7.3	-15.5	26	2.6
450	31	6,693	-12.2	-21.1	29	2.6
400	31	7,588	-18.2	-26.9	28	2.7
350	31	8,572	-25.3	-34.5	27	3.4
300	31	9,673	-33.5	-43.5	27	4.4
250	31	10,927	-43.6		27	4.9
200	31	12,388	-55.3		26	5.7
175	31	13,228	-61.4		28	6.3
150	31	14,172	-66.2		30	4.3
125	31	15,269	-69.0		32	2.7
100	31	16,614	-67.7		07	2.8
80	31	17,955	-64.8		09	5.9
70	31	18,773	-62.8		09	7.6
60	31	19,728	-60.2		09	9.6
50	31	20,872	-57.3		09	11.7
40	31	22,292	-54.3		09	12.9
30	29	24,142	-51.4		09	15.1
25	26	25,330	-49.7		09	15.1
20	26	26,798	-47.4		09	15.1
15	24	28,708	-44.7		09	16.2
10	22	31,453	-40.3		09	18.3
7	18	33,880	-37.2		[illegible]	20.5
5	9	36,[illegible]14	-34.2			

* BROWNSVILLE, TEXAS 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	24.1	22.3	14	1.0
1000	31	127	24.8	22.8	15	3.2
950	31	580	22.2	19.5	16	7.5
900	31	1,047	19.8	14.3	16	7.0
850	31	1,539	17.2	9.9	16	5.8
800	31	2,055	14.5	4.5	15	4.4
750	31	2,593	11.4	-.1	15	3.8
700	31	3,172	8.2	-3.6	15	3.8
650	31	3,775	4.8	-7.1	14	3.4
600	31	4,430	1.0	-9.6	14	2.6
550	31	5,119	-3.0	-13.2	[illegible]	1.2
500	31	5,874	-7.4	-17.3	06	.8
450	31	6,680	-12.3	-21.6	04	1.5
400	31	7,579	-18.4	-27.1	05	1.6
350	30	8,563	-25.5	-34.7	03	2.4
300	30	9,662	-34.0	-42.8	01	2.6
250	30	10,913	-44.1		36	2.8
200	29	12,37[illegible]	-55.8		35	3.3
175	29	13,208	-61.8		01	4.6
150	29	14,149	-67.5		01	5.0
125	28	15,232	-72.0		04	5.7
100	27	16,545	-71.2		06	6.7
80	27	17,877	-67.3		09	9.7
70	27	18,687	-64.7		09	11.7
60	27	19,635	-62.1		09	13.5
50	27	20,771	-58.8		09	14.9
40	27	22,182	-56.0		09	17.2
30	26	24,022	-52.7		09	19.2
25	25	25,205	-50.7		09	19.2
20	24	26,669	-47.6		09	19.5
15	21	28,583	-44.4		08	18.1
10	21	31,319	-41.2		09	18.0
7	18	33,76[illegible]	-38.3		1[illegible]	16.6
5	6	36,083	-34.0			

BUFFALO, N. Y. 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	16.0	13.7	19	1.9
1000	31	150				
950	31	590	16.7	11.3	24	4.1
900	31	1,047	14.0	8.9	26	5.7
850	31	1,528	10.8	6.0	26	6.1
800	31	2,031	8.3	.0	27	7.1
750	31	2,564	6.0	-7.5	27	7.5
700	31	3,125	3.3	-11.9	26	7.9
650	31	3,721	.1	-16.4	26	8.9
600	31	4,360	-3.6	-20.9	26	10.0
550	31	5,037	-7.8	-25.2	25	10.2
500	31	5,777	-12.7	-28.8	26	11.9
450	31	6,566	-18.3	-32.6	25	13.3
400	31	7,443	-24.5	-38.4	25	14.5
350	31	8,402	-31.4	-44.4	25	17.1
300	31	9,476	-39.1	-50.6	25	20.2
250	31	10,704	-47.1		25	22.6
200	31	12,156	-54.2		25	23.4
175	31	13,009	-55.4		25	20.9
150	30	13,988	-56.5		25	18.5
125	30	15,141	-58.4		25	13.2
100	30	16,542	-58.6		25	10.8
80	29	17,946	-57.0		25	6.3
70	29	18,795	-55.6		25	4.2
60	29	19,779	-54.1		23	1.0
50	29	20,952	-52.8		08	1.4
40	29	22,398	-51.0		09	3.6
30	28	24,281	-48.5		08	5.6
25	27	25,483	-46.8		08	6.7
20	26	26,96[illegible]	-44.7		09	7.7
15	20	28,892	-42.8		08	7.3
10	10	31,662	-37.9			
7	5	34,070	-36.3			
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* + CANTON IS. PACIFIC AREA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	30.7	23.7	09	7.1
1000	31	88	27.7	20.4	09	7.8
950	31	535	22.8	16.9	09	8.6
900	31	1,009	19.7	12.8	09	10.7
850	31	1,500	17.3	8.2	09	10.2
800	31	2,017	15.7	3.0	10	9.7
750	31	2,560	13.5	-2.0	09	10.0
700	31	3,141	10.5	-6.3	09	9.3
650	31	3,750	6.8	-9.1	09	8.1
600	31	4,407	2.9	-12.5	10	7.1
550	31	5,100	-.5	-17.8	09	5.4
500	31	5,863	-4.9	-22.4	07	3.5
450	31	6,680	-10.1	-27.2	07	3.2
400	31	7,582	-15.8	-32.1	10	2.1
350	31	8,576	-22.6	-38.7	11	1.0
300	31	9,688	-31.1	-45.9	31	1.4
250	31	10,953	-41.4		34	3.3
200	31	12,428	-53.6		33	4.3
175	31	13,273	-60.5		32	4.7
150	31	14,216	-67.8		30	3.7
125	31	15,292	-74.5		30	1.8
100	31	16,580	-76.0		09	2.2
80	31	17,890	-69.3		28	6.0
70	31	18,692	-65.7		28	12.9
60	31	19,635	-62.6		27	16.9
50	31	20,764	-60.9		27	17.2
40	31	22,157	-58.7		27	10.0
30	30	23,982	-55.3		09	15.6
25	29	25,152	-52.0		09	25.7
20	27	26,606	-48.7		09	28.8
15	20	28,509	-45.0		09	29.1
10	16	31,248	-39.3		09	31.0
7	11	33,736	-33.5			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C. 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	22.7	21.3	25	1.2
1000	31	153	23.2	20.5	25	2.2
950	31	597	20.8	17.3	25	4.0
900	31	1,067	18.4	13.7	24	5.1
850	31	1,556	15.5	11.3	24	6.6
800	31	2,068	12.7	6.7	24	6.6
750	31	2,607	9.9	2.5	23	7.3
700	31	3,179	6.8	-2.7	23	8.3
650	31	3,782	3.6	-7.1	23	9.0
600	31	4,431	.0	-11.3	23	9.4
550	31	5,116	-3.9	-16.1	23	10.0
500	31	5,670	-8.1	-21.2	23	9.7
450	31	6,675	-13.1	-25.5	23	10.2
400	31	7,570	-18.8	-31.5	23	10.1
350	31	8,551	-25.7	-37.9	23	10.7
300	31	9,651	-33.9	-45.4	23	9.4
250	31	10,903	-43.9		23	9.9
200	31	12,361	-55.7		25	10.6
175	31	13,200	-61.4		26	9.9
150	31	14,148	-64.4		26	7.7
125	31	15,260	-65.1		24	7.5
100	31	16,622	-64.3		25	2.6
80	31	17,991	-62.5		11	3.2
70	31	18,818	-60.5		09	5.1
60	31	19,782	-58.1		09	6.9
50	30	20,937	-55.4		09	8.5
40	30	22,369	-52.5		09	9.8
30	30	24,240	-49.6		09	11.2
25	30	25,438	-48.0		09	11.9
20	29	26,916	-45.8		09	13.2
15	27	28,844	-43.2		09	14.6
10	24	31,593	-39.1		09	17.6
7	15	34,074	-35.2		09	22.1
5	5	36,433	-30.6			
4						

* CARIBOU, MAINE 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	191	14.8	13.4	24	1.6
1000	31	135				
950	31	570	15.3	10.3	26	4.5
900	31	1,028	13.5	7.5	27	4.8
850	31	1,507	10.5	4.6	27	5.3
800	31	2,011	7.9	.0	26	6.4
750	31	2,540	5.0	-4.8	26	7.2
700	31	3,101	2.0	-9.4	26	8.8
650	31	3,692	-1.0	-13.6	25	11.1
600	31	4,332	-4.1	-18.8	25	12.9
550	31	5,004	-8.1	-22.9	25	14.0
500	31	5,748	-12.7	-27.6	25	16.1
450	31	6,538	-18.1	-32.7	25	18.3
400	31	7,414	-24.1	-37.6	25	20.4
350	31	8,375	-31.2	-44.6	25	24.1
300	31	9,450	-39.3	-49.9	25	26.5
250	31	10,676	-48.0		25	30.3
200	31	12,122	-54.7		25	31.0
175	31	12,974	-55.2		25	29.3
150	31	13,956	-56.2		25	23.9
125	31	15,112	-56.9		25	21.2
100	31	16,525	-56.4		25	13.3
80	30	17,942	-55.3		25	8.6
70	30	18,795	-54.2		25	6.5
60	30	19,787	-53.0		24	2.9
50	30	20,966	-51.7		22	2.2
40	28	22,415	-50.0		10	1.9
30	26	24,305	-48.2		09	4.9
25	26	25,509	-46.8		09	6.8
20	25	26,994	-44.8		08	8.4
15	24	28,928	-42.4		09	9.3
10	23	31,702	-37.3		10	8.9
7	15	34,230	-32.0		10	10.6
5	5	36,641	-28.7			

CHARLESTON, S. C. 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	13	22.6	21.5	28	.0
1000	30	151	23.0	21.7	21	.9
950	30	599	21.7	18.1	22	2.1
900	30	1,068	19.4	13.9	22	3.0
850	30	1,558	16.5	10.4	22	3.4
800	30	2,073	13.4	6.9	23	3.8
750	30	2,610	10.4	3.6	24	4.1
700	30	3,187	7.0	-.5	24	4.3
650	30	3,789	3.7	-5.0	24	4.8
600	30	4,441	.5	-11.6	24	5.3
550	30	5,128	-3.4	-15.8	23	5.4
500	30	5,883	-7.7	-21.2	23	5.4
450	30	6,692	-12.9	-25.7	24	5.4
400	30	7,586	-18.7	-30.9	25	4.9
350	30	8,568	-25.6	-38.2	26	4.3
300	30	9,667	-34.1	-46.2	25	4.5
250	30	10,918	-44.1		27	5.4
200	30	12,377	-55.5		28	7.5
175	30	13,216	-61.4		29	7.7
150	30	14,163	-64.9		28	5.2
125	30	15,269	-66.6		26	4.3
100	30	16,619	-66.2		23	1.3
80	30	17,977	-63.7		09	2.7
70	30	18,800	-61.5		08	5.8
60	30	19,760	-59.3		09	8.6
50	30	20,909	-56.5		09	10.5
40	30	22,334	-53.5		09	10.9
30	28	24,197	-50.2		09	12.0
25	26	25,392	-48.2		09	12.5
20	25	26,865	-46.6		09	12.8
15	24	28,784	-44.4		08	15.0
10	19	31,525	-39.7		09	18.8
7	18	33,983	-35.2		09	21.1
5	8	36,364	-30.6			

CHIHUAHUA, MEXICO 859 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	17.8	14.6	23	.3
1000	31	106				
950	31	550				
900	31	1,025				
850	31	1,522	18.3	13.1	36	.2
800	31	2,042	17.0	10.0	09	.7
750	31	2,581	13.3	7.2	10	2.0
700	31	3,166	9.4	3.8	10	3.0
650	31	3,764	5.0	-.1	08	3.3
600	31	4,424	.9	-4.3	08	4.0
550	31	5,106	-2.9	-10.3	08	3.9
500	31	5,867	-6.7	-16.2	08	3.3
450	31	6,670	-11.6	-22.8	06	2.2
400	31	7,574	-17.4	-32.0	05	2.3
350	31	8,561	-24.4	-37.8	02	2.4
300	31	9,662	-32.5	-44.2	34	3.3
250	31	10,925	-42.2		34	4.7
200	30	12,397	-53.7		34	5.9
175	29	13,244	-60.0		34	6.3
150	29	14,192	-66.2		35	6.0
125	29	15,284	-71.2		02	5.7
100	26	16,597	-70.6		03	6.1
80	26	17,933	-66.6		06	9.0
70	24	18,747	-64.3		08	9.8
60	24	19,697	-61.3		09	11.2
50	22	20,835	-58.1		09	12.7
40	22	22,249	-55.6		09	14.7
30	22	24,095	-52.2		09	15.8
25	22	25,280	-50.4		09	15.4
20	20	26,743	-48.5		09	16.1
15	13	28,641	-45.5		08	16.5
10	6	31,363	-43.1			

* COLD BAY, ALASKA 1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	9.4	7.2	22	2.5
1000	31	57			23	3.2
950	31	482	8.6	6.7	24	3.4
900	31	93	7.2	3.0	26	2.4
850	31	1,399	5.0	-.7	27	2.3
800	31	1,893	3.3	-5.0	27	3.8
750	31	2,411	.9	-9.2	27	4.0
700	31	2,967	-1.7	-13.4	26	4.0
650	31	3,550	-4.8	-16.2	26	5.0
600	31	4,180	-8.3	-20.4	26	4.9
550	31	4,844	-12.4	-24.7	27	5.4
500	31	5,574	-17.3	-28.9	27	6.7
450	31	6,347	-22.3	-34.0	27	8.3
400	31	7,210	-28.2	-39.5	27	9.7
350	31	8,155	-35.2	-44.5	27	11.5
300	31	9,214	-42.1	-49.8	28	12.3
250	31	10,430	-48.5		27	15.3
200	31	11,887	-50.5		28	15.5
175	31	12,759	-50.2		27	12.8
150	31	13,765	-50.7		28	12.0
125	30	14,946	-50.9		27	9.3
100	29	16,399	-51.7		27	6.6
80	28	17,851	-51.1		27	3.5
70	28	18,719	-50.8		27	2.8
60	28	19,722	-50.2		27	1.7
50	28	20,914	-49.6		28	.9
40	28	22,377	-48.8		15	.4
30	26	24,271	-47.4		10	.8
25	26	25,479	-46.4		08	1.3
20	25	26,965	-45.0		09	1.2
15	25	28,895	-43.3		08	1.9
10	22	31,642	-40.2		06	3.5
7	19	34,094	-36.6		06	4.2
5	15	36,433	-33.7		06	4.7
4	7	37,919	-33.9			

COLUMBIA, MO. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	238	16.9	14.4	15	1.2
1000	31	150				
950	31	590	19.8	12.8	22	2.2
900	31	1,056	17.1	8.9	28	2.4
850	31	1,542	14.3	3.6	31	3.1
800	31	2,052	11.8	-1.0	31	3.7
750	31	2,588	8.8	-5.5	31	5.0
700	31	3,157	5.7	-9.5	31	5.6
650	31	3,758	2.4	-14.3	31	6.2
600	31	4,403	-1.4	-18.4	31	6.9
550	31	5,086	-5.5	-22.8	31	7.1
500	31	5,833	-10.1	-27.4	31	8.0
450	31	6,631	-15.7	-31.5	31	8.9
400	31	7,515	-22.1	-36.4	30	9.6
350	31	8,484	-29.4	-41.6	30	12.1
300	31	9,567	-37.6	-48.6	30	13.7
250	31	10,801	-46.8		30	15.5
200	31	12,249	-55.7		30	17.8
175	31	13,094	-57.9		30	16.7
150	31	14,060	-60.5		30	14.3
125	31	15,189	-62.9		30	11.2
100	31	16,560	-62.8		30	6.4
80	30	17,940	-60.5		31	3.1
70	30	18,774	-58.8		36	1.4
60	30	19,745	-56.9		07	1.6
50	30	20,905	-55.0		09	3.8
40	30	22,338	-53.0		08	5.6
30	29	24,202	-50.3		09	7.8
25	28	25,395	-48.5		09	8.5
20	28	26,869	-46.6		08	8.7
15	25	28,785	-44.6		08	11.0
10	16	31,513	-40.3		08	13.1
7						
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DAYTON, OHIO 984 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	297	15.3	13.9	36	.4
1000	31	156				
950	31	597	17.3	12.6	26	2.1
900	31	1,054	14.8	9.5	28	3.3
850	31	1,536	11.7	5.2	27	3.7
800	31	2,042	9.9	-2.9	27	4.8
750	31	2,573	7.5	-6.6	27	5.7
700	31	3,141	4.4	-9.8	27	6.6
650	31	3,737	1.1	-14.2	27	8.0
600	31	4,381	-2.4	-18.9	27	8.7
550	31	5,059	-6.4	-23.9	27	9.1
500	31	5,805	-11.2	-28.3	27	10.7
450	31	6,599	-16.8	-33.2	27	11.5
400	31	7,480	-23.1	-37.6	27	12.9
350	31	8,444	-30.4	-42.9	27	14.3
300	31	9,521	-38.6	-48.0	27	17.4
250	31	10,751	-47.1		27	20.0
200	31	12,201	-54.9		27	22.2
175	31	13,050	-56.9		27	20.0
150	30	14,025	-58.7		27	16.5
125	30	15,165	-61.0		27	13.6
100	30	16,549	-61.0		27	9.6
80	30	17,942	-59.1		25	3.4
70	30	18,781	-57.6		21	.9
60	30	19,757	-55.9		10	1.8
50	30	20,922	-54.3		09	3.8
40	28	22,359	-52.3		09	5.9
30	27	24,231	-49.4		09	8.2
25	26	25,428	-47.8		09	9.0
20	26	26,908	-45.5		09	9.9
15	25	28,835	-42.7		09	11.3
10	21	31,595	-39.6		09	13.7
7	9	34,071	-35.8			

DEL RIO, TEXAS 980 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	23.7	17.9	11	3.5
1000	31	131				
950	31	583	22.5	17.5	13	6.2
900	31	1,051	20.0	15.2	16	7.0
850	31	1,544	18.1	11.7	15	6.3
800	31	2,061	15.1	7.3	14	4.6
750	31	2,601	11.7	3.6	11	3.3
700	31	3,181	8.3	-1.3	09	3.3
650	31	3,787	4.4	-4.4	07	2.8
600	31	4,438	.7	-9.4	05	1.5
550	31	5,128	-3.2	-16.0	03	.6
500	31	5,883	-7.4	-21.5	02	.6
450	31	6,692	-12.5	-27.4	34	.6
400	31	7,588	-18.4	-32.9	35	1.2
350	31	8,570	-25.6	-39.5	34	2.9
300	31	9,670	-33.7	-47.4	33	4.3
250	31	10,923	-43.4		32	6.0
200	30	12,393	-54.1		33	7.2
175	30	13,238	-60.0		34	7.9
150	30	14,187	-65.7		35	7.2
125	29	15,282	-70.3		01	5.8
100	29	16,602	-71.0		04	4.7
80	28	17,942	-66.1		07	6.3
70	28	18,756	-63.8		08	7.8
60	28	19,706	-61.1		08	9.6
50	28	20,845	-58.2		09	12.1
40	28	22,260	-55.1		09	13.9
30	28	24,111	-51.2		09	14.7
25	28	25,301	-49.2		09	14.7
20	26	26,772	-47.0		09	14.0
15	27	28,687	-44.8		09	15.5
10	22	31,423	-40.6		09	19.1
7	8	33,878	-37.0			

DENVER, COLO. 842 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	13.4	7.9	20	2.3
1000	31	137				
950	31	578				
900	31	1,044				
850	31	1,535				
800	31	2,051	17.0	4.7	29	2.2
750	31	2,598	14.8	1.1	34	2.0
700	31	3,179	10.7	-2.0	33	2.5
650	31	3,788	6.1	-4.6	33	3.3
600	31	4,442	.9	-8.1	33	4.3
550	31	5,124	-4.5	-13.6	33	5.3
500	31	5,878	-9.6	-19.9	32	5.6
450	31	6,682	-14.8	-26.2	32	6.6
400	31	7,566	-20.8	-33.6	31	7.6
350	31	8,539	-28.0	-39.9	31	8.9
300	31	9,626	-36.7	-47.2	30	11.9
250	31	10,863	-46.3		30	15.4
200	31	12,315	-55.3		30	17.7
175	30	13,158	-58.8		30	16.9
150	30	14,117	-62.3		30	15.8
125	30	15,235	-65.2		31	11.8
100	30	16,590	-65.6		32	6.7
80	30	17,956	-62.5		36	4.3
70	30	18,784	-60.0		03	3.5
60	30	19,752	-57.4		07	3.3
50	30	20,910	-55.0		08	4.8
40	30	22,343	-52.7		08	6.1
30	28	24,217	-49.7		09	7.6
25	27	25,415	-48.2		08	8.1
20	26	26,890	-46.5		08	10.2
15	25	28,813	-43.4		08	11.7
10	21	31,572	-39.7		09	13.6
7	9	34,043	-36.2			
5	6	36,356	-33.7			

DODGE CITY, KANS. 927 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	17.5	13.7	17	1.2
1000	31	139				
950	31	581				
900	31	1,048	19.6	11.8	19	4.3
850	31	1,540	18.5	8.4	22	4.4
800	31	2,058	15.6	5.1	26	2.5
750	31	2,602	12.0	2.4	29	2.2
700	31	3,177	7.8	-.2	33	1.9
650	31	3,783	4.0	-6.0	33	2.7
600	31	4,430	-.1	-12.6	34	3.0
550	31	5,120	-4.3	-17.1	32	4.0
500	31	5,868	-8.8	-23.3	32	4.7
450	31	6,674	-14.3	-28.6	32	6.2
400	31	7,560	-20.4	-34.7	32	7.3
350	31	8,534	-27.9	-41.3	32	8.4
300	31	9,623	-36.3	-48.1	31	10.3
250	31	10,860	-46.2		31	12.1
200	31	12,309	-55.9		31	15.2
175	31	13,152	-59.0		31	15.8
150	31	14,111	-62.5		31	14.2
125	31	15,227	-65.8		32	11.0
100	30	16,577	-65.4		32	7.0
80	29	17,943	-62.1		35	3.5
70	29	18,772	-59.8		03	3.1
60	29	19,739	-57.7		08	3.7
50	29	20,894	-55.9		09	5.4
40	29	22,321	-53.4		08	7.0
30	28	24,184	-50.4		09	8.6
25	28	25,378	-48.3		09	8.9
20	27	26,855	-46.5		08	10.2
15	24	28,779	-43.8		08	13.0
10	21	31,530	-39.6		08	16.1
7	11	33,980	-36.5			

EL PASO, TEXAS 884 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	20.7	13.1	01	1.8
1000	31	111				
950	31	562				
900	31	1,038				
850	31	1,533	20.4	10.6	07	2.1
800	31	2,055	17.6	6.4	11	2.7
750	31	2,601	13.9	5.9	10	3.1
700	31	3,182	9.9	3.1	09	2.6
650	31	3,786	5.4	-.6	07	3.1
600	31	4,444	.9	-5.7	06	3.5
550	31	5,132	-3.6	-11.0	06	3.5
500	31	5,886	-7.5	-18.9	06	2.8
450	31	6,693	-12.6	-26.2	04	2.5
400	31	7,590	-18.2	-32.0	34	2.9
350	31	8,573	-25.3	-38.3	33	3.8
300	31	9,673	-33.8	-45.3	34	5.5
250	31	10,925	-43.3		33	8.0
200	30	12,395	-53.8		32	9.0
175	30	13,242	-59.4		32	8.7
150	30	14,193	-64.9		33	7.2
125	29	15,288	-69.5		34	6.0
100	29	16,609	-70.7		02	4.8
80	29	17,945	-66.6		06	5.7
70	29	18,757	-63.8		08	7.1
60	29	19,708	-61.2		08	8.9
50	29	20,847	-58.5		09	10.1
40	29	22,258	-56.0		09	11.9
30	29	24,104	-52.1		09	12.6
25	29	25,289	-50.4		09	12.2
20	27	26,750	-48.4		09	13.5
15	24	28,646	-46.5		08	15.8
10	19	31,366	-41.7		09	17.5
7	13	33,804	-37.0			
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ELY, NEV. 813 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	11.9	5.0	19	3.2
1000	31	139				
950	31	581				
900	31	1,045				
850	31	1,538				
800	31	2,052	17.3	6.1	19	3.3
750	31	2,600	16.5	2.7	18	2.9
700	31	3,187	12.4	-.6	21	3.3
650	31	3,796	7.4	-3.9	22	3.3
600	31	4,457	1.8	-7.2	21	3.2
550	31	5,143	-4.2	-10.7	22	3.0
500	31	5,896	-9.7	-17.3	24	3.8
450	31	6,698	-15.1	-25.9	25	4.1
400	31	7,585	-20.8	-33.4	26	6.4
350	31	8,559	-27.9	-39.4	26	8.2
300	31	9,647	-36.4	-46.3	27	10.8
250	31	10,888	-45.3		26	14.6
200	31	12,346	-54.5		26	18.3
175	28	13,195	-58.9		26	17.7
150	28	14,151	-63.4		26	15.5
125	28	15,260	-66.9		28	10.3
100	26	16,604	-67.4		29	1.7
80	25	17,961	-63.8		07	1.1
70	25	18,783	-61.6		09	3.0
60	25	19,743	-59.0		08	4.5
50	25	20,895	-56.2		08	5.5
40	25	22,320	-53.7		08	7.3
30	25	24,181	-50.7		09	9.2
25	25	25,373	-49.1		09	9.9
20	25	26,842	-47.3		09	11.6
15	23	28,759	-44.1		09	13.1
10	19	31,507	-37.4		09	15.9
7	16	33,983	-34.9		09	18.1
5	8	36,359	-29.9			

* FAIRBANKS, ALASKA 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	11.4	9.0	34	1.0
1000	30	69				
950	30	498	12.2	6.7	24	1.2
900	30	951	9.7	4.1	24	3.7
850	30	1,423	6.4	1.7	23	5.3
800	30	1,918	2.8	-.5	23	6.5
750	30	2,434	-.5	-3.4	23	7.1
700	30	2,987	-3.4	-6.8	24	7.3
650	30	3,568	-6.5	-14.0	24	8.0
600	30	4,192	-10.2	-16.7	24	8.3
550	30	4,855	-14.5	-22.5	24	8.5
500	30	5,574	-19.2	-27.8	24	9.6
450	30	6,349	-24.5	-31.9	23	8.5
400	30	7,199	-30.7	-38.3	23	9.4
350	30	8,133	-37.9	-42.6	24	9.4
300	30	9,178	-46.0		24	10.0
250	30	10,367	-54.7		24	11.3
200	30	11,788	-54.6		24	11.5
175	29	12,647	-51.3		24	9.2
150	29	13,651	-50.3		24	9.7
125	28	14,836	-50.2		24	8.0
100	26	16,294	-49.9		24	6.7
80	28	17,754	-49.3		24	5.5
70	28	18,629	-49.1		24	4.5
60	26	19,636	-48.6		24	3.3
50	25	20,842	-48.4		25	2.3
40	25	22,312	-47.8		25	1.2
30	24	24,213	-47.1		07	.4
25	23	25,425	-46.1		05	1.5
20	22	26,921	-43.9		08	1.7
15	22	28,864	-41.3		09	2.5
10	20	31,643	-37.2		07	2.8
7	12	34,178	-32.7			

FLINT, MICH. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	234	13.3	11.0	23	1.0
1000	31	149				
950	31	585	15.4	10.5	28	2.9
900	31	1,041	13.0	6.9	28	3.5
850	31	1,520	10.3	3.2	28	4.1
800	31	2,023	8.4	-2.5	29	5.0
750	31	2,550	6.3	-8.6	28	5.8
700	31	3,117	3.5	-11.9	28	6.8
650	31	3,712	.2	-15.1	28	7.9
600	31	4,352	-3.7	-17.9	28	8.9
550	31	5,027	-8.0	-22.9	28	9.5
500	31	5,768	-12.8	-27.0	28	9.9
450	31	6,555	-18.2	-32.8	28	10.6
400	31	7,432	-24.6	-39.1	28	11.1
350	31	8,390	-31.7	-44.8	28	12.9
300	31	9,462	-39.9	-49.5	28	13.5
250	31	10,684	-48.1		28	17.1
200	31	12,132	-53.6		28	18.9
175	31	12,989	-54.2		27	19.2
150	31	13,973	-55.6		27	15.5
125	31	15,128	-57.6		27	12.7
100	31	16,532	-58.0		26	9.6
80	31	17,941	-56.6		26	6.0
70	31	18,788	-55.5		26	4.1
60	31	19,773	-54.2		26	1.2
50	31	20,945	-52.9		10	1.6
40	31	22,388	-51.0		09	4.1
30	31	24,269	-48.6		09	6.3
25	29	25,477	-47.0		09	7.6
20	26	26,964	-44.8		08	9.1
15	26	28,898	-41.8		09	10.1
10	21	31,677	-37.7		09	11.3
7	6	34,162	-34.3			

FORT WORTH, TEXAS 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	22.6	18.0	18	1.1
1000	31	145				
950	31	596	22.6	16.2	20	5.2
900	31	1,062	21.2	13.3	20	4.9
850	31	1,556	18.1	9.8	21	2.6
800	31	2,073	14.9	5.6	29	.8
750	31	2,611	11.2	1.7	01	1.6
700	31	3,189	7.4	-5.0	04	1.6
650	31	3,789	3.5	-8.4	04	1.2
600	31	4,441	-.1	-14.9	06	1.0
550	31	5,129	-3.9	-19.4	36	.7
500	31	5,880	-8.3	-24.1	33	1.4
450	31	6,685	-13.3	-30.1	32	1.9
400	31	7,577	-19.5	-35.9	31	3.2
350	31	8,554	-26.8	-40.4	32	4.0
300	31	9,648	-35.3	-47.8	31	5.9
250	31	10,892	-44.9		31	7.4
200	31	12,351	-54.7		30	8.7
175	31	13,197	-59.1		31	8.7
150	31	14,153	-63.6		31	7.7
125	31	15,260	-67.5		33	6.4
100	31	16,600	-67.6		35	3.3
80	31	17,957	-63.1		06	3.5
70	31	18,781	-61.3		07	4.8
60	31	19,742	-59.3		08	7.4
50	31	20,891	-56.8		09	9.0
40	31	22,313	-54.1		09	10.6
30	31	24,173	-50.6		09	12.2
25	31	25,367	-48.5		09	12.2
20	29	26,842	-46.5		08	12.8
15	29	28,758	-44.5		09	15.2
10	20	31,490	-40.6		09	16.7

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1967

GLASGOW, MONT. 936 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	14.7	5.2	08	2.2
1000	31	131				
950	31	570				
900	31	1,033	18.9	4.6	19	1.4
850	31	1,522	17.0	1.9	26	3.1
800	31	2,036	13.5	-.9	29	4.2
750	31	2,571	9.7	-3.8	30	6.5
700	31	3,144	5.6	-6.5	30	7.5
650	31	3,743	1.3	-9.5	30	8.9
600	30	4,385	-3.1	-15.0	30	9.6
550	30	5,061	-7.3	-21.6	29	11.1
500	30	5,806	-12.1	-27.0	29	12.2
450	30	6,596	-17.9	-31.9	29	12.7
400	30	7,473	-24.4	-38.6	30	14.1
350	30	8,431	-31.9	-44.6	30	16.3
300	30	9,502	-40.2	-49.7	29	18.5
250	30	10,722	-49.0		29	20.5
200	30	12,161	-55.5		29	22.1
175	30	13,010	-56.3		29	20.5
150	30	13,987	-57.3		30	17.9
125	30	15,135	-58.6		30	14.3
100	30	16,534	-59.1		31	10.7
80	30	17,937	-57.7		32	5.9
70	30	18,781	-56.6		33	4.0
60	30	19,760	-55.3		35	3.3
50	30	20,929	-53.3		02	2.3
40	30	22,372	-51.2		05	2.8
30	30	24,255	-48.0		07	3.6
25	30	25,462	-46.4		08	3.5
20	28	26,945	-44.7		08	4.0
15	28	28,881	-42.2		09	4.9
10	20	31,623	-39.3		08	6.6
7	8	34,092	-35.5			
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* GRAND JUNCTION, COLO. 855 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,474	18.6	7.4	12	3.5
1000	31	105				
950	31	554				
900	31	1,028				
850	31	1,529	19.5	7.3	12	3.6
800	31	2,051	18.9	4.7	13	4.3
750	31	2,599	15.9	2.2	16	1.8
700	31	3,185	11.8	-.6	29	1.6
650	31	3,794	6.9	-3.6	32	2.1
600	31	4,453	1.6	-6.4	31	3.2
550	31	5,139	-4.0	-10.7	31	4.2
500	31	5,892	-9.3	-15.6	31	4.8
450	31	6,695	-14.2	-23.7	31	5.2
400	31	7,585	-20.2	-31.5	31	5.8
350	31	8,560	-27.4	-38.5	30	7.8
300	31	9,651	-36.0	-45.5	29	10.3
250	31	10,892	-45.5		28	12.0
200	31	12,347	-54.8		29	15.4
175	30	13,190	-59.1		29	15.9
150	30	14,148	-62.9		30	13.0
125	30	15,260	-66.5		30	9.5
100	30	16,605	-67.2		33	5.6
80	30	17,963	-63.1		02	3.4
70	30	18,786	-60.8		06	3.3
60	30	19,752	-58.1		07	3.5
50	29	20,903	-56.0		08	4.7
40	29	22,329	-53.5		08	6.2
30	28	24,189	-50.6		09	7.1
25	27	25,382	-48.7		09	8.7
20	26	26,854	-46.7		09	9.4
15	25	28,769	-43.7		09	10.5
10	23	31,520	-39.8		09	14.1
7	17	33,982	-34.8		09	15.9
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* GREAT FALLS, MONT. 891 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,123	14.2	1.0	22	2.6
1000	31	126				
950	31	569				
900	31	1,037				
850	31	1,522	18.6	2.6	22	3.5
800	31	2,040	15.9	-.1	25	2.4
750	31	2,582	12.0	-2.8	26	3.9
700	31	3,158	7.6	-6.1	27	5.2
650	31	3,764	2.9	-9.3	27	6.9
600	31	4,407	-1.8	-13.8	27	8.2
550	31	5,088	-6.5	-20.2	27	10.7
500	31	5,832	-11.9	-24.7	28	11.3
450	31	6,627	-17.6	-30.6	28	12.8
400	31	7,503	-23.8	-36.5	28	13.7
350	31	8,464	-31.1	-42.9	28	15.0
300	31	9,539	-39.4	-49.6	28	16.5
250	31	10,764	-48.6		27	18.5
200	31	12,209	-54.6		27	21.7
175	31	13,062	-55.4		28	21.3
150	30	14,042	-56.9		28	18.9
125	30	15,191	-59.0		28	13.6
100	30	16,586	-60.0		29	9.2
80	30	17,983	-58.7		31	4.7
70	29	18,824	-57.0		32	3.7
60	29	19,802	-55.7		33	2.9
50	28	20,970	-53.4		36	2.2
40	28	22,412	-51.2		04	3.2
30	28	24,296	-47.9		07	4.3
25	26	25,503	-46.3		08	4.7
20	27	26,992	-44.4		08	5.6
15	25	28,934	-41.4		08	7.3
10	22	31,703	-36.5		09	9.3
7	21	34,193	-32.0		09	8.8
5	9	36,514	-29.5			

GREEN BAY, WIS. 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	12.7	10.8	28	.9
1000	31	144				
950	31	578	15.2	9.1	29	3.4
900	31	1,035	13.1	5.7	30	3.5
850	31	1,514	10.6	3.4	30	3.6
800	31	2,018	8.2	-2.1	29	4.9
750	31	2,544	5.6	-5.6	30	5.4
700	31	3,110	2.8	-10.3	30	6.8
650	31	3,701	-.5	-14.5	30	8.2
600	31	4,343	-4.1	-19.3	30	9.1
550	31	5,015	-8.3	-23.7	30	9.5
500	31	5,759	-13.2	-28.6	30	10.2
450	31	6,545	-19.0	-33.5	30	10.9
400	31	7,421	-25.5	-39.4	30	11.6
350	31	8,375	-32.7	-45.1	30	14.2
300	31	9,444	-40.6	-50.4	30	15.6
250	31	10,664	-49.2		30	18.5
200	31	12,107	-54.5		30	20.4
175	31	12,962	-54.5		30	17.2
150	31	13,947	-55.6		30	15.4
125	31	15,104	-57.1		29	12.4
100	31	16,514	-57.5		29	9.4
80	31	17,926	-56.6		29	6.0
70	31	18,774	-55.3		29	4.3
60	31	19,763	-53.8		29	2.3
50	31	20,938	-52.2		01	.7
40	31	22,388	-50.6		08	3.3
30	30	24,274	-48.6		08	4.8
25	30	25,477	-46.8		09	6.4
20	30	26,964	-44.9		09	7.3
15	29	28,896	-42.4		09	9.3
10	21	31,649	-38.6		09	10.1
7	9	34,095	-36.1			
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GREENSBORO, N. C. 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	273	19.9	19.6	22	.5
1000	31	160				
950	31	602	20.0	15.8	27	2.2
900	31	1,069	17.7	12.3	28	2.6
850	31	1,557	14.5	9.8	25	3.0
800	31	2,068	11.7	4.8	26	3.9
750	31	2,604	8.8	-.1	25	5.3
700	31	3,175	6.4	-5.2	25	7.1
650	31	3,778	3.1	-10.0	25	7.9
600	31	4,425	-.4	-14.0	25	7.8
550	31	5,114	-4.2	-19.8	25	8.4
500	31	5,863	-8.4	-23.5	25	9.9
450	31	6,672	-13.8	-28.6	25	10.4
400	31	7,558	-19.8	-35.5	25	10.7
350	31	8,536	-26.8	-40.7	25	12.0
300	31	9,630	-35.0	-48.1	25	14.1
250	31	10,875	-45.0		25	15.5
200	31	12,329	-56.0		26	17.0
175	31	13,168	-61.0		27	15.7
150	31	14,119	-63.2		26	12.8
125	31	15,235	-64.9		25	10.4
100	31	16,596	-64.2		25	6.0
80	31	17,969	-61.9		18	.9
70	31	18,797	-60.0		10	3.1
60	30	19,764	-57.7		09	5.2
50	30	20,919	-55.5		09	6.8
40	30	22,348	-53.2		09	8.1
30	28	24,210	-50.4		09	9.3
25	25	25,401	-48.8		09	10.2
20	21	26,875	-46.7		09	11.5
15	17	28,797	-44.6		09	14.3
10	12	31,547	-40.8		09	17.2
7	6	34,013	-37.3			
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GUAM, MARIANA IS. 997 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	24.6	23.8	14	1.1
1000	31	84				
950	31	536	23.7	21.8	15	2.7
900	31	1,008	21.2	18.6	15	3.2
850	31	1,502	18.6	15.1	14	3.3
800	31	2,022	15.9	11.5	14	3.3
750	31	2,567	13.1	7.8	13	3.7
700	31	3,146	10.0	4.4	12	4.0
650	31	3,761	6.5	.2	13	4.0
600	31	4,412	2.3	-2.5	12	4.0
550	31	5,108	-1.6	-6.7	11	4.1
500	31	5,664	-5.7	-11.8	10	4.3
450	31	6,682	-10.2	-18.5	10	4.6
400	31	7,582	-15.9	-24.1	10	4.8
350	31	8,574	-22.7	-31.8	10	5.2
300	31	9,687	-30.9	-41.0	09	4.7
250	31	10,952	-41.1		08	7.3
200	31	12,426	-53.7		07	7.9
175	31	13,270	-61.0		06	8.9
150	31	14,210	-68.8		06	11.0
125	31	15,278	-76.6		07	12.5
100	29	16,552	-77.7		08	15.2
80	25	17,850	-71.0		09	14.4
70	25	18,646	-68.2		09	14.1
60	25	19,580	-64.8		09	15.3
50	25	20,699	-61.9		09	15.9
40	25	22,095	-57.9		09	18.7
30	24	23,926	-54.2		09	22.9
25	24	25,100	-52.6		09	26.7
20	24	26,552	-49.6		09	30.5
15	22	28,447	-46.6		09	35.5
10	14	31,160	-42.0		09	39.9
7	6	33,567	-38.8			
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HILO, HAWAII 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	22.0	19.4	23	2.1
1000	31	143	23.3	[illegible]	24	1.3
950	31	590	21.0	16.9	07	2.1
900	31	1,056	16.8	15.3	07	3.3
850	31	1,542	14.0	11.3	08	3.6
800	31	2,053	12.5	[illegible]	09	4.4
750	31	2,596	10.8	-3.6	10	4.5
700	31	3,166	8.4	-7.4	10	4.0
650	31	3,776	5.5	-12.1	10	3.6
600	31	4,426	2.0	-16.3	10	3.5
550	31	5,120	-1.7	-20.0	10	2.4
500	31	5,876	-6.6	-23.2	11	1.4
450	31	6,691	-12.1	-28.4	18	1.2
400	31	7,582	-18.3	-32.8	23	2.7
350	31	8,565	-25.8	-37.1	24	5.2
300	31	9,663	-34.4	-45.3	24	7.9
250	31	10,912	-44.5		25	12.3
200	31	12,368	-56.2		25	16.7
175	31	13,204	-62.6		25	17.5
150	28	14,141	-68.1		25	15.1
125	28	15,228	-69.9		25	8.7
100	28	16,550	-71.5		13	2.3
80	28	17,876	-68.4		09	9.2
70	28	18,680	-66.1		09	11.8
60	28	19,620	-62.9		09	14.4
50	28	20,749	-60.2		09	16.9
40	28	22,153	-56.5		09	19.1
30	28	23,995	-52.5		09	22.1
25	28	25,178	-50.8		09	22.9
20	26	26,638	-48.3		09	23.7
15	27	28,543	-45.9		09	25.1
10	23	31,261	-42.4		09	26.5
7	9	33,681	-39.7			
5						

HUNTINGTON, W. VA. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	16.6	15.2	13	.2
1000	31	157				
950	31	600	18.6	14.5	26	2.4
900	31	1,061	16.2	11.8	27	2.8
850	31	1,545	12.7	8.8	26	3.7
800	31	2,053	10.0	3.0	26	5.2
750	31	2,589	7.7	-3.9	26	5.8
700	31	3,155	5.1	-7.5	27	6.1
650	31	3,754	2.1	-12.2	27	6.9
600	31	4,399	-1.4	-16.6	27	7.6
550	31	5,079	-5.4	-20.6	26	8.1
500	31	5,830	-10.1	-25.1	26	10.0
450	31	6,630	-15.6	-30.1	26	11.4
400	31	7,514	-21.7	-36.2	26	12.9
350	31	8,483	-28.8	-42.1	26	15.0
300	31	9,569	-37.0	-48.4	25	17.3
250	31	10,806	-46.0		25	20.3
200	31	12,259	-55.5		25	22.6
175	31	13,104	-58.4		26	20.4
150	31	14,070	-60.1		26	16.1
125	31	15,201	-62.1		26	11.4
100	31	16,581	-61.2		26	7.3
80	31	17,970	-59.6		26	3.0
70	31	18,808	-58.2		21	.5
60	30	19,784	-56.6		09	2.8
50	30	20,944	-54.9		09	5.2
40	30	22,378	-52.5		09	6.8
30	30	24,250	-49.5		09	8.2
25	30	25,448	-47.7		09	9.1
20	30	26,928	-45.6		09	10.3
15	30	28,658	-44.3		09	11.7
10	25	31,618	-39.8		09	13.0
7	15	34,061	-36.2		09	17.2
5	6	36,440	-33.0			

* INTERNATIONAL FALLS, MINN. 974 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	360	11.1	6.8	23	.2
1000	31	142				
950	31	571	14.2	8.5	24	2.0
900	31	1,029	12.7	5.8	28	3.3
850	31	1,507	10.1	1.5	30	4.5
800	31	2,009	7.1	-3.0	30	5.8
750	31	2,534	4.8	-8.9	30	6.7
700	31	3,097	2.0	-13.1	30	7.7
650	31	3,685	-1.4	-16.7	30	8.3
600	31	4,325	-5.0	-20.4	30	9.7
550	31	4,993	-9.4	-23.8	30	10.9
500	31	5,735	-14.2	-28.7	30	11.5
450	31	6,515	-19.9	-33.9	30	11.7
400	31	7,390	-26.2	-39.7	30	12.7
350	31	8,343	-33.4	-45.4	30	13.1
300	31	9,407	-41.5	-50.2	30	14.6
250	31	10,622	-49.7		30	17.2
200	31	12,061	-55.6		30	18.5
175	31	12,911	-55.7		30	18.5
150	31	13,894	-55.3		30	17.3
125	31	15,056	-56.1		30	13.1
100	31	16,473	-56.1		31	10.1
80	30	17,896	-55.1		31	7.4
70	30	18,749	-54.2		31	5.9
60	30	19,742	-52.8		32	4.0
50	30	20,923	-51.3		35	1.4
40	30	22,376	-50.0		04	.2
30	30	24,265	-47.5		06	2.7
25	30	25,473	-46.3		08	3.8
20	30	26,961	-44.3		08	4.3
15	29	28,900	-41.6		08	6.5
10	29	31,673	-37.6		08	7.8
7	27	34,154	-33.5		09	7.9
5	14	36,512	-30.4			

JACKSON, MISS. 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	94	21.4	19.9	26	.1
1000	31	148	21.6	19.6	17	.1
950	31	596	21.3	16.7	21	1.1
900	31	1,062	18.4	14.9	25	1.3
850	31	1,551	15.5	11.4	27	1.4
800	31	2,064	12.7	6.1	30	1.5
750	31	2,602	9.6	2.5	31	1.3
700	31	3,175	7.1	-2.2	30	2.3
650	31	3,781	3.6	-5.2	29	2.8
600	31	4,428	-.3	-9.0	28	3.5
550	31	5,116	-4.0	-14.5	28	3.7
500	31	5,867	-8.2	-20.2	28	4.5
450	31	6,675	-13.4	-25.7	28	5.1
400	31	7,565	-19.4	-32.1	28	5.8
350	31	8,543	-26.6	-38.6	28	7.0
300	31	9,638	-34.9	-46.2	27	9.0
250	31	10,884	-44.8		27	10.0
200	31	12,339	-55.9		27	11.8
175	31	13,179	-60.9		28	11.9
150	31	14,127	-64.7		29	8.8
125	31	15,232	-67.6		29	5.2
100	31	16,575	-66.7		33	1.8
80	31	17,933	-63.4		09	3.5
70	31	18,757	-61.3		09	5.4
60	31	19,717	-59.0		09	7.0
50	31	20,865	-56.6		09	9.3
40	31	22,287	-54.1		09	11.2
30	31	24,144	-50.9		09	12.5
25	31	25,336	-48.9		09	12.7
20	30	26,807	-47.2		09	13.1
15	30	28,717	-45.1		09	15.3
10	26	31,448	-40.6		09	20.1
7	16	33,883	-37.5		09	21.1
5	7	36,169	-35.9			

* JACKSONVILLE, FLA. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	22.9	21.9	25	.5
1000	31	159	23.2	21.1	20	1.0
950	31	606	21.7	17.8	21	2.1
900	31	1,075	19.1	14.4	21	2.6
850	31	1,566	16.4	10.7	21	2.6
800	31	2,080	13.4	6.3	22	2.4
750	31	2,616	10.3	1.9	22	3.0
700	31	3,193	7.2	-3.7	23	3.3
650	31	3,792	3.9	-7.7	24	3.5
600	31	4,446	.5	-14.0	24	3.5
550	31	5,125	-3.4	-18.7	24	3.6
500	31	5,888	-7.6	-23.2	24	3.0
450	31	6,690	-12.8	-28.5	24	2.8
400	31	7,589	-18.8	-34.4	24	2.1
350	31	8,571	-25.7	-40.3	26	1.4
300	31	9,670	-34.0	-47.8	29	1.6
250	31	10,921	-44.1		32	3.0
200	31	12,380	-55.9		33	5.8
175	30	13,218	-61.7		33	6.1
150	29	14,161	-65.9		33	3.3
125	29	15,263	-67.6		27	1.4
100	29	16,604	-67.6		10	1.5
80	28	17,954	-64.8		08	5.6
70	28	18,772	-62.6		09	8.0
60	28	19,728	-60.1		09	10.6
50	28	20,672	-57.2		09	12.3
40	28	22,294	-53.7		10	13.0
30	28	24,151	-51.2		09	13.8
25	27	25,341	-49.4		09	15.1
20	27	26,809	-47.1		09	14.9
15	26	28,724	-44.5		09	16.2
10	22	31,461	-40.2		09	19.5
7	11	33,910	-35.8			
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JOHN F. KENNEDY INT. AP NY 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	20.2	17.1	30	1.2
1000	31	158	19.8	16.0	31	1.5
950	31	603	18.6	12.7	30	1.7
900	31	1,063	16.3	9.4	26	3.2
850	31	1,548	13.5	7.6	26	4.9
800	31	2,057	10.6	4.4	25	6.1
750	31	2,596	7.9	-.3	25	8.2
700	31	3,160	5.0	-5.2	25	9.1
650	31	3,763	2.2	-10.0	25	10.7
600	31	4,405	-1.3	-14.6	25	12.5
550	31	5,088	-5.2	-20.2	25	14.5
500	31	5,837	-9.7	-24.5	25	15.3
450	31	6,645	-14.8	-28.5	25	16.1
400	31	7,527	-20.7	-32.9	25	18.4
350	31	8,501	-27.6	-38.9	24	20.7
300	31	9,591	-35.9	-47.2	24	24.4
250	31	10,832	-45.7		24	27.0
200	31	12,282	-56.5		25	29.2
175	31	13,121	-59.8		25	25.7
150	31	14,083	-60.3		25	19.8
125	31	15,216	-61.4		25	15.1
100	30	16,601	-60.9		25	9.9
80	30	17,994	-59.2		25	4.4
70	30	18,833	-57.7		22	1.4
60	30	19,809	-56.1		12	1.0
50	30	20,974	-54.1		10	3.0
40	29	22,412	-52.0		08	4.9
30	28	24,282	-49.0		08	7.7
25	27	25,486	-47.1		08	8.8
20	23	26,975	-44.6		09	9.9
15	21	28,912	-41.2		08	11.5
10	12	31,674	-37.6			
7						
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JOHNSTON IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	26.9	23.1	09	6.5
1000	31	122	25.6	22.5	09	7.6
950	31	573	21.8	20.0	09	8.8
900	31	1,043	19.1	15.3	09	9.6
850	31	1,533	16.6	11.4	09	9.0
800	31	2,049	14.5	7.1	09	7.7
750	31	2,590	11.9	2.2	09	7.0
700	31	3,167	8.8	-3.5	09	5.5
650	31	3,774	5.4	-8.4	08	5.1
600	31	4,427	1.6	-15.5	09	5.2
550	31	5,116	-2.4	-19.2	09	4.4
500	31	5,875	-6.7	-23.9	09	2.7
450	31	6,686	-12.0	-27.0	10	1.7
400	31	7,581	-18.0	-32.8	06	.7
350	31	8,566	-24.9	-38.9	31	2.2
300	31	9,669	-33.2	-47.2	29	4.7
250	31	10,923	-43.3		28	7.4
200	31	12,385	-55.7		28	8.8
175	31	13,221	-62.6		28	9.0
150	31	14,156	-69.3		28	10.0
125	31	15,231	-73.6		27	7.3
100	31	16,537	-72.7		09	1.9
80	29	17,854	-69.4		08	9.8
70	28	18,657	-66.3		09	12.3
60	28	19,597	-63.2		09	13.9
50	28	20,727	-59.9		09	16.1
40	27	22,130	-56.9		09	18.6
30	26	23,965	-53.1		09	23.2
25	26	25,145	-50.8		09	25.4
20	26	26,606	-48.2		09	28.4
15	24	28,509	-45.8		09	30.1
10	14	31,201	-42.5		09	33.5
7	5	33,593	-41.6			
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KEY WEST, FLA. 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	3	27.5	21.9	12	2.5
1000	28	151	26.2	21.5	12	3.5
950	28	598	22.6	19.8	12	4.7
900	28	1,072	19.6	16.0	12	4.5
850	28	1,564	17.0	11.6	12	3.8
800	28	2,079	13.9	7.9	13	3.0
750	28	2,616	11.0	4.4	11	2.3
700	28	3,195	7.8	.2	12	1.8
650	28	3,798	4.6	-3.5	12	2.3
600	28	4,452	1.0	-8.5	11	1.5
550	28	5,140	-2.8	-12.3	09	.5
500	28	5,896	-7.4	-17.7	05	1.0
450	28	6,702	-12.8	-22.3	01	1.4
400	28	7,597	-16.8	-28.5	03	2.0
350	27	8,576	-26.1	-34.8	01	3.2
300	27	9,673	-34.5	-43.2	01	4.3
250	27	10,923	-44.4		02	6.3
200	27	12,381	-55.8		03	8.9
175	27	13,219	-61.9		03	9.2
150	27	14,164	-66.1		03	8.1
125	27	15,265	-68.0		04	4.2
100	27	16,602	-66.8		07	6.4
80	27	17,944	-66.8		09	10.0
70	26	18,755	-64.2		09	12.3
60	26	19,765	-61.5		09	15.1
50	26	20,844	-58.3		09	16.2
40	26	22,260	-55.0		10	17.4
30	26	24,115	-51.2		09	18.3
25	24	25,306	-48.7		09	17.1
20	23	26,782	-46.3		09	16.3
15	20	28,699	-44.0		08	17.4
10	9	31,442	-40.5			
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KING SALMON, ALASKA 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	9.8	7.2	13	2.5
1000	31	58			15	3.4
950	31	484	10.4	6.5	16	4.7
900	31	935	7.9	4.4	15	4.1
850	31	1,406	5.2	1.7	15	4.5
800	31	1,900	2.7	-.9	16	4.9
750	31	2,416	-.1	-5.3	16	5.1
700	31	2,970	-2.8	-11.6	16	4.7
650	31	3,548	-5.9	-17.1	16	4.0
600	31	4,178	-9.6	-21.1	16	4.1
550	31	4,838	-13.8	-26.0	16	3.9
500	31	5,564	-18.1	-30.3	16	5.2
450	31	6,336	-23.6	-34.3	17	5.5
400	31	7,194	-29.6	-38.7	19	4.9
350	31	8,133	-36.6	-41.6	19	4.5
300	31	9,184	-44.3	-42.4	19	4.2
250	31	10,385	-51.9		21	3.7
200	31	11,824	-52.7		25	5.9
175	31	12,690	-51.0		26	5.6
150	31	13,695	-50.3		26	5.3
125	31	14,684	-50.7		26	5.1
100	31	16,337	-51.0		25	4.2
80	30	17,791	-50.5		24	3.1
70	30	18,663	-49.9		23	2.7
60	30	19,672	-49.5		23	2.4
50	29	20,864	-49.1		24	.9
40	28	22,331	-48.7		21	.7
30	28	24,226	-47.6		13	.4
25	28	25,433	-46.7		10	.8
20	28	26,918	-45.2		07	.9
15	27	28,849	-43.0		08	2.1
10	23	31,590	-39.9		07	2.2
7	15	34,005	-36.2		01	2.9
5	5	36,439	-31.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1967

* KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.1	24.1	23	2.7
1000	31	85	26.5	23.3	24	3.3
950	31	532	23.3	19.4	25	7.2
900	31	1,009	20.6	15.7	26	7.5
850	31	1,503	17.8	12.7	27	6.7
800	31	2,020	14.9	9.5	27	6.2
750	31	2,564	12.1	5.9	27	4.8
700	31	3,141	9.2	2.3	27	3.2
650	31	3,749	5.8	-1.1	24	2.3
600	31	4,405	1.9	-4.4	12	.7
550	31	5,101	-1.8	-8.7	12	2.4
500	31	5,857	-5.9	-13.6	11	4.3
450	31	6,672	-10.5	-19.7	11	6.5
400	31	7,575	-15.9	-27.0	10	8.6
350	31	8,568	-22.6	-35.0	09	9.6
300	31	9,681	-30.9	-43.7	09	11.4
250	31	10,946	-41.3		08	14.7
200	31	12,420	-53.8		07	19.6
175	31	13,263	-61.0		07	20.7
150	31	14,204	-68.4		07	22.1
125	31	15,277	-75.3		08	19.0
100	30	16,559	-76.0		08	15.4
80	30	17,874	-68.7		08	9.2
70	30	18,678	-66.1		08	7.1
60	30	19,618	-63.3		09	5.8
50	30	20,744	-61.1		09	6.6
40	30	22,139	-58.6		09	10.2
30	29	23,958	-55.3		09	21.5
25	28	25,130	-52.8		09	30.0
20	26	26,580	-49.0		09	34.4
15	19	28,484	-45.3		09	39.2
10	7	31,173	-42.6			
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KOTZEBUE, ALASKA 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	9.3	5.7	02	1.6
1000	30	74	9.5	3.9	03	2.8
950	30	498	7.7	.7	09	1.5
900	30	943	4.5	-1.8	13	.7
850	30	1,406	1.5	-3.9	21	.8
800	30	1,892	-1.0	-7.1	20	1.8
750	30	2,405	-3.4	-10.9	21	2.6
700	30	2,949	-6.0	-15.1	22	4.2
650	30	3,525	-9.0	-19.5	23	5.2
600	30	4,143	-12.4	-21.6	23	7.0
550	30	4,801	-16.5	-26.1	24	8.7
500	30	5,514	-20.8	-30.3	24	10.7
450	30	6,283	-25.9	-34.8	24	12.5
400	30	7,128	-31.9	-40.3	24	14.4
350	30	8,057	-38.9	-43.8	24	16.5
300	30	9,098	-46.5		25	17.8
250	30	10,288	-53.4		24	19.1
200	30	11,723	-51.4		25	13.5
175	30	12,596	-48.8		25	10.6
150	30	13,610	-48.3		25	8.8
125	30	14,812	-48.0		25	6.9
100	30	16,283	-47.7		25	5.9
80	30	17,757	-47.4		25	4.3
70	29	18,642	-47.4		26	3.1
60	29	19,662	-47.4		26	2.7
50	29	20,868	-47.3		26	1.4
40	29	22,344	-47.1		23	.9
30	29	24,251	-46.3		06	.4
25	28	25,461	-45.3		04	1.3
20	27	26,947	-43.7		07	1.2
15	24	28,878	-41.5		08	1.5
10	21	31,644	-38.1		07	3.1

KWAJALEIN, MARSHALL IS. 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	27.4	23.9	10	2.3
1000	31	93	26.7	23.4	10	2.7
950	31	541	23.4	20.6	10	3.4
900	31	1,014	20.5	17.2	10	4.1
850	31	1,510	17.8	14.2	09	5.0
800	31	2,027	15.2	10.6	09	5.3
750	31	2,573	12.4	7.4	10	5.9
700	31	3,150	9.4	3.2	10	6.4
650	31	3,751	5.9	-1.1	10	6.9
600	31	4,406	2.1	-5.1	10	7.0
550	31	5,103	-1.7	-8.9	10	7.2
500	31	5,866	-5.6	-14.0	10	6.7
450	31	6,678	-10.6	-20.0	10	5.7
400	31	7,582	-16.3	-24.6	09	4.8
350	31	8,567	-23.4	-32.1	09	4.4
300	31	9,683	-31.7	-41.1	09	4.9
250	31	10,945	-42.2		07	4.5
200	31	12,413	-54.6		06	4.6
175	31	13,251	-61.5		05	3.7
150	31	14,192	-69.2		05	4.2
125	31	15,262	-76.1		07	3.9
100	30	16,541	-77.1		09	7.6
80	28	17,844	-70.5		09	8.1
70	28	18,640	-68.1		09	7.5
60	28	19,574	-64.5		09	6.7
50	28	20,697	-62.0		08	7.9
40	28	22,083	-59.0		09	12.3
30	28	23,907	-55.3		09	21.4
25	27	25,073	-53.5		09	26.6
20	26	26,515	-51.0		09	32.0
15	26	28,402	-47.5		09	37.2
10	24	31,121	-42.3		09	39.2
7	22	33,558	-37.8		09	32.0
5	9	35,919	-33.7			

LAKE CHARLES, LA. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	22.8	21.6	04	1.0
1000	31	147	23.4	21.8	07	.6
950	31	595	21.3	18.0	18	1.6
900	31	1,063	18.9	13.3	19	1.8
850	31	1,553	16.2	8.3	17	.8
800	31	2,067	13.3	5.1	35	.2
750	31	2,605	10.2	1.4	36	.4
700	31	3,179	7.1	-1.8	31	.7
650	31	3,785	3.9	-5.8	28	1.3
600	31	4,433	.4	-10.4	31	1.4
550	31	5,122	-3.5	-14.9	31	1.4
500	31	5,874	-7.7	-21.2	29	1.3
450	31	6,687	-12.9	-26.6	28	2.5
400	31	7,575	-18.9	-29.6	27	3.1
350	31	8,556	-25.9	-36.6	27	4.3
300	31	9,654	-34.2	-45.3	27	6.1
250	31	10,903	-44.1		27	7.0
200	31	12,362	-55.3		27	7.5
175	31	13,203	-60.6		29	7.2
150	31	14,151	-65.2		30	5.9
125	31	15,252	-68.4		32	3.6
100	31	16,589	-67.7		03	1.8
80	31	17,941	-64.3		08	5.4
70	31	18,761	-62.4		09	7.0
60	31	19,716	-59.9		09	9.4
50	31	20,860	-57.5		09	10.8
40	31	22,277	-54.7		09	12.9
30	31	24,132	-51.0		09	14.4
25	30	25,321	-49.5		09	14.4
20	30	26,786	-47.8		09	14.8
15	29	28,693	-45.2		08	16.4
10	22	31,415	-41.2		08	18.4
7	14	33,859	-37.5		09	20.5
5	8	36,172	-32.5			

LANDER, WYO. 834 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,696	14.2	4.7	24	2.2
1000	31	131				
950	31	575				
900	31	1,042				
850	31	1,536				
800	31	2,052	17.1	1.0	30	1.6
750	31	2,593	14.1	-1.4	28	1.4
700	31	3,178	10.3	-3.6	27	3.2
650	31	3,783	5.7	-7.0	28	5.0
600	31	4,440	.4	-10.8	29	6.8
550	31	5,123	-5.0	-17.4	30	7.4
500	31	5,874	-10.4	-22.9	30	7.5
450	31	6,671	-16.0	-29.6	29	8.9
400	31	7,557	-22.4	-36.1	29	10.6
350	31	8,523	-29.6	-42.6	28	12.3
300	31	9,603	-38.2	-49.1	28	15.2
250	31	10,832	-47.6		28	18.3
200	31	12,277	-55.5		28	21.0
175	31	13,122	-58.7		28	20.9
150	31	14,083	-61.5		29	17.0
125	31	15,207	-63.5		30	11.7
100	31	16,573	-64.4		31	5.8
80	28	17,952	-61.0		34	2.5
70	28	18,783	-59.5		02	2.3
60	27	19,755	-57.0		04	2.4
50	27	20,916	-54.5		07	4.0
40	27	22,353	-51.7		08	4.8
30	25	24,226	-49.0		09	6.6
25	25	25,428	-47.2		09	8.1
20	23	26,918	-44.8		08	9.4
15	17	28,841	-42.0		08	11.0

* LIHUE KAUAI, HAWAII 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	24.2	21.7	06	5.4
1000	31	151	23.5	21.1	06	6.4
950	31	595	20.4	19.0	07	8.0
900	31	1,065	17.2	15.6	07	8.1
850	31	1,552	14.1	11.7	06	8.0
800	31	2,062	12.0	3.6	08	6.9
750	31	2,598	11.1	-5.3	09	6.2
700	31	3,176	8.6	-10.2	09	4.1
650	31	3,781	5.4	-13.6	08	3.5
600	31	4,435	1.7	-16.9	08	2.3
550	31	5,123	-2.5	-21.4	10	1.7
500	31	5,881	-7.6	-25.0	15	.1
450	31	6,690	-13.4	-28.6	25	1.3
400	31	7,579	-19.9	-34.4	26	3.2
350	31	8,556	-27.3	-40.6	26	5.3
300	31	9,646	-35.8	-47.8	26	7.1
250	31	10,888	-45.4		26	10.0
200	31	12,340	-56.5		27	12.2
175	31	13,176	-62.3		27	11.9
150	31	14,118	-66.4		26	9.6
125	31	15,215	-68.1		26	6.3
100	30	16,550	-69.5		18	.6
80	30	17,887	-67.7		09	7.2
70	30	18,693	-65.3		09	11.2
60	30	19,637	-62.6		09	13.4
50	29	20,769	-60.0		09	15.6
40	29	22,174	-56.6		09	17.9
30	29	24,015	-52.7		09	20.1
25	28	25,195	-50.7		09	21.2
20	28	26,655	-48.9		09	20.5
15	28	28,554	-46.2		09	21.0
10	28	31,266	-43.0		09	21.0
7	25	33,688	-39.8		09	23.5
5	24	36,001	-36.6		09	27.8
4	18	37,553	-34.9		09	31.4
3	7	39,604	-32.0			
2	5	42,551	-29.3			

LITTLE ROCK, ARK. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	19.3	16.6	02	.6
1000	31	152	20.3	17.0	06	.8
950	31	599	20.8	15.2	17	.9
900	31	1,064	18.5	12.3	25	.9
850	31	1,552	15.9	7.6	29	2.0
800	31	2,066	13.1	4.3	31	2.9
750	31	2,604	10.3	-.9	30	3.4
700	31	3,178	6.8	-4.5	31	3.6
650	31	3,781	3.5	-9.8	30	3.9
600	31	4,429	-.3	-14.3	30	4.0
550	31	5,115	-4.3	-19.1	30	4.5
500	31	5,867	-8.6	-22.8	30	5.0
450	31	6,672	-13.9	-28.3	30	6.1
400	31	7,562	-20.2	-34.2	30	6.4
350	31	8,538	-27.3	-40.7	29	7.8
300	31	9,630	-35.7	-47.2	29	8.4
250	31	10,873	-44.9		29	10.4
200	31	12,332	-55.1		29	14.4
175	31	13,177	-58.9		30	12.3
150	31	14,136	-62.4		30	9.4
125	31	15,254	-65.3		30	6.6
100	31	16,609	-65.3		31	3.7
80	31	17,978	-62.0		03	1.7
70	31	18,808	-59.7		07	2.6
60	31	19,776	-58.0		08	5.3
50	30	20,931	-55.8		09	6.7
40	30	22,360	-53.5		09	8.5
30	29	24,224	-50.1		09	9.9
25	29	25,421	-48.1		09	10.1
20	29	26,899	-46.2		09	11.3
15	27	28,824	-43.9		09	13.9
10	19	31,562	-40.1		09	16.6
7	7	34,025	-36.6			

MCGRATH, ALASKA 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	10.4	8.4	24	.7
1000	31	66				
950	31	498	11.3	6.8	21	2.0
900	31	945	9.1	4.7	21	3.6
850	31	1,416	6.0	2.8	20	5.1
800	31	1,911	3.1	-.8	20	5.4
750	31	2,433	.0	-3.9	20	5.1
700	31	2,981	-3.0	-7.1	21	6.0
650	31	3,563	-6.3	-12.3	20	6.5
600	31	4,187	-9.9	-17.5	19	5.7
550	31	4,850	-14.2	-21.7	19	6.4
500	31	5,570	-18.9	-27.4	20	5.3
450	31	6,346	-24.3	-32.6	20	5.8
400	31	7,196	-30.3	-38.6	20	5.9
350	31	8,132	-37.4	-42.4	21	5.3
300	31	9,179	-45.4		23	5.9
250	31	10,372	-53.9		23	7.2
200	31	11,796	-53.8		23	6.2
175	31	12,660	-50.9		23	6.5
150	31	13,665	-50.0		23	6.4
125	30	14,861	-50.0		23	4.8
100	30	16,320	-49.8		24	4.6
80	30	17,781	-49.5		22	3.7
70	30	18,656	-49.1		22	2.6
60	28	19,670	-48.6		24	1.8
50	28	20,870	-48.3		22	.7
40	28	22,340	-48.1		13	.7
30	28	24,239	-46.9		10	.8
25	27	25,445	-45.9		09	1.0
20	25	26,944	-44.2		09	1.5
15	23	28,886	-42.0		10	2.1
10	17	31,656	-39.2		09	3.2
7	7	34,197	-34.7			

* MAJURO, MARSHALL IS. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	29.4	24.5	10	2.9
1000	30	96	27.7	21.3	10	3.5
950	30	547	23.3	18.1	11	5.5
900	30	1,020	20.7	13.7	11	6.3
850	30	1,513	17.9	10.8	10	6.5
800	30	2,031	15.4	7.0	10	6.4
750	30	2,576	12.9	2.4	10	7.0
700	30	3,154	9.9	-1.1	09	6.7
650	30	3,765	6.5	-4.5	10	7.8
600	30	4,420	2.7	-9.6	10	8.2
550	30	5,114	-.9	-14.2	10	7.7
500	30	5,676	-4.9	-18.0	09	7.3
450	30	6,693	-9.7	-23.1	09	7.1
400	30	7,599	-15.1	-29.4	09	5.4
350	30	8,596	-22.1	-36.3	09	4.7
300	30	9,712	-30.3	-44.2	09	3.8
250	30	10,983	-40.5	-51.8	09	3.4
200	30	12,465	-52.9		07	3.5
175	30	13,313	-60.0		06	3.2
150	30	14,259	-67.4		07	1.9
125	30	15,340	-73.8		11	1.4
100	30	16,633	-74.8		09	6.5
80	29	17,940	-69.6		09	6.7
70	29	18,744	-65.5		10	5.5
60	29	19,687	-62.4		09	3.8
50	29	20,820	-60.0		08	4.3
40	28	22,219	-58.0		10	8.6
30	26	24,050	-53.9		09	17.2
25	23	25,235	-51.4		09	26.4
20	22	26,694	-48.2		09	30.9
15	17	28,606	-44.6		09	39.2
10	10	31,339	-39.6			
7	10	33,800	-36.2			
5	5	36,142	-33.0			

* MARCUS IS., N. PACIFIC 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	9	29.2	25.0	15	1.2
1000	31	93	27.5	22.9	14	1.3
950	31	545	23.3	18.2	17	1.3
900	31	1,016	20.7	14.4	18	.9
850	31	1,509	18.1	10.7	19	.8
800	31	2,027	15.6	6.4	21	.7
750	31	2,573	13.1	.9	30	.2
700	31	3,150	10.0	-3.1	31	.7
650	31	3,763	6.4	-7.4	31	1.1
600	31	4,416	2.5	-11.5	33	.8
550	31	5,113	-1.7	-16.3	33	.7
500	31	5,867	-6.0	-21.2	34	1.3
450	31	6,686	-10.9	-27.3	36	1.5
400	31	7,583	-16.8	-32.6	01	2.2
350	31	8,572	-23.7	-38.9	02	3.2
300	31	9,680	-31.8	-46.9	03	4.3
250	31	10,943	-41.5	-51.4	04	6.1
200	31	12,420	-52.6		05	8.0
175	31	13,271	-58.7		05	9.7
150	31	14,225	-64.8		05	10.7
125	31	15,322	-70.3		06	12.8
100	31	16,633	-73.6		07	13.7
80	31	17,952	-68.3		08	13.6
70	31	18,758	-65.3		08	14.6
60	31	19,703	-62.2		09	16.2
50	31	20,838	-59.1		09	16.4
40	30	22,248	-55.6		09	18.6
30	27	24,096	-51.3		09	19.8
25	25	25,286	-48.8		09	20.2
20	21	26,762	-46.5		09	21.1
15	18	28,689	-44.3		09	21.5
10	14	31,434	-40.5		09	22.8
7	12	33,874	-39.3			

* MEDFORD, OREG. 969 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	16.2	9.4	16	.5
1000	31	132				
950	31	579	19.2	8.4	24	.6
900	31	1,038	19.7	5.7	27	.7
850	31	1,529	18.2	2.6	11	.8
800	31	2,046	16.2	-1.7	13	1.3
750	31	2,588	12.9	-5.6	20	3.4
700	31	3,167	8.8	-8.5	20	5.4
650	31	3,772	4.4	-12.8	20	6.8
600	31	4,421	-.1	-18.4	21	7.1
550	31	5,105	-4.8	-23.2	21	7.0
500	31	5,855	-10.0	-27.6	22	7.2
450	31	6,650	-16.3	-32.4	23	8.8
400	31	7,533	-22.9	-37.4	23	10.7
350	31	8,498	-30.0	-44.6	23	12.6
300	31	9,578	-38.2	-50.9	23	15.1
250	31	10,808	-47.1		24	17.5
200	31	12,259	-54.4		24	21.7
175	31	13,110	-57.0		24	20.9
150	30	14,079	-59.6		24	17.1
125	30	15,212	-61.9		24	10.9
100	30	16,589	-63.2		23	6.1
80	30	17,966	-61.3		20	1.7
70	30	18,796	-59.7		13	1.5
60	30	19,763	-57.8		10	2.4
50	30	20,918	-56.0		09	3.3
40	29	22,343	-53.6		09	4.0
30	29	24,205	-50.7		08	5.8
25	29	25,397	-49.0		08	7.6
20	28	26,871	-46.5		09	8.8
15	27	28,788	-43.9		09	10.5
10	24	31,529	-39.9		09	11.8
7	23	33,988	-35.2		09	12.7
5	18	36,364	-30.4		09	14.1
4	7	38,005	-27.0			

MERIDA, MEXICO 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	22.0	21.5	09	2.4
1000	31	144	24.0	22.8	11	5.0
950	31	592	23.3	18.6	12	7.1
900	31	1,066	21.1	13.7	12	6.6
850	31	1,559	18.4	8.9	11	6.2
800	31	2,077	15.4	5.4	11	5.8
750	31	2,613	12.3	.9	11	5.8
700	31	3,197	8.9	-2.4	11	5.5
650	31	3,800	5.1	-6.1	11	5.4
600	31	4,457	1.5	-10.0	10	4.8
550	31	5,140	-2.6	-15.0	09	4.7
500	31	5,903	-7.2	-19.1	08	4.1
450	31	6,708	-12.2	-26.5	07	4.2
400	31	7,609	-18.0	-32.2	06	4.5
350	31	8,594	-24.8	-38.3	05	3.9
300	31	9,696	-33.2	-45.7	03	3.6
250	31	10,951	-43.1		03	4.7
200	31	12,415	-55.1		02	6.0
175	31	13,255	-61.3		02	7.0
150	31	14,197	-67.0		03	6.7
125	31	15,288	-70.0		04	6.0
100	31	16,612	-70.5		06	8.0
80	31	17,943	-67.5		08	11.8
70	30	18,753	-64.8		08	12.7
60	30	19,701	-61.2		08	13.2
50	30	20,840	-58.2		08	16.2
40	29	22,254	-55.0		09	16.7
30	27	24,135	-51.1		09	18.8
25	27	25,296	-49.0		09	22.6
20	27	26,766	-47.3		08	20.7
15	26	28,683	-43.7		08	22.9
10	19	31,434	-40.2		08	23.4
7	6	33,898	-39.3			

* MIAMI, FLA. 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	24.9	21.7	07	.8
1000	31	150	25.6	22.3	12	2.1
950	31	600	22.4	19.9	14	4.2
900	31	1,071	19.4	15.8	14	4.2
850	31	1,562	16.5	12.2	14	3.8
800	31	2,077	13.7	8.1	14	2.9
750	31	2,614	10.8	3.9	14	2.4
700	31	3,193	7.5	.0	15	1.8
650	31	3,796	4.1	-4.6	16	2.0
600	31	4,448	.3	-10.2	15	1.9
550	31	5,131	-3.5	-16.5	13	1.2
500	31	5,889	-8.0	-20.7	07	.9
450	31	6,694	-13.2	-25.9	06	1.1
400	31	7,588	-19.2	-32.9	05	2.3
350	31	8,568	-26.2	-39.5	03	3.1
300	31	9,665	-34.6	-47.7	03	5.5
250	31	10,914	-44.4		03	8.0
200	29	12,371	-56.1		03	10.9
175	29	13,209	-61.8		03	9.8
150	28	14,151	-66.3		04	6.8
125	28	15,251	-67.9		05	4.7
100	28	16,585	-69.3		08	5.7
80	28	17,924	-66.9		08	9.5
70	28	18,734	-64.5		08	12.1
60	27	19,683	-61.6		09	15.2
50	27	20,821	-58.4		09	17.0
40	27	22,234	-55.3		10	17.4
30	25	24,085	-51.7		09	18.1
25	25	25,273	-49.4		09	17.5
20	24	26,744	-47.3		09	17.5
15	19	28,651	-45.6		08	17.8
10	16	31,379	-40.9		09	20.6
7	11	33,847	-36.9			

* MIDLAND, TEXAS 918 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	19.7	12.4	13	1.9
1000	31	127				
950	31	577				
900	31	1,045	21.2	12.6	15	4.3
850	31	1,540	19.7	10.3	17	6.4
800	31	2,060	16.3	7.0	16	3.9
750	31	2,604	12.7	4.4	09	2.0
700	31	3,182	8.6	.9	06	3.5
650	31	3,791	4.7	-3.6	05	3.9
600	31	4,439	.6	-8.6	07	3.2
550	31	5,127	-3.4	-14.8	07	2.0
500	31	5,881	-7.5	-20.8	08	1.5
450	31	6,689	-11.8	-26.7	03	1.5
400	31	7,584	-18.5	-32.5	36	1.8
350	31	8,566	-25.7	-37.7	35	3.1
300	31	9,664	-34.3	-45.0	33	4.6
250	31	10,913	-43.9		33	7.5
200	31	12,379	-53.7		31	9.7
175	30	13,224	-59.3		32	11.6
150	30	14,177	-64.6		33	10.7
125	30	15,277	-69.1		34	7.5
100	28	16,607	-68.5		01	4.7
80	28	17,953	-65.0		05	5.3
70	28	18,771	-62.4		08	6.3
60	28	19,727	-60.4		08	7.9
50	28	20,871	-57.4		09	10.2
40	27	22,289	-55.2		09	11.5
30	27	24,143	-51.0		09	12.8
25	27	25,335	-49.2		09	13.0
20	27	26,804	-47.2		09	13.4
15	25	28,714	-45.0		09	15.2
10	23	31,447	-40.9		09	18.7
7	19	33,899	-36.9		09	19.8
5	10	36,262	-33.3			

MONTGOMERY, ALA. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	21.6	19.4	36	.3
1000	31	152	21.9	19.3	30	.1
950	31	600	21.5	17.5	19	1.4
900	31	1,068	18.9	14.9	22	1.7
850	31	1,558	16.0	11.2	23	2.2
800	31	2,072	13.0	6.6	25	2.6
750	31	2,612	10.4	1.6	26	3.4
700	31	3,185	7.2	-1.4	26	3.8
650	31	3,791	3.8	-4.9	26	3.7
600	31	4,439	.2	-9.8	26	4.3
550	31	5,129	-3.6	-14.5	26	4.8
500	31	5,880	-7.9	-19.2	26	5.5
450	31	6,688	-13.0	-23.9	26	5.5
400	31	7,581	-18.7	-29.8	26	6.6
350	31	8,563	-25.8	-35.9	26	7.9
300	31	9,661	-34.2	-44.6	26	9.3
250	31	10,909	-44.3		27	11.1
200	31	12,368	-55.3		27	12.5
175	31	13,209	-60.7		28	12.3
150	31	14,158	-64.7		27	9.3
125	30	15,262	-66.8		27	5.0
100	30	16,609	-66.5		23	1.9
80	30	17,969	-63.3		09	2.8
70	30	18,793	-61.3		08	4.8
60	30	19,756	-58.8		09	7.2
50	30	20,907	-56.7		09	9.1
40	30	22,333	-53.7		09	10.7
30	29	24,195	-50.4		09	12.2
25	29	25,389	-48.7		09	12.7
20	28	26,865	-46.4		09	13.9
15	26	28,790	-43.8		09	14.1
10	8	31,541	-38.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1967

* NANTUCKET, MASS. 1018 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	17.9	17.7	20	1.4
1000	31	169	18.5	16.9	23	4.1
950	31	604	17.5	12.6	25	6.0
900	31	1,071	15.7	9.5	24	6.9
850	31	1,555	13.5	4.5	25	7.9
800	31	2,064	10.9	-.1	24	8.0
750	31	2,599	8.2	-3.4	24	9.7
700	31	3,167	5.3	-7.2	24	10.8
650	31	3,764	1.9	-9.4	24	12.7
600	31	4,411	-1.8	-13.4	24	13.8
550	31	5,092	-5.4	-18.3	24	14.3
500	31	5,842	-9.8	-23.3	24	15.1
450	31	6,643	-14.8	-27.4	24	16.9
400	31	7,530	-20.9	-32.6	24	19.0
350	31	8,504	-27.7	-38.4	24	20.3
300	31	9,593	-36.2	-47.1	24	22.6
250	31	10,833	-46.1		24	24.4
200	30	12,278	-57.0		25	26.9
175	30	13,115	-60.6		25	24.1
150	30	14,073	-61.5		25	18.9
125	30	15,201	-62.0		25	15.2
100	30	16,583	-61.4		24	9.5
80	30	17,971	-59.7		24	4.6
70	30	18,808	-58.2		23	2.2
60	30	19,782	-56.6		17	1.4
50	30	20,943	-54.6		12	2.5
40	29	22,379	-52.4		09	4.8
30	26	24,250	-49.5		09	6.9
25	26	25,448	-48.0		09	7.9
20	25	26,921	-46.1		09	9.1
15	24	28,849	-43.1		09	10.3
10	18	31,613	-38.6		09	10.5
7	10	34,057	-35.1			
5						

* NASHVILLE, TENN. 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	18.0	17.1	05	.5
1000	31	159				
950	31	611	18.9	14.6	02	.9
900	31	1,063	16.4	12.4	28	2.0
850	31	1,549	13.7	9.1	28	3.1
800	31	2,059	11.8	3.4	28	3.8
750	31	2,598	9.1	-2.2	28	4.1
700	31	3,166	6.0	-5.7	28	4.7
650	31	3,770	2.6	-7.9	27	5.7
600	31	4,413	-1.0	-12.8	27	6.8
550	31	5,096	-4.7	-19.1	27	7.0
500	31	5,848	-9.2	-23.8	28	8.2
450	31	6,652	-14.7	-29.2	28	8.9
400	31	7,536	-20.8	-34.6	27	10.0
350	31	8,510	-27.8	-40.7	27	11.3
300	31	9,599	-36.3	-47.6	27	14.0
250	31	10,838	-45.7		27	16.2
200	31	12,290	-55.4		27	18.2
175	31	13,133	-59.8		27	18.0
150	31	14,091	-61.9		27	13.5
125	31	15,214	-64.2		27	9.5
100	31	16,577	-63.7		26	5.2
80	31	17,953	-61.4		27	.4
70	31	18,784	-59.6		09	2.4
60	31	19,751	-57.9		09	4.5
50	31	20,917	-55.3		09	6.4
40	30	22,338	-53.2		09	7.5
30	29	24,252	-50.3		09	9.1
25	29	25,396	-48.6		09	10.5
20	28	26,871	-46.3		09	12.1
15	27	28,788	-44.0		09	13.5
10	26	31,534	-39.5		08	16.0
7	22	34,000	-35.0		09	18.4
5	10	36,352	-30.8			

NOME, ALASKA 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	8.6	4.0	04	1.6
1000	31	56			04	2.2
950	31	483	5.1	2.8	06	1.5
900	31	926	5.1	.2	13	1.4
850	31	1,392	2.5	-2.3	16	1.9
800	31	1,880	.4	-6.0	19	2.1
750	31	2,398	-1.9	-9.8	20	2.5
700	31	2,943	-4.6	-12.8	23	3.8
650	31	3,522	-7.4	-17.2	22	4.5
600	30	4,145	-11.1	-22.4	22	5.2
550	30	4,802	-15.4	-26.7	22	5.5
500	30	5,523	-20.1	-28.5	22	6.4
450	29	6,286	-25.2	-33.0	22	6.4
400	29	7,143	-31.2	-38.7	22	6.9
350	29	8,075	-38.4	-43.5	22	8.4
300	29	9,114	-45.9		22	8.6
250	29	10,313	-53.4		22	10.0
200	29	11,750	-51.0		23	8.5
175	29	12,624	-49.1		24	7.2
150	29	13,637	-48.7		24	6.7
125	29	14,835	-46.7		25	5.6
100	29	16,302	-48.5		25	4.7
80	28	17,774	-48.0		25	3.2
70	28	18,654	-47.8		25	3.2
60	28	19,672	-47.6		25	1.7
50	28	20,877	-47.4		25	.5
40	28	22,352	-47.2		22	.3
30	28	24,260	-46.2		09	.5
25	28	25,473	-45.4		11	.7
20	28	26,966	-44.1		07	1.6
15	27	28,906	-42.1		08	1.9
10	20	31,669	-38.7		08	3.1
7						
5						

* NORTH PLATTE, NEBR. 921 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	848	13.4	10.0	12	.5
1000	31	144				
950	31	584				
900	31	1,042	17.7	10.7	17	2.1
850	31	1,532	18.3	7.2	24	3.0
800	31	2,050	15.7	3.6	26	3.1
750	31	2,592	12.0	-.3	29	3.7
700	31	3,169	8.0	-3.8	30	4.2
650	31	3,772	3.8	-7.4	31	4.9
600	31	4,421	-.9	-12.0	32	6.1
550	31	5,103	-5.6	-17.6	32	7.5
500	31	5,851	-10.1	-23.5	31	8.3
450	31	6,651	-15.5	-29.7	31	9.3
400	31	7,535	-21.7	-36.0	31	10.7
350	31	8,515	-28.9	-42.8	31	11.8
300	31	9,588	-37.6	-48.1	30	13.4
250	31	10,820	-47.2		30	16.7
200	31	12,264	-56.1		30	18.7
175	31	13,108	-58.4		30	17.8
150	31	14,072	-60.9		31	16.0
125	31	15,197	-63.5		31	12.4
100	31	16,566	-63.3		32	7.7
80	31	17,945	-60.9		34	4.4
70	31	18,778	-58.9		36	3.1
60	30	19,750	-56.6		03	2.6
50	30	20,913	-54.3		06	3.2
40	30	22,352	-52.0		08	5.3
30	30	24,226	-49.5		09	6.7
25	29	25,424	-47.8		09	7.6
20	29	26,904	-45.9		08	8.6
15	27	28,629	-43.2		09	11.1
10	26	31,593	-38.6		09	13.7
7	23	34,051	-34.9		09	15.0
5	13	36,393	-30.6			

* OAKLAND, CALIF. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	13.9	12.2	31	1.3
1000	31	118	12.9	11.3	29	1.2
950	31	563	20.6	6.0	26	2.3
900	31	1,026	25.2	.0	27	2.1
850	31	1,525	22.5	-2.2	22	2.0
800	31	2,048	19.0	-4.5	19	3.5
750	31	2,594	15.1	-7.6	19	4.7
700	31	3,177	10.8	-10.3	19	5.4
650	31	3,786	6.4	-14.3	19	5.7
600	31	4,440	1.6	-17.9	18	5.3
550	31	5,124	-3.4	-22.3	19	5.2
500	31	5,880	-8.7	-26.5	20	5.1
450	31	6,681	-14.5	-32.0	21	6.1
400	31	7,569	-21.1	-38.1	22	7.9
350	31	8,541	-28.3	-43.5	22	9.8
300	31	9,628	-36.4	-49.3	22	12.1
250	31	10,868	-45.3		22	15.2
200	31	12,327	-54.2		23	17.1
175	30	13,172	-56.2		23	18.0
150	30	14,132	-62.3		23	15.5
125	30	15,249	-65.4		23	10.8
100	30	16,602	-66.3		21	3.6
80	28	17,961	-63.7		13	2.7
70	28	18,783	-61.6		11	3.9
60	28	19,741	-59.5		09	4.8
50	26	20,889	-56.7		09	5.3
40	28	22,312	-54.3		09	7.0
30	27	24,167	-51.5		09	9.2
25	27	25,355	-49.9		09	10.2
20	27	26,821	-47.7		09	11.6
15	26	28,732	-44.9		09	11.9
10	21	31,467	-41.1		09	14.7
7	18	33,900	-37.3		09	15.9
5	10	36,252	-32.6			

OMAHA, NEBR. 971 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	403	16.4	13.7	04	.1
1000	31	147				
950	31	585	18.9	12.4	23	1.6
900	31	1,052	18.0	9.2	27	4.4
850	31	1,540	15.5	5.7	28	4.3
800	31	2,052	12.5	.7	30	5.1
750	31	2,585	9.4	-4.5	30	6.0
700	31	3,160	6.4	-8.2	30	6.2
650	31	3,758	2.5	-10.9	30	6.9
600	31	4,407	-1.5	-15.5	30	7.6
550	31	5,087	-5.8	-21.1	30	8.5
500	31	5,836	-10.3	-26.4	30	9.3
450	31	6,634	-15.9	-29.8	30	11.1
400	31	7,518	-22.0	-35.7	31	12.6
350	31	8,486	-29.2	-42.2	31	14.3
300	31	9,568	-37.7	-48.8	30	15.5
250	31	10,799	-47.2		30	17.6
200	31	12,241	-56.2		30	19.2
175	31	13,086	-57.7		30	19.1
150	31	14,053	-59.6		30	17.1
125	31	15,186	-62.1		30	12.0
100	31	16,563	-61.8		31	8.7
80	31	17,950	-59.5		33	4.8
70	31	18,788	-57.5		33	3.0
60	31	19,765	-55.4		01	1.6
50	31	20,932	-53.5		07	2.0
40	31	22,372	-51.9		09	4.4
30	30	24,243	-49.4		08	6.3
25	29	25,441	-47.8		08	6.8
20	29	26,919	-46.0		08	7.3
15	25	28,834	-43.6		06	10.1
10	22	31,579	-39.5		08	12.2
7	9	34,027	-36.7			
5						

* PAGO PAGO, AMERICAN SAMOA 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	26.9	22.7	11	5.7
1000	31	120	25.2	20.0	11	7.2
950	31	576	21.1	16.6	10	9.1
900	31	1,036	18.0	13.0	10	8.5
850	31	1,524	15.7	8.4	09	7.6
800	31	2,038	14.5	1.9	08	5.8
750	31	2,584	11.9	-2.8	07	3.8
700	31	3,156	8.6	-6.9	08	2.2
650	31	3,765	4.9	-10.7	06	1.6
600	31	4,414	1.6	-14.6	06	1.1
550	31	5,1[illegible]7	-2.0	-20.0	01	.9
500	31	5,863	-6.4	-24.1	02	1.7
450	31	6,681	-11.1	-28.4	01	1.0
400	31	7,576	-17.1	-33.8	23	1.8
350	31	8,563	-24.2	-40.3	24	5.1
300	31	9,667	-32.8	-47.8	26	7.2
250	31	10,922	-42.6		26	10.0
200	31	12,390	-54.1		27	11.0
175	31	13,232	-60.6		27	11.5
150	31	14,177	-66.4		27	9.9
125	31	15,264	-72.4		26	7.0
100	31	16,563	-75.2		26	3.7
80	29	17,864	-72.0		27	3.1
70	29	18,661	-66.9		26	3.1
60	29	19,605	-61.6		27	1.9
50	29	20,746	-57.5		11	1.2
40	27	22,165	-54.4		08	5.9
30	26	24,021	-52.0		09	10.9
25	25	25,204	-50.9		09	13.8
20	21	26,665	-47.8		09	16.5
15	12	28,559	-44.8			
10						
7						
5						

* PEORIA, ILL. 995 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	200	15.3	13.0	33	.2
1000	31	153				
950	31	595	17.5	12.1	26	1.9
900	31	1,053	15.0	9.0	30	3.4
850	31	1,535	12.7	2.8	30	4.4
800	31	2,042	10.2	-1.7	30	4.9
750	31	2,577	7.9	-7.0	31	5.2
700	31	3,143	4.8	-10.4	31	6.0
650	31	3,738	1.3	-13.3	31	6.6
600	31	4,384	-2.4	-18.3	30	7.7
550	31	5,062	-6.6	-23.2	30	8.1
500	31	5,807	-11.1	-28.9	29	8.9
450	31	6,605	-16.8	-33.4	30	9.9
400	31	7,483	-23.0	-39.1	30	12.3
350	31	8,447	-30.2	-44.9	30	13.7
300	31	9,525	-38.4	-50.5	30	15.9
250	31	10,755	-47.5		30	19.5
200	31	12,232	-55.1		30	19.8
175	31	13,051	-56.6		30	18.0
150	31	14,025	-58.3		29	14.8
125	31	15,156	-60.3		29	11.4
100	31	16,555	-60.9		29	7.5
80	31	17,944	-58.5		29	3.7
70	31	18,790	-57.0		30	1.9
60	31	19,771	-55.1		08	.9
50	31	20,939	-53.6		09	3.1
40	30	22,379	-51.9		09	5.4
30	30	24,255	-48.9		09	6.4
25	30	25,456	-47.2		09	7.9
20	30	26,939	-45.2		09	9.4
15	30	28,871	-42.2		09	12.2
10	27	31,645	-37.6		09	14.9
7	22	34,132	-34.1		09	16.1
5	11	36,529	-29.3			

* PITTSBURGH, PA. 976 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	15.9	14.3	24	1.0
1000	31	154				
950	31	592	17.2	13.4	25	2.2
900	31	1,053	15.3	10.1	26	4.3
850	31	1,535	12.1	7.2	26	5.0
800	31	2,041	9.1	2.8	26	5.9
750	31	2,574	6.6	-3.3	26	6.9
700	31	3,138	4.1	-10.4	27	7.4
650	31	3,733	1.2	-15.4	26	8.2
600	31	4,377	-2.4	-19.6	26	9.6
550	31	5,057	-6.3	-24.1	26	10.7
500	31	5,802	-11.1	-27.1	26	11.2
450	31	6,598	-16.8	-31.7	26	13.0
400	31	7,477	-22.9	-36.7	26	14.6
350	31	8,442	-29.9	-43.0	26	16.5
300	31	9,523	-37.7	-48.4	26	19.7
250	31	10,757	-46.3		25	23.8
200	31	12,211	-54.9		25	25.1
175	31	13,059	-57.1		26	22.9
150	31	14,031	-58.5		26	17.2
125	31	15,173	-60.0		25	13.7
100	30	16,562	-60.2		25	9.5
80	30	17,958	-58.5		25	2.9
70	30	18,799	-57.1		23	1.4
60	30	19,776	-55.6		13	.8
50	30	20,942	-53.9		10	1.7
40	30	22,382	-51.7		10	2.3
30	29	24,262	-49.1		09	4.0
25	29	25,463	-47.4		10	4.5
20	29	26,945	-45.2		09	6.8
15	28	28,880	-42.1		09	8.2
10	28	31,645	-38.5		10	9.8
7	27	34,106	-34.4		09	11.4
5	8	36,427	-30.4			

* PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	28.5	24.3	16	.2
1000	31	81	27.9	23.5	19	.3
950	31	526	23.9	18.6	19	1.5
900	31	1,007	20.8	15.1	15	2.0
850	31	1,500	18.0	11.3	13	3.1
800	31	2,017	15.5	7.5	11	3.3
750	30	2,563	12.9	3.1	11	4.0
700	30	3,141	9.8	-.7	11	4.7
650	30	3,753	6.3	-4.2	11	5.3
600	30	4,407	2.5	-7.0	10	5.8
550	30	5,104	-1.1	-11.9	10	6.1
500	30	5,863	-5.2	-16.3	10	6.3
450	30	6,684	-9.7	-22.0	10	7.4
400	30	7,587	-15.1	-28.6	09	7.9
350	30	8,583	-22.0	-36.0	09	7.8
300	30	9,699	-30.5	-43.9	09	7.7
250	30	10,968	-40.7	-49.7	08	8.7
200	30	12,446	-53.4		07	9.9
175	30	13,292	-60.6		07	10.5
150	30	14,234	-68.3		07	10.0
125	30	15,307	-75.7		08	8.8
100	30	16,590	-75.4		09	8.7
80	30	17,902	-69.2		08	8.4
70	30	18,705	-65.9		08	6.6
60	29	19,648	-63.1		09	5.2
50	29	20,775	-60.5		09	4.6
40	29	22,173	-57.8		09	8.4
30	27	23,997	-54.3		09	19.8
25	27	25,169	-52.5		09	27.5
20	27	26,621	-49.1		09	32.7
15	27	28,523	-45.5		09	36.5
10	20	31,250	-40.2		09	41.3
7	14	33,700	-37.8		09	43.8
5	7	35,993	-36.6			

PORTLAND, MAINE 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	20	16.6	14.3	25	1.4
1000	31	151	17.3	13.6	27	1.9
950	31	588	17.3	11.[illegible]	26	2.9
900	31	1,051	14.8	7.6	26	3.2
850	31	1,533	12.1	5.2	25	4.8
800	31	2,039	9.4	1.2	25	7.0
750	31	2,570	7.0	-3.8	25	8.7
700	31	3,138	4.4	-8.8	25	10.1
650	31	3,733	1.2	-13.7	25	11.9
600	31	4,378	-2.5	-16.9	25	13.1
550	31	5,053	-6.4	-20.9	25	14.4
500	31	5,803	-11.0	-24.6	25	15.8
450	31	6,596	-16.3	-29.5	25	17.9
400	31	7,482	-22.3	-35.[illegible]	25	18.9
350	31	8,450	-29.1	-41.8	25	22.5
300	31	9,534	-37.4	-48.5	24	25.1
250	31	10,767	-46.9		25	28.8
200	31	12,213	-56.0		25	30.4
175	31	13,059	-57.3		25	25.5
150	31	14,030	-58.9		24	22.0
125	31	15,172	-59.5		25	17.2
100	31	16,569	-59.0		25	11.9
80	31	17,972	-57.8		24	6.7
70	31	18,816	-56.5		23	3.7
60	31	19,798	-55.1		21	1.6
50	31	20,967	-53.3		12	1.3
40	31	22,411	-51.3		10	2.4
30	30	24,291	-48.7		09	5.5
25	30	25,493	-47.3		09	6.4
20	29	26,975	-45.0		09	7.1
15	28	28,914	-41.8		09	9.1
10	20	31,663	-38.0		10	9.6
7	7	34,082	-34.1			
5						

* QUILLAYUTE, WASH. 1011 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	58	12.2	11.7	07	.6
1000	31	149	13.5	12.1	02	1.2
950	31	583	15.5	6.6	33	3.1
900	31	1,042	15.6	2.0	31	2.1
850	31	1,525	14.0	-2.7	28	1.5
800	31	2,034	11.9	-7.6	25	2.4
750	31	2,570	9.0	-10.7	24	3.1
700	31	3,139	5.6	-13.4	23	4.5
650	31	3,737	1.5	-16.3	23	5.9
600	31	4,379	-2.4	-21.7	23	7.0
550	31	5,056	-7.0	-24.4	23	8.0
500	31	5,800	-12.2	-27.7	23	8.9
450	31	6,590	-18.0	-33.0	23	9.9
400	31	7,466	-24.5	-37.8	23	11.3
350	31	8,424	-32.0	-43.4	23	12.5
300	31	9,493	-40.5	-49.5	24	12.4
250	31	10,71[illegible]	-49.4		24	14.1
200	31	12,147	-55.3		24	16.3
175	31	12,978	-55.3		24	16.5
150	31	13,960	-56.1		24	14.9
125	31	15,134	-57.5		24	11.9
100	31	16,540	-58.3		24	8.6
80	31	17,945	-57.7		24	4.1
70	31	18,788	-56.8		23	1.9
60	31	19,766	-55.9		19	1.1
50	31	20,929	-54.4		10	.6
40	30	22,365	-52.3		07	2.3
30	29	24,236	-49.6		08	3.0
25	29	25,433	-48.0		08	3.5
20	29	26,910	-46.0		08	5.4
15	29	28,833	-43.5		08	6.4
10	27	31,576	-39.8		09	7.1
7	[illegible]	34,031	-36.2		09	8.1
5	11	36,366	-32.3			

RAPID CITY, S. DAK. 9[illegible]8 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	[illegible]	15.4	5.3	31	2.0
1000	31	132				
950	31	575				
900	31	1,037	16.9	5.4	32	1.7
850	31	1,527	18.2	3.4	30	2.0
800	31	2,044	15.6	.4	30	2.5
750	31	2,579	12.0	-1.9	30	4.7
700	31	3,163	8.0	-5.5	30	6.4
650	31	3,76[illegible]	3.5	-8.4	30	8.7
600	31	4,414	-1.3	-11.9	30	9.7
550	31	5,092	-6.1	-17.2	30	9.6
500	30	5,842	-11.0	-23.4	30	11.4
450	30	6,6[illegible]4	-16.6	-30.2	30	12.6
400	30	7,518	-22.7	-37.8	30	13.7
350	30	8,484	-29.9	-43.4	30	15.0
300	30	9,564	-38.4	-49.9	30	18.2
250	30	10,792	-47.8		29	20.1
200	30	12,235	-56.1		30	22.2
175	30	13,080	-57.9		30	21.8
150	30	14,048	-59.9		30	18.0
125	30	15,180	-61.9		30	13.9
100	30	16,559	-62.0		31	9.2
80	30	17,945	-59.9		32	4.6
70	30	18,781	-58.4		34	3.7
60	30	19,757	-56.3		01	3.4
50	30	20,92[illegible]	-53.6		05	2.6
40	30	22,364	-51.3		07	3.4
30	30	24,243	-48.7		08	4.2
25	29	25,443	-47.3		08	5.1
20	27	26,923	-45.6		08	6.8
15	26	28,851	-43.1		08	8.0
10						
7						
5						

ST CLOUD, MINN. 9[illegible] MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	316	13.4	11.4	16	.6
1000	31	144				
950	31	583	16.2	11.3	23	2.2
900	31	1,039	14.8	8.2	27	4.1
850	31	1,521	12.5	2.7	29	4.6
800	31	2,027	9.5	-1.4	30	5.6
750	31	2,559	6.8	-6.9	31	7.0
700	31	3,125	3.9	-10.6	30	7.7
650	31	3,72[illegible]	.4	-13.8	30	8.9
600	31	4,361	-3.5	-15.8	30	9.1
550	31	5,038	-7.9	-19.4	30	9.2
500	31	5,779	-12.7	-27.6	30	10.7
450	31	6,565	-18.1	-32.2	30	11.6
400	31	7,445	-24.2	-37.7	30	12.2
350	31	8,405	-31.4	-44.6	30	13.2
300	31	9,477	-39.6	-50.5	30	15.7
250	31	10,700	-48.4		30	18.6
200	31	12,142	-55.7		30	21.0
175	31	12,990	-55.6		30	19.1
150	31	13,970	-56.7		30	18.9
125	31	15,123	-57.8		31	13.8
100	31	16,528	-58.4		31	9.7
80	31	17,934	-56.8		31	5.7
70	31	18,781	-55.7		32	4.7
60	31	19,766	-54.1		34	2.4
50	31	20,940	-52.4		01	1.3
40	31	22,386	-50.2		05	2.3
30	31	24,274	-48.1		08	3.8
25	30	25,475	-47.1		08	4.8
20	29	26,955	-45.4		06	5.5
15	28	28,845	-42.3		08	6.5
10	24	31,653	-39.0		08	8.4
7	21	34,120	-36.2		07	11.6
5	7	36,461	-34.3			

ST PAUL IS., ALASKA 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1[illegible]	8.9	7.5	24	1.2
1000	30	57			26	1.7
950	30	485	7.5	5.1	26	1.9
900	30	926	5.7	1.7	25	2.4
850	30	1,393	3.9	-.4	26	3.3
800	30	1,885	1.7	-3.3	25	2.9
750	30	2,405	-.7	-7.3	24	3.4
700	30	2,953	-3.5	-9.9	25	3.3
650	30	3,536	-7.3	-14.1	26	4.0
600	30	4,160	-10.0	-20.0	26	4.1
550	30	4,824	-14.0	-24.4	26	4.5
500	30	5,545	-18.5	-28.9	26	4.8
450	30	6,320	-23.8	-33.7	26	5.0
400	30	7,176	-29.7	-39.2	26	6.2
350	30	8,115	-36.7	-43.1	27	7.8
300	30	9,166	-44.1		27	9.1
250	30	10,372	-49.9		26	8.7
200	30	11,829	-49.4		26	11.0
175	30	12,7[illegible]6	-49.4		27	11.5
150	30	13,715	-49.8		27	9.7
125	30	14,9[illegible]6	-50.5		27	8.4
100	30	16,3[illegible]	-5[illegible].9		27	6.4
80	30	17,814	-50.6		27	4.9
70	30	18,684	-50.3		28	3.7
60	30	19,689	-49.9		28	2.3
50	30	[illegible]	-49.4		28	1.1
40	30	22,347	-48.7		30	.4
30	30	24,244	-47.3		06	.6
25	30	25,453	-46.2		07	1.5
20	30	26,940	-44.6		09	1.7
15	29	28,881	-42.1		09	2.5
10	22	31,654	-38.8		10	2.0
7	8	34,[illegible]	-35.7			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1967

SALEM, OREG. 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	13.5	9.9	21	.2
1000	31	140	15.8	1[illegible].5	01	.9
950	31	579	17.7	8.7	02	3.9
900	31	1,042	18.0	5.3	01	3.1
850	31	1,530	16.6	.2	33	.7
800	31	2,044	14.5	-4.9	24	1.8
750	31	2,582	11.4	-7.8	23	4.0
700	31	3,158	7.6	-9.6	23	5.5
650	31	3,758	3.6	-13.4	23	6.7
600	31	4,408	-1.0	-18.8	23	7.8
550	31	5,087	-5.8	-23.8	23	7.7
500	31	5,836	-10.9	-28.0	23	9.0
450	31	6,629	-17.1	-32.4	23	9.8
400	31	7,508	-23.8	-36.4	23	10.3
350	31	8,469	-31.2	-44.0	24	12.2
300	31	9,542	-39.5	-49.7	24	14.2
250	31	10,765	-46.5		24	16.6
200	30	12,208	-55.1		24	18.1
175	30	13,058	-56.4		24	18.3
150	30	14,033	-58.2		24	16.6
125	30	15,175	-60.3		24	12.1
100	30	16,562	-61.4		24	7.4
80	30	17,948	-60.3		23	2.4
70	30	18,781	-59.1		17	.8
60	30	19,750	-57.5		10	1.7
50	29	20,968	-55.3		09	2.2
40	29	22,340	-52.8		08	3.0
30	29	24,205	-50.4		08	4.2
25	29	25,399	-48.5		08	5.9
20	28	26,878	-46.1		08	7.3
15	25	28,801	-43.0		08	8.4
10	17	31,565	-39.3		09	9.9
7	9	34,023	-35.5			
5						
4						

SALT LAKE CITY, UTAH 873 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	18.5	7.2	16	2.9
1000	31	106				
950	31	557				
900	31	1,026				
850	31	1,523	23.1	6.3	15	4.4
800	31	2,050	21.1	3.4	16	3.0
750	31	2,600	17.0	.6	20	1.3
700	31	3,187	12.2	-2.2	26	2.1
650	31	3,799	7.0	-5.1	28	2.9
600	31	4,454	1.3	-8.7	28	3.0
550	31	5,138	-4.7	-13.1	28	3.8
500	31	5,889	-1[illegible].3	-20.2	29	4.8
450	31	6,689	-15.6	-27.3	29	5.2
400	31	7,572	-21.3	-34.2	28	6.9
350	31	8,543	-28.4	-39.8	27	8.7
300	31	9,629	-36.9	-47.2	27	11.7
250	31	10,864	-46.2		27	15.1
200	31	12,318	-54.9		27	18.3
175	31	13,163	-58.7		27	18.5
150	31	14,123	-62.6		28	15.6
125	31	15,237	-65.7		28	10.5
100	31	16,587	-66.3		30	4.8
80	31	17,947	-63.3		35	2.0
70	31	18,772	-60.9		04	2.3
60	31	19,735	-58.6		07	3.6
50	30	20,887	-56.1		08	3.7
40	30	22,313	-53.7		08	5.3
30	30	24,174	-50.8		09	7.0
25	29	25,367	-49.0		08	7.6
20	29	26,837	-46.9		08	9.1
15	27	28,754	-44.0		09	11.3
10	21	31,507	-39.7		10	12.3
7	14	33,942	-36.3		08	14.1
5	7	36,261	-33.2			
4						

SAN DIEGO, CALIF. 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	19.5	17.6	32	.9
1000	31	104				
950	31	552	21.0	14.2	35	.9
900	31	1,02[illegible]	25.5	6.1	35	1.5
850	31	1,522	23.9	3.5	35	1.7
800	31	2,048	2[illegible].5	3.0	09	.5
750	31	2,599	16.1	2.1	12	2.3
700	31	3,184	11.5	-1.5	12	3.5
650	31	3,794	6.5	-4.2	12	4.6
600	31	4,450	1.6	-9.8	12	3.8
550	31	5,141	-3.3	-15.2	12	2.4
500	31	5,894	-7.8	-21.6	09	1.5
450	31	6,702	-12.6	-29.9	09	1.0
400	31	7,598	-18.3	-36.2	24	1.6
350	31	8,582	-25.4	-41.3	23	2.6
300	31	9,682	-33.6	-48.2	21	4.6
250	31	10,937	-42.8		22	7.4
200	31	12,408	-53.4		22	10.0
175	31	13,256	-59.1		22	9.2
150	31	14,209	-64.9		22	7.7
125	31	15,306	-70.1		23	4.6
100	31	16,632	-69.7		08	2.5
80	31	17,970	-66.3		09	4.7
70	31	18,783	-63.6		09	6.4
60	31	19,737	-60.2		09	7.8
50	31	20,881	-57.3		09	9.1
40	31	22,299	-54.6		09	10.3
30	31	24,152	-51.7		09	12.0
25	30	25,338	-50.5		09	12.3
20	30	26,799	-48.5		09	13.7
15	28	28,703	-45.7		09	15.2
10	24	31,420	-41.9		09	17.4
7	17	33,888	-36.3		09	20.9
5	7	36,265	-32.0			
4						

• SAN JUAN, P. R. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	25.7	22.7	14	2.1
1000	31	153	25.1	21.3	11	5.3
950	31	595	22.1	18.[illegible]	09	8.9
900	31	1,072	19.1	14.3	10	8.7
850	31	1,562	16.4	9.5	10	8.7
800	31	2,076	13.7	4.7	10	7.6
750	31	2,611	10.9	-1.5	1[illegible]	6.9
700	31	3,19[illegible]	7.5	-4.[illegible]	1[illegible]	5.8
650	31	3,789	4.2	-10.0	09	5.2
600	31	4,445	1.0	-16.2	09	5.3
550	31	5,129	-2.4	-21.4	08	4.4
500	31	5,891	-6.7	-25.9	07	3.9
450	31	6,697	-11.7	-31.3	07	3.0
400	31	7,597	-18.1	-36.4	09	1.5
350	31	8,579	-25.9	-42.6	20	1.3
300	31	9,675	-34.8	-49.7	23	1.8
250	31	10,920	-44.8		25	2.5
200	31	12,375	-55.9		27	6.2
175	31	13,215	-60.5		25	6.1
150	31	14,164	-65.3		24	3.7
125	31	15,260	-69.9		16	1.2
100	30	16,577	-72.0		09	6.0
80	30	17,902	-67.8		09	11.1
70	29	18,708	-65.5		09	14.5
60	29	19,651	-62.7		09	15.8
50	29	20,784	-59.1		09	17.0
40	28	22,194	-55.8		09	18.3
30	27	24,039	-52.3		09	20.0
25	26	25,221	-50.4		09	22.4
20	25	26,683	-47.7		09	24.2
15	23	28,599	-43.7		09	25.3
10	22	31,348	-39.6		09	29.0
7	20	33,806	-36.9		10	28.8
5	7	36,170	-33.7			
4						

SAN NICOLAS, CALIF. 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	174	16.1	14.5	31	2.1
1000	31	108				
950	31	551	21.8	7.1	32	1.9
900	31	1,[illegible]23	25.7	4.2	30	1.5
850	31	1,524	23.9	2.6	27	.9
800	31	2,[illegible]	[illegible]	.2	2[illegible]	1.[illegible]
750	31	2,603	16.3	-1.4	18	2.2
700	31	3,185	11.6	-3.1	17	3.4
650	31	3,799	6.6	-6.7	16	4.1
600	31	4,450	1.5	-12.5	15	4.4
550	31	5,145	-3.2	-18.2	16	3.8
500	31	5,892	-8.0	-25.1	18	2.4
450	31	6,703	-13.2	-30.9	21	2.3
400	31	7,590	-19.1	-35.3	22	3.9
350	31	8,570	-26.4	-41.3	22	5.3
300	31	9,666	-34.5	-48.5	22	7.6
250	31	10,915	-43.8	-57.4	22	10.7
200	31	12,382	-53.6	-65.7	22	12.8
175	31	13,229	-59.2	-70.4	21	12.4
150	31	14,182	-65.1	-75.0	22	10.4
125	31	15,280	-69.5		21	7.7
100	31	16,611	-68.7		08	1.9
80	31	17,956	-65.5		10	5.5
70	31	18,773	-63.0		09	6.7
60	31	19,730	-59.6		10	8.1
50	31	20,878	-56.8		09	8.9
40	31	22,298	-54.9		09	10.7
30	29	24,154	-51.5		09	11.8
25	29	25,341	-50.3		09	12.4
20	29	26,806	-47.6		08	13.2
15	28	28,718	-45.1		09	15.0
10	26	31,459	-40.5		09	16.6
7	20	33,892	-35.1		10	18.4
5	15	36,245	-31.3		09	20.7
4	8	37,639	-29.3			

* SAULT STE MARIE, MICH. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	221	11.2	10.4	05	1.0
1000	31	142				
950	31	570	13.2	6.4	28	1.9
900	31	1,028	11.8	5.3	29	3.4
850	31	1,505	9.2	2.2	28	4.0
800	31	2,006	7.0	-2.5	29	5.1
750	31	2,533	4.9	-6.2	28	6.3
700	31	3,095	2.1	-10.4	28	7.1
650	31	3,686	-1.1	-14.4	28	6.7
600	31	4,324	-5.0	-17.4	28	7.7
550	30	4,998	-9.1	-22.2	29	8.4
500	30	5,735	-14.1	-28.1	29	9.1
450	30	6,519	-19.5	-33.5	29	10.0
400	30	7,391	-25.9	-39.4	29	9.7
350	30	8,343	-33.3	-45.4	29	11.1
300	30	9,408	-41.4	-50.0	29	11.4
250	30	10,621	-49.9		29	14.1
200	29	12,063	-54.0		29	14.9
175	29	12,921	-53.3		28	14.4
150	29	13,912	-54.1		28	13.2
125	29	15,078	-55.4		28	12.3
100	29	16,499	-55.7		28	9.0
80	29	17,923	-54.4		28	5.8
70	29	18,780	-53.5		27	4.3
60	29	19,773	-52.4		27	2.9
50	29	20,955	-51.1		28	1.6
40	29	22,410	-49.9		09	1.3
30	29	24,299	-47.7		09	3.6
25	29	25,507	-46.2		08	4.8
20	28	26,998	-44.2		08	6.8
15	27	28,938	-41.7		09	7.9
10	24	31,713	-37.1		09	9.9
7	12	34,150	-33.6			
5						

SHEMYA, ALASKA 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	38	9.2	8.9	25	1.8
1000	31	73			25	3.5
950	31	499	9.2	7.8	27	4.9
900	31	948	8.6	5.1	27	5.0
850	31	1,419	6.6	.8	28	5.6
800	31	1,916	4.8	-1.8	28	6.5
750	31	2,440	2.4	-5.6	28	6.4
700	31	2,996	-.4	-9.5	27	8.1
650	31	3,581	-3.5	-15.3	27	8.6
600	31	4,215	-6.9	-19.6	27	10.2
550	31	4,883	-11.1	-23.4	27	11.0
500	31	5,616	-15.6	-26.7	27	12.2
450	31	6,398	-20.7	-31.1	27	14.4
400	31	7,265	-26.8	-37.4	27	15.7
350	31	8,215	-33.6	-42.6	27	17.3
300	31	9,280	-41.6	-46.3	27	18.6
250	31	10,497	-48.2		27	20.7
200	31	11,957	-51.2		27	22.2
175	31	12,822	-52.5		27	21.9
150	31	13,817	-53.2		27	18.7
125	31	14,788	-54.2		27	15.5
100	31	16,417	-54.5		27	11.4
80	31	17,847	-54.0		27	7.8
70	31	18,705	-53.5		27	4.9
60	31	19,699	-52.5		27	2.7
50	31	20,879	-51.5		26	1.2
40	31	22,331	-50.3		08	.6
30	31	24,216	-48.5		10	1.9
25	30	25,417	-47.3		10	2.5
20	29	26,904	-45.5		09	3.5
15	27	28,825	-43.5		09	4.0
10	22	31,574	-40.0		08	2.6
7	15	34,024	-37.2		09	3.0
5	7	36,313	-36.0			

* SHREVEPORT, LA. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	21.4	19.2	16	.6
1000	31	144	21.7	19.0	18	1.1
950	31	596	21.4	16.4	21	3.0
900	31	1,059	19.1	13.2	19	2.0
850	31	1,549	16.0	10.0	14	.6
800	31	2,063	13.2	5.1	34	1.1
750	31	2,604	10.2	.6	35	1.9
700	31	3,175	6.8	-2.9	36	1.5
650	31	3,775	3.1	-6.8	35	1.8
600	31	4,425	-.7	-11.0	31	1.5
550	31	5,110	-4.6	-16.5	28	1.8
500	31	5,861	-8.5	-23.7	28	2.8
450	31	6,669	-13.9	-28.0	29	3.5
400	31	7,556	-20.0	-35.0	29	3.5
350	31	8,532	-27.3	-40.5	29	3.9
300	31	9,624	-35.6	-47.0	29	5.9
250	31	10,867	-45.0		28	7.4
200	31	12,324	-55.0		28	9.5
175	31	13,166	-60.2		29	9.1
150	31	14,117	-64.3		30	7.4
125	30	15,226	-67.3		32	4.8
100	30	16,566	-67.3		34	2.8
80	30	17,922	-63.6		07	3.2
70	30	18,744	-61.6		08	5.2
60	30	19,704	-59.2		09	7.4
50	30	20,852	-57.0		09	9.2
40	30	22,273	-54.4		09	10.1
30	30	24,128	-51.4		09	12.4
25	30	25,317	-49.3		09	13.3
20	30	26,786	-47.4		09	13.3
15	30	28,698	-44.8		09	15.0
10	29	31,433	-40.5		09	19.3
7	22	33,888	-35.3		10	20.7
5						

SPOKANE, WASH. 933 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	717	16.2	1.7	16	2.1
1000	31	117				
950	31	556				
900	31	1,025	22.3	2.6	21	1.8
850	31	1,519	20.0	-.3	24	2.8
800	31	2,037	15.9	-3.0	24	3.1
750	31	2,575	11.5	-5.5	24	3.4
700	31	3,153	7.3	-9.3	24	4.4
650	31	3,752	3.1	-13.3	25	6.1
600	31	4,401	-1.5	-16.5	26	8.3
550	31	5,079	-6.2	-21.8	26	9.2
500	31	5,826	-11.3	-26.7	26	10.1
450	31	6,616	-17.3	-31.4	26	10.4
400	31	7,498	-24.0	-37.4	26	11.7
350	31	8,457	-31.5	-43.1	26	13.4
300	31	9,530	-39.9	-49.9	26	13.6
250	31	10,751	-48.8		26	16.0
200	31	12,193	-55.0		26	18.8
175	31	13,044	-55.6		26	18.1
150	30	14,025	-56.8		27	15.4
125	30	15,175	-58.7		27	12.5
100	30	16,571	-60.0		27	8.1
80	30	17,965	-59.2		28	3.6
70	30	18,803	-58.2		29	1.9
60	30	19,776	-56.5		35	1.2
50	30	20,937	-54.4		05	1.7
40	30	22,374	-52.3		06	2.4
30	30	24,246	-49.4		06	3.7
25	30	25,446	-47.3		08	5.0
20	29	26,932	-45.5		08	5.6
15	29	28,863	-42.5		08	7.2
10	27	31,626	-37.5		04	8.3
7	21	34,113	-32.1		08	9.3
5	10	36,481	-29.2			

SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	26.7	23.6	09	4.4
1000	31	121	25.8	22.9	09	5.5
950	31	580	22.7	20.3	10	8.2
900	31	1,043	19.8	16.1	10	9.4
850	31	1,535	17.2	11.8	10	9.5
800	31	2,052	14.6	7.1	10	8.7
750	31	2,594	11.6	2.2	10	8.9
700	31	3,170	8.3	-2.0	11	9.2
650	31	3,779	4.6	-6.2	11	8.2
600	31	4,428	1.1	-11.1	11	7.4
550	31	5,117	-2.9	-15.1	11	6.6
500	31	5,874	-7.4	-20.4	11	5.7
450	31	6,685	-12.8	-24.4	11	5.0
400	31	7,577	-18.8	-29.7	10	3.6
350	31	8,559	-25.7	-35.9	07	3.2
300	31	9,658	-34.0	-44.3	05	2.3
250	31	10,908	-44.3		35	1.6
200	30	12,365	-56.6		26	2.9
175	30	13,199	-63.1		27	3.7
150	29	14,134	-68.2		33	3.2
125	27	15,222	-70.6		03	2.9
100	27	16,539	-72.5		09	7.4
80	27	17,861	-66.8		09	8.5
70	27	18,664	-66.3		08	11.2
60	27	19,604	-63.1		09	13.9
50	25	20,733	-60.6		09	16.3
40	24	22,134	-56.9		10	18.6
30	23	23,973	-52.8		09	21.5
25	22	25,157	-50.5		09	24.3
20	22	26,622	-46.9		09	27.5
15	19	28,547	-43.1		09	28.4
10	17	31,294	-40.7		09	35.1
7	7	33,745	-39.2			
5						

TAMPA, FLA. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	23.8	22.5	11	1.9
1000	31	151	24.0	21.6	13	3.2
950	31	598	22.3	18.8	17	3.1
900	31	1,070	19.6	15.1	18	2.4
850	31	1,562	16.8	11.5	19	2.4
800	31	2,077	13.9	7.7	20	2.6
750	31	2,614	10.8	3.8	20	2.7
700	31	3,192	7.6	-.4	20	2.7
650	31	3,797	4.4	-4.4	21	2.3
600	31	4,449	.8	-10.6	23	1.6
550	31	5,135	-3.2	-15.2	25	1.4
500	31	5,893	-7.3	-2[illegible]	25	1.4
450	31	6,701	-12.2	-25.4	26	1.1
400	31	7,596	-18.1	-32.4	34	.8
350	31	8,583	-25.0	-37.7	34	1.4
300	31	9,685	-33.4	-45.2	36	2.5
250	31	10,938	-43.4		02	4.6
200	31	12,401	-55.3		36	7.2
175	31	13,241	-61.5		01	7.4
150	31	14,184	-66.3		02	5.9
125	31	15,283	-6[illegible]		04	2.8
100	31	16,619	-68.7		[illegible]	4.1
80	31	17,964	-65.7		[illegible]	7.6
70	31	18,780	-63.2		08	10.3
60	31	19,734	-60.4		09	12.7
50	31	20,878	-57.4		09	13.3
40	31	22,296	-54.9		09	14.4
30	31	24,153	-51.1		09	16.3
25	31	25,343	-49.2		09	16.7
20	31	26,815	-46.7		[illegible]	16.2
15	28	28,736	-44.4		09	16.4
10	17	31,482	-4[illegible].2		09	17.7
7						
5						

TOPEKA, KANS. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	269	17.1	14.2	10	.7
1000	31	153				
950	31	595	20.0	1[illegible]	21	2.8
900	31	1,06[illegible]	18.4	8.[illegible]	23	2.5
850	31	1,548	15.6	5.2	28	2.4
800	31	2,061	13.2	.1	29	3.5
750	31	2,594	10.1	-3.3	29	3.7
700	31	3,172	6.4	-5.5	30	4.4
650	31	3,773	2.7	-8.8	30	4.6
600	31	4,421	-1.0	-13.3	30	5.7
550	31	5,100	-5.1	-19.1	30	5.4
500	31	5,854	-9.7	-23.5	30	6.9
450	30	6,654	-15.0	-29.6	30	7.3
400	30	7,542	-21.2	-35.1	30	8.8
350	30	8,513	-28.5	-41.0	31	11.2
300	30	9,600	-36.6	-47.5	31	13.4
250	30	10,837	-46.4		31	15.0
200	30	12,287	-56.1		30	16.3
175	30	13,130	-58.8		30	16.3
150	[illegible]	14,093	-60.9		31	15.3
125	30	15,220	-63.3		31	10.1
100	30	16,589	-63.2		31	8.3
80	30	17,969	-6[illegible].4		34	2.7
70	30	18,803	-58.5		04	1.6
60	30	19,777	-56.6		09	2.3
50	30	20,939	-54.7		09	3.9
40	30	22,372	-52.8		09	5.6
30	30	24,23[illegible]	-50.0		09	7.8
25	29	25,439	-4[illegible]		[illegible]	[illegible].8
20	28	26,915	-46.3		08	[illegible].4
15	26	28,834	-43.9		08	11.0
10	19	31,559	-39.4			
7	5	34,000	-36.7			
5						

+ TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	27.8	24.2	24	.9
1000	31	90	27.1	23.[illegible]	24	1.1
950	31	53[illegible]	23.7	1[illegible].9	23	2.1
900	31	1,015	20.9	15.2	21	2.4
850	31	1,509	16.4	11.9	17	1.7
800	31	2,028	15.6	8.6	14	2.0
750	31	2,577	12.8	4.9	13	2.6
700	31	3,152	9.7	1.2	11	3.6
650	31	3,765	6.2	-2.3	10	4.7
600	31	4,418	2.5	-6.5	10	5.9
550	31	5,111	-1.0	-10.4	10	6.2
500	31	5,673	-5.1	-15.6	1[illegible]	6.8
450	31	6,695	-9.7	-21.4	10	7.6
400	31	7,598	-15.1	-28.[illegible]	10	8.0
350	31	8,595	-21.8	-35.[illegible]	09	8.2
300	31	9,712	-30.2	-43.7	09	9.1
250	31	10,983	-4[illegible].6	-5[illegible].8	08	9.7
200	31	12,463	-53.1		07	12.0
175	31	13,310	-60.4		07	13.7
150	31	14,253	-66.3		07	14.2
125	31	15,326	-75.8		08	13.0
100	31	16,609	-75.6		08	12.0
80	31	17,921	-69.1		09	9.5
70	31	18,726	-65.5		09	7.1
60	31	19,669	-62.9		[illegible]	6.4
50	31	20,800	-60.0		[illegible]	5.7
40	31	22,2[illegible]	-57.8		[illegible]	10.0
30	30	24,030	-53.9		[illegible]	21.9
25	[illegible]	[illegible]	-51.7		[illegible]	28.0
20	17	26,681	-49.5		[illegible]	33.2
15	8	28,548	-45.6			
10						
7						
5						

* TUCSON, ARIZ. 925 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	789	23.8	16.3	14	2.8
1000	31	94				
950	31	549				
900	31	1,025	25.3	13.6	12	2.4
850	31	1,526	22.9	10.5	08	1.8
800	31	2,051	19.4	8.[illegible]	07	1.8
750	31	2,599	15.3	5.[illegible]	07	2.6
700	31	3,184	10.8	3.2	08	3.2
650	31	3,795	6.2	-.1	09	3.6
600	31	4,450	1.6	-5.2	10	3.8
550	31	5,138	-3.0	-10.1	10	3.9
500	31	5,895	-7.6	-17.8	09	2.5
450	31	6,7[illegible]2	-12.4	-24.4	[illegible]7	1.6
400	31	7,600	-18.3	-29.7	[illegible]	1.5
350	31	8,583	-25.1	-36.3	31	1.5
300	31	9,685	-33.3	-44.0	2[illegible]	2.1
250	31	10,944	-42.9		27	4.5
200	31	12,407	-54.2		28	5.5
175	31	13,251	-60.0		28	6.1
150	31	14,1[illegible]	-66.1		30	5.4
125	31	15,291	-70.6		33	2.6
100	30	16,607	-71.5		04	3.4
80	30	17,942	-66.0		[illegible]	[illegible].5
70	30	18,756	-63.3		08	6.7
60	30	19,709	-6[illegible].8		09	8.8
50	30	20,85[illegible]	-5[illegible].1		09	1[illegible].3
40	29	22,265	-55.1		09	11.7
30	29	24,115	-5[illegible].2		[illegible]	11.7
25	29	25,298	-5[illegible].8		[illegible]	11.3
20	29	26,757	-48.8		[illegible]	13.1
15	29	28,681	-45.4		09	14.8
10	27	31,397	-40.5		09	17.2
7	25	33,636	-36.2		[illegible]	20.5
5	8	36,[illegible]90	-32.7			

* VANDENBERG AFB, CALIF. 1022 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1[illegible]0	13.3	13.2	33	.2
1000	31	117			36	.3
950	31	56[illegible]	18.6	5.3	03	1.6
900	31	1,022	24.8	-.3	06	1.9
850	31	1,522	22.9	-2.3	08	2.0
800	31	2,046	19.4	-4.2	13	1.3
750	31	2,594	15.6	-6.1	18	2.5
700	31	3,177	11.3	-9.6	19	3.7
650	31	3,786	6.7	-13.2	18	4.2
600	31	4,442	2.0	-18.[illegible]	18	3.9
550	31	5,130	-2.9	-22.9	17	3.3
500	30	5,883	-8.1	-27.9	19	3.2
450	30	6,69[illegible]	-13.5	-32.7	21	3.4
400	30	7,580	-19.8	-37.1	22	[illegible].1
350	30	8,557	-26.8	-42.9	2[illegible]	7.3
300	30	9,65[illegible]	-35.0	-49.9	22	1[illegible].0
250	30	10,896	-44.2		22	12.0
200	30	12,363	-53.8		22	14.5
175	30	13,211	-58.9		22	14.2
150	29	14,167	-64.2		22	11.4
125	28	15,266	-68.7		22	8.2
100	26	16,544	-68.3		17	1.2
80	26	17,945	-65.4		09	3.3
70	26	18,743	-62.7		09	5.4
60	26	19,714	-59.6		10	6.3
50	26	20,866	-56.9		09	6.8
40	26	22,285	-54.8		09	8.7
30	26	24,135	-52.3		09	10.5
25	2[illegible]	25,316	-50.7		[illegible]8	11.8
20	25	26,778	-48.0		09	12.9
15	24	28,688	-45.6		09	13.1
10	24	31,415	-41.5		09	16.8
7	2[illegible]	33,652	-37.1		09	18.3
5	5	36,171	-3[illegible].7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

AUGUST 1967

VICTORIA, TEXAS — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	33	23.6	21.5	05	1.1
1000	31	137	23.8	21.6	12	1.6
950	31	584	21.7	18.9	18	4.3
900	31	1,055	19.6	13.2	17	4.4
850	31	1,545	16.9	9.4	17	3.9
800	31	2,060	14.1	5.1	15	2.9
750	31	2,598	10.9	1.7	12	1.9
700	31	3,175	7.4	-2.[illegible]	11	1.1
650	31	3,777	3.9	-6.1	16	.7
600	31	4,429	.6	-10.9	15	.9
550	31	5,115	-3.1	-16.2	18	.7
500	31	5,872	-7.4	-20.7	16	.8
450	31	6,679	-12.3	-26.7	23	.7
400	31	7,577	-18.4	-29.6	27	1.5
350	31	8,559	-25.7	-35.4	28	2.6
300	31	9,657	-34.1	-44.3	28	3.1
250	31	10,907	-44.0		29	5.0
200	31	12,366	-55.2		3[illegible]	5.6
175	31	13,210	-60.8		32	6.3
150	31	14,156	-66.3		33	5.1
125	31	15,248	-70.2		35	3.7
100	31	16,571	-70.4		03	4.0
80	30	17,911	-65.5		08	6.0
70	30	18,726	-63.2		09	7.3
60	30	19,678	-61.2		09	8.9
50	29	20,817	-58.6		09	10.5
40	29	22,228	-55.7		09	12.7
30	28	24,073	-51.9		09	14.5
25	26	25,258	-49.8		09	14.6
20	25	26,720	-47.8		09	14.1
15	23	28,634	-45.8		08	16.1
10	19	31,358	-41.2		09	18.9
7	8	33,824	-39.3			
5						

* WAKE IS., PACIFIC AREA — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	27.8	24.9	10	3.7
1000	31	106	27.0	24.4	10	4.0
950	31	555	23.5	21.7	10	5.2
900	31	1,031	20.7	18.2	11	5.7
850	31	1,525	18.0	14.9	11	5.2
800	31	2,043	15.4	11.3	12	4.9
750	31	2,585	12.7	8.2	12	4.4
700	31	3,167	9.5	1.8	12	3.5
650	31	3,775	5.9	-.6	12	3.1
600	31	4,431	2.2	-4.9	13	2.5
550	31	5,125	-1.9	-8.9	12	1.8
500	31	5,882	-6.1	-13.9	12	1.1
450	31	6,696	-11.0	-20.7	12	.9
400	31	7,597	-16.6	-25.7	05	.3
350	31	8,588	-23.4	-32.9	01	.3
300	31	9,697	-31.8	-41.7	32	1.3
250	31	10,959	-42.2		31	2.0
200	31	12,429	-54.6		29	3.1
175	31	13,270	-61.6		30	4.9
150	31	14,209	-66.5		32	4.0
125	29	15,284	-73.5		02	3.4
100	25	16,583	-72.3		07	7.1
80	25	17,909	-68.2		08	11.4
70	25	18,713	-66.0		09	13.2
60	24	19,653	-62.9		09	15.4
50	24	20,785	-59.6		09	18.0
40	24	22,190	-56.4		09	19.0
30	24	24,031	-53.0		09	21.0
25	23	25,213	-51.2		09	22.6
20	21	26,675	-48.4		09	24.2
15	21	28,583	-44.9		09	25.6
10	19	31,309	-42.1		09	25.9
7	18	33,735	-39.0		09	28.7
5	6	36,036	-36.6			

* WALLOPS IS., VA. NASA — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	19.1	18.8	20	.5
1000	31	162	21.1	18.9	23	1.5
950	31	607	19.6	16.0	26	3.1
900	31	1,072	17.0	13.0	26	3.7
850	31	1,558	14.2	9.7	25	4.9
800	31	2,069	11.5	6.0	24	6.1
750	31	2,602	8.6	1.9	24	7.9
700	31	3,175	5.4	-2.5	24	9.3
650	31	3,773	2.2	-7.5	24	10.0
600	31	4,422	-1.0	-12.0	24	11.4
550	31	5,104	-4.7	-16.8	24	11.6
500	31	5,857	-9.0	-21.3	24	12.3
450	31	6,663	-14.1	-26.8	24	12.9
400	31	7,550	-20.1	-32.7	24	14.3
350	31	8,526	-27.0	-39.0	24	16.0
300	31	9,620	-35.3	-47.1	24	17.3
250	31	10,864	-45.4		24	1[illegible].4
200	31	12,314	-56.9		25	21.1
175	31	13,149	-61.7		25	19.8
150	31	14,100	-63.2		25	15.5
125	31	15,218	-64.1		25	12.5
100	31	16,585	-63.4		24	6.4
80	31	17,464	-61.2		18	1.4
70	31	18,794	-59.9		10	2.3
60	31	19,760	-58.1		09	5.0
50	31	20,913	-56.1		09	6.6
40	29	22,345	-53.5		09	8.0
30	27	24,2[illegible]5	-50.5		08	10.1
25	26	25,395	-48.7		09	11.9
20	25	26,868	-46.6		09	13.2
15	23	28,787	-43.8		09	13.8
10	19	31,528	-39.7		09	14.4
7	11	33,959	-35.2			
5						

WASHINGTON DULLES INT. AP — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	85	17.6	16.7	34	.6
1000	30	158	18.4	16.7	33	.8
950	30	615	19.2	14.4	30	1.9
900	30	1,064	16.5	11.1	29	2.2
850	30	1,549	13.3	8.1	27	3.1
800	30	2,057	10.4	4.0	27	4.6
750	30	2,600	7.7	-.3	26	6.0
700	30	3,159	5.3	-6.3	25	7.4
650	30	3,765	2.3	-10.6	25	8.7
600	30	4,405	-1.5	-14.3	25	10.0
550	30	5,089	-5.2	-18.9	25	10.9
500	30	5,836	-9.4	-24.1	25	12.5
450	30	6,640	-14.8	-28.5	24	13.9
400	30	7,524	-20.8	-33.7	24	16.4
350	30	8,497	-28.2	-40.1	24	18.5
300	30	9,585	-36.4	-47.8	24	20.6
250	30	10,825	-45.8		24	24.6
200	30	12,276	-56.2		25	25.1
175	30	13,116	-60.0		25	23.0
150	30	14,076	-60.9		25	18.0
125	29	15,206	-62.6		25	13.9
100	29	16,583	-62.0		25	9.2
80	29	17,969	-60.0		22	2.3
70	29	18,804	-58.8		14	.7
60	29	19,777	-56.9		11	2.6
50	29	20,936	-55.0		08	4.6
40	29	22,369	-52.6		09	5.9
30	29	24,240	-49.4		09	8.5
25	28	25,443	-47.7		09	8.6
20	28	26,921	-46.2		09	10.2
15	28	28,843	-43.7		09	12.4
10	24	31,592	-40.1		09	13.0
7	17	34,048	-37.0		1[illegible]	13.8
5	8	36,401	-33.2			

WINNEMUCCA, NEV. — 871 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,310	15.8	1.3	16	1.5
1000	30	113				
950	30	562				
900	30	1,032				
850	30	1,523	22.2	3.8	16	1.2
800	30	2,047	19.9	.9	27	1.2
750	30	2,592	16.2	-2.0	27	1.7
700	30	3,181	11.8	-4.2	23	2.3
650	30	3,788	6.6	-7.0	21	4.3
600	30	4,447	1.3	-9.4	21	6.9
550	30	5,132	-4.4	-13.1	21	8.6
500	30	5,884	-9.7	-21.1	22	7.8
450	30	6,684	-15.1	-26.8	24	6.9
400	30	7,571	-21.2	-33.6	25	7.8
350	30	8,543	-28.3	-39.8	25	9.8
300	30	9,630	-36.7	-46.7	25	12.7
250	30	10,867	-45.6		25	16.0
200	30	12,324	-54.1		25	18.6
175	30	13,173	-57.6		25	18.7
150	30	14,136	-61.5		25	15.7
125	29	15,256	-64.4		26	11.3
100	27	16,613	-65.2		25	3.6
80	27	17,980	-62.7		15	.3
70	27	18,806	-6[illegible].9		09	2.1
60	24	19,768	-58.7		08	3.5
50	24	20,921	-55.9		08	4.3
40	24	22,349	-53.2		08	5.4
30	23	24,214	-50.6		08	6.9
25	22	25,403	-49.2		09	8.1
20	22	26,874	-47.9		09	10.0
15	20	28,784	-44.5		08	9.7
10	15	31,529	-40.1			
7						
5						

WINSLOW, ARIZ. — 854 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,492	17.6	[illegible].9	16	1.4
1000	31	116				
950	31	572				
900	31	1,037				
850	31	1,535	18.0	9.[illegible]	1[illegible]	1.5
800	31	2,057	19.1	8.5	1[illegible]	.5
750	31	2,6[illegible]5	16.2	5.2	03	.4
700	31	3,192	11.9	2.1	36	.5
650	31	3,804	7.0	-.7	[illegible]	1.4
600	31	4,461	1.8	-3.5	06	2.3
550	31	5,153	-3.7	-7.2	05	2.3
500	31	5,904	-8.5	-13.6	06	2.2
450	31	6,710	-13.3	-22.[illegible]	[illegible]	1.6
400	31	7,603	-19.1	-28.9	33	2.4
350	31	8,583	-25.9	-35.7	[illegible]	3.7
300	31	9,682	-34.0	-44.[illegible]	29	7.2
250	31	10,935	-43.4		28	10.1
200	31	12,401	-54.2		28	11.6
175	31	13,247	-59.6		28	11.9
150	31	14,199	-64.8		29	10.1
125	30	15,297	-69.1		30	6.7
100	30	16,625	-69.8		35	3.2
80	30	17,964	-65.8		06	3.8
70	30	18,776	-63.5		09	4.5
60	30	19,732	-60.3		08	6.3
50	30	20,875	-57.8		09	8.3
40	29	22,291	-55.3		09	9.5
30	27	24,141	-51.9		09	11.4
25	26	25,327	-49.9		09	11.0
20	24	26,788	-48.5		09	12.0
15	21	28,687	-46.3		09	14.8
10	8	31,422	-42.0			
7						

YAKUTAT, ALASKA — 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	9.5	9.2	09	1.5
1000	31	12[illegible]	10.5	9.7	1[illegible]	2.1
950	31	546	9.8	8.1	13	3.6
900	31	997	7.4	5.7	15	4.7
850	31	1,466	5.0	2.2	15	5.7
800	31	1,959	2.7	-1.6	16	5.7
750	31	2,481	.5	-5.4	17	6.0
700	31	3,032	-2.1	-8.5	19	5.8
650	31	3,616	-5.4	-11.2	2[illegible]	5.8
600	31	4,243	-9.1	-14.[illegible]	20	6.3
550	31	4,911	-13.1	-18.6	2[illegible]	6.9
500	31	5,632	-18.0	-24.2	[illegible]	7.1
450	31	6,408	-23.5	-31.7	20	8.0
400	31	7,264	-29.7	-39.8	20	8.1
350	31	8,202	-36.8	-42.6	20	8.7
300	31	9,252	-44.3		21	10.0
250	31	10,454	-51.2		22	10.5
200	31	11,894	-53.2		23	9.0
175	31	12,755	-52.1		23	7.8
150	31	13,755	-51.4		23	7.7
125	31	14,939	-51.5		24	7.0
100	31	16,388	-51.4		24	5.4
80	31	17,838	-50.8		24	4.8
70	31	18,708	-50.4		24	4.0
60	31	19,714	-50.0		24	2.7
50	30	20,907	-49.5		25	1.7
40	30	22,370	-48.8		27	.7
30	30	24,265	-47.5		[illegible]	.5
25	29	25,467	-46.4		10	.5
20	27	26,964	-44.5		18	1.4
15	24	28,899	-42.4		07	2.3
10	15	31,695	-38.3			
7	6	34,141	-36.2			

* YAP, CAROLINE IS. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	17	27.7	24.7	24	1.6
1000	31	81	27.0	23.7	25	2.3
950	31	529	23.4	19.1	26	5.0
900	31	1,005	20.7	15.7	27	4.9
850	31	1,499	18.0	12.6	27	4.3
800	31	2,016	15.3	9.4	26	3.3
750	31	2,557	12.6	5.7	26	1.9
700	31	3,13[illegible]	9.5	2.3	25	1.0
650	31	3,747	6.1	-1.3	22	1.3
600	31	4,404	2.3	-4.6	14	2.1
550	31	5,[illegible]98	-1.3	-9.5	12	3.7
500	31	5,858	-5.4	-15.2	12	5.5
450	31	6,675	-10.0	-21.2	11	6.1
400	31	7,58[illegible]	-15.6	-27.7	11	6.8
350	31	8,573	-22.4	-35.6	10	8.2
300	31	9,667	-31.7	-43.6	09	10.1
250	31	10,956	-41.9	-49.7	08	12.1
200	31	12,433	-53.7		07	15.0
175	31	13,278	-60.9		07	16.9
150	31	14,219	-68.5		07	18.9
125	31	15,291	-76.0		[illegible]7	18.1
100	31	16,566	-76.8		[illegible]8	15.6
80	31	17,873	-69.3		[illegible]	12.6
70	31	18,675	-66.2		[illegible]9	11.0
60	31	19,613	-63.9		08	11.4
50	31	20,737	-61.2		09	11.2
40	30	22,127	-58.8		09	14.1
30	28	23,949	-54.7		09	22.1
25	28	25,122	-51.9		09	29.3
20	27	26,576	-49.4		09	33.6
15	23	28,471	-46.0		09	38.9
10	21	31,204	-43.2		09	44.8
7	7	33,606	-37.5			

YUCCA FLAT, NEV. — 893 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,196	19.7	[illegible]	29	.4
1000	31	[illegible]				
950	31	548				
900	31	1,026				
850	31	1,524	24.3	8.1	27	.8
800	31	2,054	21.3	5.1	22	2.7
750	31	2,603	17.2	2.4	22	3.6
700	31	3,192	12.5	-.3	20	3.2
650	31	3,80[illegible]	7.1	-2.8	18	2.8
600	31	4,461	1.4	-5.[illegible]	15	3.9
550	31	5,146	-4.1	-10.6	15	4.1
500	31	5,901	-8.9	-17.5	16	3.6
450	31	6,7[illegible]	-13.9	-24.0	24	3.2
400	31	7,596	-19.6	-31.6	25	4.8
350	31	8,574	-26.6	-37.8	25	6.5
300	31	9,67[illegible]	-34.9	-46.0	25	9.1
250	31	10,917	-44.1		25	11.9
200	31	12,383	-53.8		24	13.1
175	31	13,231	-58.5		25	13.4
150	31	14,189	-63.7		25	11.5
125	31	15,295	-67.8		26	8.3
100	30	16,635	-67.6		26	1.1
80	29	17,987	-64.5		06	1.9
70	29	18,809	-61.3		08	3.4
60	29	19,771	-58.5		09	5.0
50	27	20,923	-56.1		09	6.0
40	27	22,349	-54.0		09	7.4
30	27	24,207	-51.0		09	9.3
25	26	25,395	-49.7		09	10.2
20	24	26,865	-47.8		09	11.7
15	22	28,773	-45.3		09	12.9
10	13	31,481	-42.9			
7						

YUMA, ARIZ. — 975 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	23	131	29.[illegible]	15.5	32	.2
1000	23	83				
950	23	542	30.2	11.6	2[illegible]	.9
900	23	1,022	27.3	8.6	21	2.4
850	23	1,525	24.2	6.7	18	2.4
800	23	2,052	2[illegible].2	5.6	13	2.4
750	23	2,596	15.7	4.1	11	3.5
700	23	3,185	11.0	1.6	12	3.3
650	23	3,79[illegible]	6.0	-.5	11	4.5
600	23	4,450	1.4	-5.2	10	5.2
550	23	5,136	-3.4	-10.4	09	5.4
500	23	5,893	-7.8	-16.3	09	3.6
450	23	6,697	-12.5	-27.2	06	2.3
400	23	7,595	-18.8	-32.6	10	1.3
350	23	8,576	-25.9	-38.4	19	2.6
300	23	9,674	-34.0	-45.9	24	4.6
250	22	10,923	-43.4		22	5.8
200	22	12,387	-54.4		23	7.1
175	22	13,232	-59.7		24	6.8
150	19	14,177	-64.7		26	6.1
125	15	15,277	-68.6		26	2.3
100	13	16,603	-69.3		01	.4
80	9	17,941	-65.5			
70	9	18,759	-62.9			
60	9	19,716	-59.3			
50	9	20,864	-57.4			
40	9	22,286	-54.2			
30	8	24,142	-51.4			
25	8	25,331	-49.7			
20	8	26,800	-47.3			
15	8	28,717	-44.7			
10	6	31,468	-41.0			
7						

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

MADISON, WIS.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Aug.									
4-----	S 0.78	S 0.88	S 0.97	S 1.14	----	----	----	----	----
5-----	----	----	M .81	S .97	----	----	----	----	----
9-----	S .71	S .81	----	----	----	----	----	----	----
12----	S .81	S .91	S 1.03	S 1.18	----	M 1.10	M 0.98	M 0.91	M 0.82
13----	M .67	M .77	M .89	S 1.05	----	----	----	----	----
16----	----	----	----	HI .75	HM1.14	HM .68	HM .39	HM .28	HM .16
28----	S .88	S .97	S 1.05	S 1.21	S 1.39	----	----	----	----
31----	S .80	S .90	S 1.04	S 1.16	----	----	----	----	----
Averages	0.78	0.87	0.97	1.07	1.27	0.89	0.69	0.60	0.49

TUCSON, ARIZ.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Aug.									
1-3---		Inoperable							
6-7---		Inoperable							
8-----	----	----	----	1.03	----	----	----	----	----
12----	0.06	0.08	0.13	0.29	1.14	----	----	----	----
13----	----	----	----	----	----	0.67	0.47	0.34	0.24
14----	----	----	.97	1.10	1.27	----	----	----	----
15----	.73	.82	.93	1.09	1.30	1.10	.90	.78	.68
16----	.71	.82	.93	1.08	1.30	1.06	.90	.74	.61
17----	.71	.82	.92	1.11	1.27	1.08	.88	.74	.62
18----	.70	.79	.90	1.04	1.22	----	----	----	----
19----	----	----	.93	1.09	1.28	----	.90	.77	.65
20----	----	.80	.92	1.09	1.29	1.07	.87	----	.63
21----	.58	.66	.80	1.02	1.27	----	----	----	----
22----	.36	.40	.57	.80	1.21	.97	.69	.65	----
23----	.20	.24	.36	.57	1.21	.93	----	----	----
24----	.08	.11	.10	.33	1.17	----	----	----	----
25----	----	----	----	.11	.83	.61	.44	.36	.29
26----	----	----	----	----	.49	.34	.25	.19	.17
28----	----	----	----	----	1.20	----	.74	.62	.50
29----	.63	.73	.87	1.02	1.25	1.02	.88	.73	.62
30----	.83	.91	1.03	1.18	1.34	1.17	.99	.85	.70
31----	.72	----	.97	1.13	----	.34	----	----	----
Averages	0.52	0.59	0.75	0.88	1.17	0.86	0.74	0.61	0.51

ALBUQUERQUE, N. MEX.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19

No observations due to equipment struck by lightning - expect operation September

GUAM, M. I.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92

No observations due to cloudiness

BLUE HILL OBS., MASS.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Aug.									
2-----	----	0.[illegible]	0.65	0.87	----	----	----	----	----
29----	0.[illegible]	.[illegible]	.79	.99	----	0.89	0.74	.60	0.47
30----	.[illegible]	.[illegible]	.87	1.01	----	----	----	----	----
Averages	0.60	0.65	0.77	0.96	----	0.89	0.74	0.60	0.47

OMAHA, NEBR.

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Aug.									
2-----	HI0.70	----	----	HM1.07	1.23	----	----	----	----
3-----	----	----	----	----	----	----	HS0.93	HS0.80	HS0.[illegible]
4-----	HS .72	HS0.80	HS0.94	HS1.06	HS1.12	HS0.96	HS .81	HS .65	HS .55
12----	HS .65	HS .76	HS .88	HS1.04	----	----	----	----	----
16----	----	----	HM .89	HM .98	HM1.14	HM .88	----	----	----
19----	----	----	HS .94	HS1.12	HS1.28	HS1.08	HS .90	HS .80	HS .68
20----	HM .67	HM .79	HM .85	----	----	----	----	----	----
21----	----	----	----	HM .94	HM1.12	HM .84	HS .63	----	----
22----	----	----	----	----	----	HM .90	HM .75	HM .60	HM .48
23----	----	HM .45	HM .57	HI .77	HI1.02	HI .79	HI .58	HI .47	HI .38
27----	----	----	----	HS1.22	HS1.32	----	HS1.01	----	HS .82
28----	HS .73	HS .82	HS .96	HS1.10	HS1.25	HS .98	HS .80	HS .70	HS .57
29----	----	----	----	----	----	----	HM .74	----	----
31----	HS .83	HS .86	HS1.04	HS1.19	HS1.32	----	----	----	----
Averages	0.72	0.75	0.88	1.05	1.20	0.92	0.79	0.67	0.60

MAUNA LOA OBS., HAWAII

Date	A M 78.7°	75.7°	70.7°	60.0°	*	P M 60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Aug.									
1-----	1.08	1.15	1.25	1.36	----	----	----	----	----
2-----	1.08	1.15	1.25	1.36	----	----	----	----	----
5-----	----	----	----	----	1.53	----	----	----	----
6-----	1.08	1.17	1.26	1.37	1.54	----	----	----	----
7-----	1.10	1.18	1.28	1.38	----	----	----	----	----
11----	1.05	1.13	1.23	1.34	----	----	----	----	----
13----	1.09	1.12	1.21	----	----	----	----	----	----
14----	1.05	1.14	1.24	----	----	----	----	----	----
16----	1.10	1.18	1.27	1.39	1.[illegible]	1.[illegible]	1.[illegible]	1.13	1.05
17----	1.11	1.18	1.27	1.38	----	----	----	----	----
18----	1.07	1.14	1.24	1.36	----	----	----	----	----
19----	1.08	1.16	1.26	1.38	----	----	----	----	----
20----	1.13	1.22	1.30	1.41	1.56	1.39	1.[illegible]	1.17	1.[illegible]
21----	1.14	1.22	1.31	1.42	----	----	----	----	----
22----	1.13	1.21	1.29	1.40	----	----	----	----	----
28----	1.12	1.20	1.29	1.40	1.[illegible]	----	----	----	----
29----	1.10	1.18	1.27	1.40	----	----	----	----	----
Averages	1.09	1.17	1.26	1.38	1.54	1.37	1.[illegible]	1.[illegible]	1.[illegible]

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon

HS Slight haze
HM Moderate haze
HI Intense haze

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OAK RIDGE TENNESSEE	499	355	365	511	498	666	571	529	110	441	537	422	464	593	586	408	322	429	385	331	333	210	342	218	310	210	392	541	574	519	453	423
OKLAHOMA CITY OKLA.	378	661	363	112	522	675	644	662	363	560	669	700	682	569	621	497	240	598	562	502	333	624	533	578	567	342	652	596	579	544	458	528
PAGE ARIZONA	488	682	630	637	589	274	315	568	529	633	704	711	578	620	348*	---	553*	553	439	630	475	618	622	614	606	574	532	542	471	561	464	552*
PALMER AAES ALASKA	---	504	472	448	153	201	110	263	254	114	269	89	64	182	214	44	175	179	177	267	301	411	249	140	192	250	378	364	142	275	238	237
PHOENIX ARIZONA	577	620	207	609	429	615	624	547	420	557	629	649	643	534	639	615	638	608	627	608	628	594	546	595	617	621	614	605	613	298	577	571
PORTLAND MAINE	413	645	101	204	429	102	569	---	548	320	478	365	318	381	610	560	500	517	431	209	483	493	619	598	551	---	188	404	505	542	206	423
PROSSER WASHINGTON	678	668	636	675	676	666	649	652	636	443	554	619	648	638	598	614	628	601	465	471	610	612	598	617	606	392	---	532	458	540	500	589
RAPID CITY S.DAK.	597	542	630	576	526	621	340	621	579	599	597	437	582	363	443	569	390	374	597	522	494	342	550	547	340	582	534	377	497	365	203	495
RENO NEVADA	645	637	636	650	655	649	627	445	590	575	545	609	609	599	337	542	588	559	543	503	561	557	525	419	465	473	527	425	542	550	544	553
RICHLAND 25 NW WASH.	638	646	621	639	632	557	537	617	602	481	495	581	591	608	583	583	641	637	633	629	624	620	616	611	607	692	598	593	588	583	578	599
RIVERSIDE CALIFORNIA	560	566	581	593	590	588	381	600	531	595	593	584	578	575	492	540	497	544	465	545	545	495	394	452	550	549	589	555	543	440	357	531
RUSTON LOUISIANA	526	366	573	518	453	434	561	562	536	239	554	653	665	564	433	432	492	530	355	524	487	269	321	480	328	346	319	438	539	549	---	460
SAINT CLOUD MINN.	252	563	485	602	657	398	313	540	539	595	659	648	539	576	575	431	550	251	634	390	606	562	175	552	43	434	597	391	446	534	578	488
SAN ANTONIO TEXAS	581	633	667	626	626	636	661	644	646	622	447	626	669	639	598	594	465	---	33	559	568	[illegible]	361	325	607	620	572	178	368	505	336	534
SANTA MARIA CALIF.	606	517	614	674	668	570	493	505	394	541	623	616	616	630	586	601	619	627	595	565	595	580	539	576	530	520	500	535	622	549	546	573
SAULT STE MARIE MICH	609	505	360	504	654	550	254	512	257	684	683	675	561	509	604	548	347	201	656	409	413	594	600	599	457	456	135	576	316	504	558	494
SEATTLE TACOMA WASH.	698	674	660	578	401	312	511	671	652	447	575	637	640	626	619	621	581	615	604	466	461	587	321	587	587	564	467	522	454	354	349	542
SPOKANE WASHINGTON	690	665	655	664	672	454	427	621	632	604	539	601	618	630	622	604	601	564	606	463	548	588	577	564	596	515	240	522	527	540	524	571
STATE COLLEGE PENN.	564	560	403	552	601	496	430	610	221	532	499	636	292	604	560	542	479	447	376	267	404	488	302	66	139	146	174	382	580	476	243	422
STERLING VIRGINA	584	540	449	388	298	617	400	519	529	585	---	554	328	691	585	493	493	520	355	319	193	444	50	62	268	315	309	506	610	555	378	431
SWAN ISLAND W.I.	660	655	641	616	560	63	552	584	637	430	442	561	708	593	657	589	417	641	629	525	619	596	247	642	629	398	448	477	531	407	614	541
TAMPA FLORIDA	405	540	683	525	729	319	326	338	606	676	400	101	122	229	543	533	541	569	621	665	543	549	632	534	449	674	624	513	605	614	588	510
TUCSON ARIZONA	639	533	552	525	507	591	498	505	266	452	535	560	515	595	651	638	638	627	631	575	481	621	604	593	614	572	576	564	603	619	557	563
WAKE ISLAND, PACIFIC	599	156	250	318	283	699	631	670	601	644	684	451	169	569	611	701	578	652	546	431	612	689	699	668	693	237	61	552	376	582	460	512

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

AUGUST 1967

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	690	753	620	---	---	706	792	---	---	---	---	---	752	766	652	696	719	655	658	710	657	692	605	697	701	606	677	702	700	---	598	687
AMES IOWA	207	599	659	668	339	442	498	375	595	635	663	644	575	447	544	572	506	315	624	569	494	260	394	543	573	438	612	589	345	546	596	512
ANNETTE ALASKA	506	618	602	604	605	517	195	57	49	125	521	584	586	574	564	579	531	271	92	369	296	449	324	384	33	121	343	473	415	130	76	374
APALACHICOLA FLORIDA	341	659	544	536	455	529	505	583	313	254	277	270	301	641	577	525	652	646	608	372	109	173	411	515	461	574	490	563	352	614	525	464
ARGONNE NAT. LAB.	591	586	519	609	611	332	437	242	575	642	506	561	638	507	437	562	505	353	95	648	543	227	612	608	521	376	193	616	360	147	601	476
ASTORIA OREGON	697	571	664	308	258	254	418	661	641	283	506	535	609	653	610	414	632	631	613	339	480	559	608	602	594	511	532	498	338	194	382	503
ATLANTA GEORGIA	635	581	492	264	631	627	643	550	199	206	448	493	608	495	338	453	459	421	602	298	203	241	198	90	---	---	346	410	555	423	498	428
BARROW ALASKA	---	477	208	286	619	616	236	320	223	230	397	482	346	277	511	147	280	219	276	111	134	366	304	202	293	117	294	93	203	116	182	286
BETHEL ALASKA	323	433	260	227	369	474	554	426	527	254	121	93	137	71	53	174	317	311	464	239	214	344	333	388	184	370	350	405	441	143	302	300
BISMARCK N.DAK.	713	---	713*	697*	581	449	461	412	646	615	682	566	650	636	537	625	542	669	660	496	625	517	604	559	101	632	611	455	596	609	597	575*
BLUE HILL MASS.	434	611	238	272	337	126	588	358	568	236	348	287	239	489	585	582	465	511	367	315	395	398	356	457	205	150	296	417	470	493	318	384
BOISE IDAHO	660	623	639	594	630	635	660	648	646	533	531	592	584	606	604	585	561	541	571	529	569	579	564	541	541	492	545	498	545	545	533	578
BOSTON MASSACHUSETTS	450	622	202	285	315	88	396	317	549	228	350	285	215	438	570	552	474	504	402	357	390	387	340	448	235	113	311	423	449	493	295	370
BROWNSVILLE TEXAS	738	632	729	712	676	786	729	747	683	---	573	590	635	518	536	664	446	305	555	444	455	210	334	71	332	125	---	210	483	638	562	521
BURLINGTON VERMONT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	153	523	580	521	331	264	333	524	307	126	---
CANTON ISLAND P.I.	543	562	537	550	386	538*	---	---	---	---	---	---	---	---	621*	567	661	643	525	645	637	644	648	654	660	629	647	646	619	622	679	603*
CAPE HATTERAS N.C.	549	617	---	526	528	324	587	534	614	472	166	212	100	500	520	240	---	---	---	---	---	---	---	---	---	518	476	303	407	227	145	---
CARIBOU MAINE	309	489	173	56	412	365	505	379	155	155	264	351	360	119	469	445	377	315	259	25	283	329	450	482	480	449	220	60	278	311	63	303
CHARLESTON S.C.	608	587	704	633	533	623	578	623	553	384	82	73	293	585	494	551	670	497	497	471	579	482	557	393	537	420	600	600	204	314	511	491
CLEVELAND OHIO	632	472	417	656	571	643	340	545	275	218	567	473	496	585	544	481	460	397	354	419	480	255	628	363	281	279	435	178	582	154	505	442
COLUMBIA MISSOURI	569	646	485	708	579	382	636	240	566	618	547	669	677	566	644	569	585	392	656	669	628	545	488	625	572	427	664	643	561	565	639	573
DAVIS CALIFORNIA	721	702	687	706	705	708	710	633	658	691	610	669	665	649	643	645	642	642	659	655	628	619	586	484	575	607	596	624	611	597	600	643
DODGE CITY KANSAS	668	720	498	564	568	620	627	632	425	296	652	713	670	590	639	554	655	615	646	503	667	666	610	565	647	542	667	639	629	104	263	576
E. LANSING MICHIGAN	640	---	552	538	687	528	381	612	443	552	674	688	684	607	---	---	466	325	92	487	559	535	640	554	506	284	182	610	440	73	558	496
EL CENTRO CALIF. NPF	620	618	618	595	527	554	574	603	575	586	586	---	561	561	562	523	565	568	545	554	564	526	372	372	550	541	184	541	499	499	286	528
EL PASO TEXAS	646	638	716	358	694	749	605	729	529	663	492	526	376	617	670	730	721	736	712	647	713	650	721	565	702	672	589	649	720	465	271	622
ELY NEVADA	369	524	686	681	669	702	735	683	241	658	667	634	613	448	646	610	646	489	566	634	384	683	578	607	503	640	537	496	588	189	656	573
EPPLEY NEWPORT R.I.	474	617	214	291	271	395	484	449	482	120	249	195	123	497	---	---	---	---	190	371	---	---	366	458	95	164	171	361	---	---	---	320
FLAMING GORGE UTAH	479	723	589	581	394	503	325	386	541	595	507	689	725	622	725	730	---	649	688	669	695	693	690	589	452	536	326	383	210	522	563	559
FORT WORTH TEXAS	497	726	726	600	336	696	703	703	676	250	552	734	727	718	662	593	433	472	598	659	514	401	553	550	600	542	604	581	659	603	369	582
FRESNO CALIFORNIA	670	668	685	688	714	729	624	584	655	653	625	647	641	570	622	628	621	629	629	658	634	623	548	568	227	614	601	591	604	584	586	617
GLASGOW MONTANA	682	662	686	637	360	648	618	473	569	676	639	464	600	641	645	600	531	558	607	603	525	596	596	575	350	620	549	298	478	481	564	566
GRAND JUNCTION COLO.	700	602	632	666	680	438	497	515	585	613	622	670	690	675	599	689	571	663	607	636	---	540	---	639	610	625	620	543	552	600	378	602
GREAT FALLS MONTANA	711	693	689	---	---	---	634	666	668	670	576	628	643	638	634	573	614	608	623	605	407	621	---	589	615	581	483	502	522	559	565	604
GREENSBORO N.C.	422	467	560	303	445	519	289	581	492	323	501	354	509	553	474	540	301	481	521	329	222	69	156	252	354	398	372	534	549	459	435	412
INDIANAPOLIS INDIANA	637	582	318	593	634	536	429	228	474	566	695	691	667	642	603	520	546	475	377	303	641	447	603	559	322	264	214	632	617	379	567	508
LAKE CHARLES LA.	590	563	598	572	436	567	583	581	595	574	509	674	615	566	294	241	301	444	68	307	512	272	394	275	83	193	223	217	455	522	547	431
LAKELAND FLORIDA	436	542	523	514	355	326	212	397	584	592	337	139	115	225	552	558	535	591	565	577	423	561	556	339	529	553	538	413	541	514	504	456
LANDER WYOMING	713	722	680	662	508	565	676	693	672	633	595	514	459	524	664	608	655	535	617	---	---	---	---	---	---	---	---	---	---	---	---	---
LARAMIE WYOMING	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	155	549	485	613	585	548	398	569	603	454	582	343	326	344	215	387	---
LAS VEGAS NEVADA	569	699	685	612	622	322	682	611	621	640	677	686	675	545	543	662	661	660	629	611	493	425	621	598	630	589	520	---	517	252	583	588
LITTLE ROCK ARKANSAS	327	365	564	233	666	633	640	633	514	414	656	753	722	695	575	568	623	339	587	578	551	423	550	547	---	---	---	---	---	400	476	540
LOS ANGELES, CALIF.	644	580	613	628	492	549	567	607	592	718	712	697	682	669	633	611	656	663	681	678	636	629	604	660	649	673	684	683	687	642	604	639
LOS ANGELES CALIF.U	622	673	647	665	624	624	566	650	639	684	680	676	650	640	274	569	600	635	554	612	574	561	591	590	611	643	586	613	576	563	512	603
MADISON WISCONSIN	427	662	574	666	635	154	542	148	509	505	677	639	643	470	336	563	263	129	237	605	393	376	552	553	580	263	370	602	270	613	598	469
MANHATTAN KANSAS	383	534	554	605	596	515	443	458	575	606	563	588	552	554	547	469	386	396	539	523	540	496	537	533	512	361	570	535	352	338	534	506
MATANUSKA ALASKA	150	595	474	536	180	187	144	299	297	157	331	121	72	212	235	75	203	187	198	318	295	492	283	163	216	169	424	465	151	283	328	266
MAUNA LAO OBS HAWAII	791	469	367	815	780	810	715	155	310	467	533	393	464	787	776	780	635	411	613	801	741	542	453	456	704	726	548	773	648	578	773	607
MEDFORD OREGON	710	697	692	681	690	695	704	672	445	618	634	635	617	639	622	616	621	607	597	600	632	---	---	---	---	280	589	575	597	584	561	615
MIAMI FLORIDA	562	656	453	353	386	321	718	247	497	613	353	629	422	307	621	592	477	633	531	544	577	694	609	607	603	558	588	538	586	497	398	522
MIDLAND TEXAS	435	564	615	618	652	578	632	---	571	607	565	394	319	517	583	176	329	592	573	283	492	592	557	506	561	567	482	536	600	390	345	508
NASHVILLE TENNESSEE	638	430	306	533	662	638	581	404	---	633	625	656	672	635	596	413	268	379	229	483	482	566	401	369	170	180	615	569	561	467	77	475
NEW YORK N.Y. U	562	559	130	137	434	646	373	524	478	423	535	360	144	605	452	390	406	438	397	252	270	339	274	195	45	80	298	446	527	500	340	373
NORTH OMAHA NEBRASKA	394	651	655	709	389	648	532	637	---	595	616	669	626	646	546	630	625	388	670	588	613	614	600	603	581	657	660	614	551	499	633	595

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

1 [illegible]

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

AUGUST 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	176	279	257	251	81	92	58	148	111	56	128	62	44	124	113	31	76	96	91	156	143	214	117	79	92	131	199	169	76	127	126	128

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ssw w w defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA

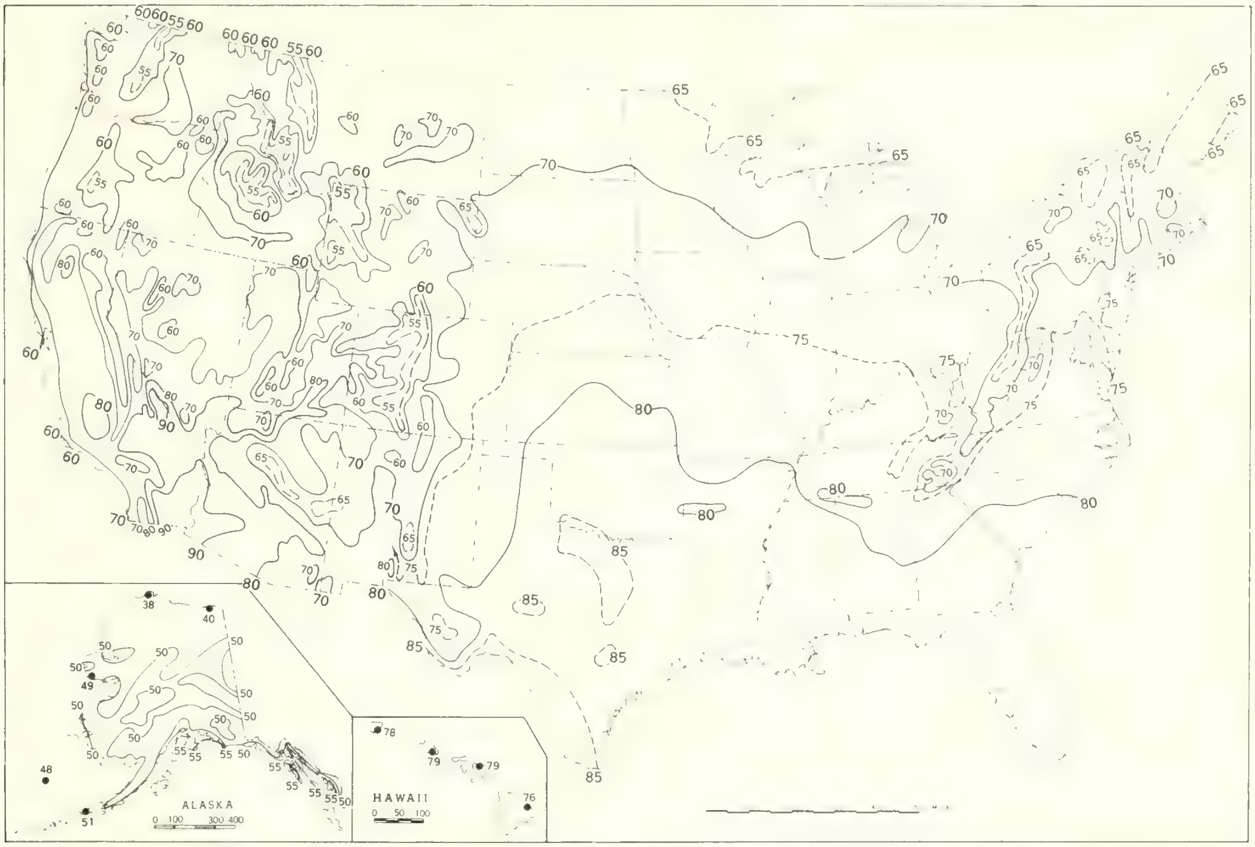
Units: Milli-atmo-cms.

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Albuquerque, N. Mex	05289	05290	03286	05280	-----	-----	00289	00290	02281	05279	05245	-----	-----	00271	00289
Bedford, Mass.	00341	00343	00385	06326	-----	-----	00333	00336	00328	06329	02301	-----	-----	00310	00316
Bismarck, N. Dak.	00347	00344	00336	00333	00316	00327	00310	00329	00334	00336	00331	04315	00326	00316	00321
Boulder, Colo	00324	00316	05364	00313	-----	-----	06319	00315	04320	00319	00315	-----	-----	00320	04356
Caribou, Maine	00335	00354	04336	05354	00318	04323	00341	03334	05336	05344	00333	00326	00320	04320	00323
Fairbanks, Alaska	-----	00313	00300	00309	00298	06281	00284	04312	-----	-----	03371	-----	-----	-----	-----
Green Bay, Wis.	05341	00355	00366	00371	00359	03342	05349	04357	00337	00361	00362	00342	00339	00342	00337
Huancayo, Peru	00260	00267	05264	00263	00263	00264	00265	00262	00263	00267	00269	-----	00263	00275	00274
Mauna Loa, Hawaii	02291	-----	-----	02269	00287	-----	05273	-----	05282	00280	00290	00279	-----	00282	00282
Nashville, Tenn.	00309	04285	04339	00327	00306	00319	00317	00312	04326	00323	00336	00355	00338	00345	00317
Tallahassee, Fla.	00329	00316	00312	00310	35312	33304	00301	00303	00308	05312	04314	35368	35314	00304	00302

Station	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex	00289	00275	00272	-----	-----	00292	00291	00289	00275	00280	-----	-----	00292	00286	02276	00285	282
Bedford, Mass.	00319	00321	00338	-----	-----	00322	00331	00325	00321	06320	-----	-----	05321	00332	00313	06328	328
Bismarck, N. Dak.	00317	00304	00332	00321	00317	00320	00329	00311	00307	05389	00303	00298	00302	00295	00314	00295	322
Boulder, Colo	04323	00310	05363	-----	-----	00337	00327	00315	00314	03304	-----	-----	00314	00308	05320	05338	324
Caribou, Maine	00332	00322	00341	02305	-----	00321	06340	06374	00329	00310	00308	05323	-----	05320	00310	-----	331
Fairbanks, Alaska	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	309
Green Bay, Wis.	00331	00349	04354	00356	00359	07390	00349	00343	00331	00329	00345	04362	00319	04316	00328	00358	348
Huancayo, Peru	00272	00271	00267	00270	00280	00273	00284	00288	00285	00275	00288	00279	00271	00270	00266	00269	271
Mauna Loa, Hawaii	00283	00281	00293	00289	-----	00288	00288	05276	05287	00283	-----	-----	00280	00288	-----	00280	283
Nashville, Tenn.	00318	00314	00318	04366	00317	00325	00321	00324	00309	-----	-----	00345	00339	00319	00304	05349	325
Tallahassee, Fla.	00295	00297	00298	00299	00294	35321	05304	02311	00299	00296	00294	00295	00292	00293	00297	00299	307

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded w w w) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code s s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), August.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), August 1967.

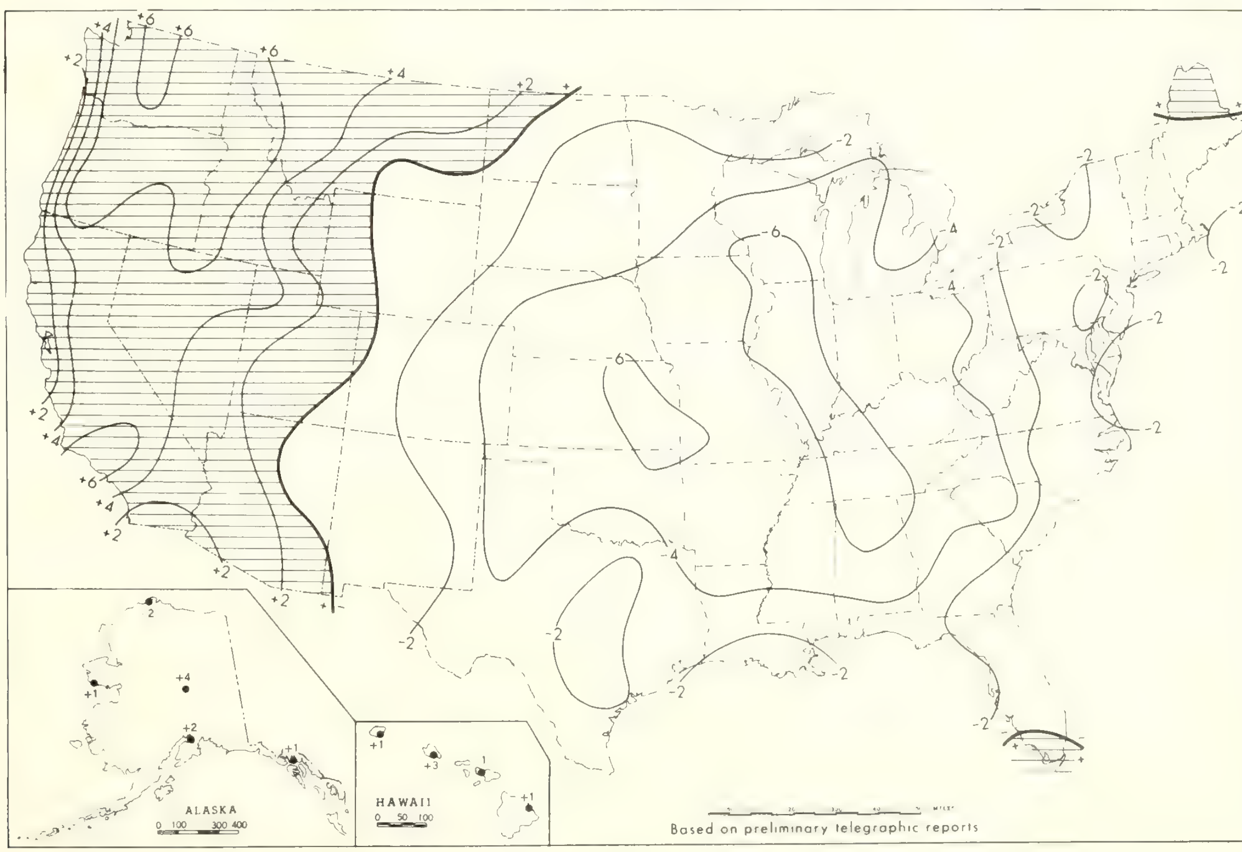


Chart II. Total Precipitation (Inches), August 1967.

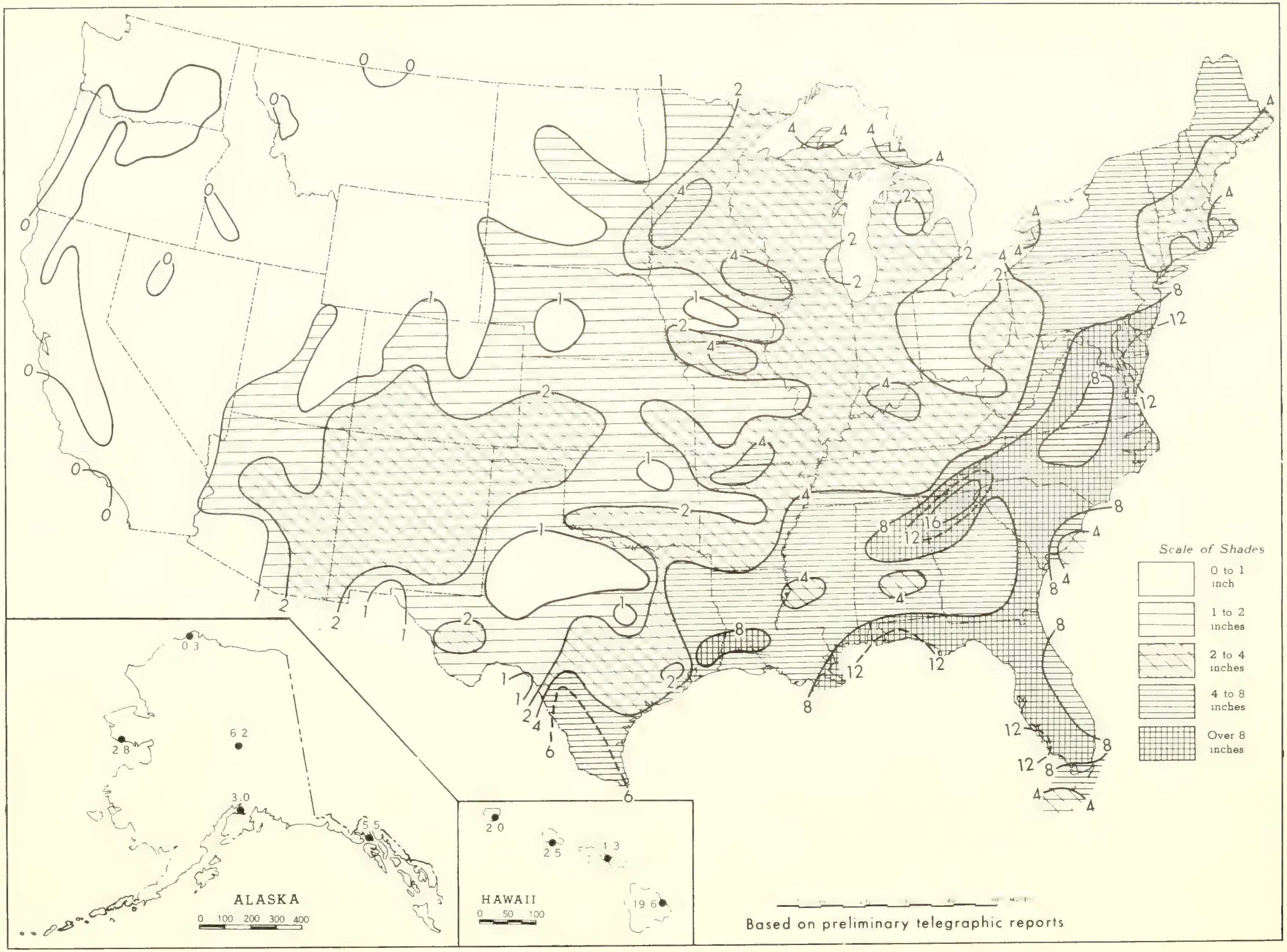


Chart III. Percentage of Normal Precipitation, August 1967.

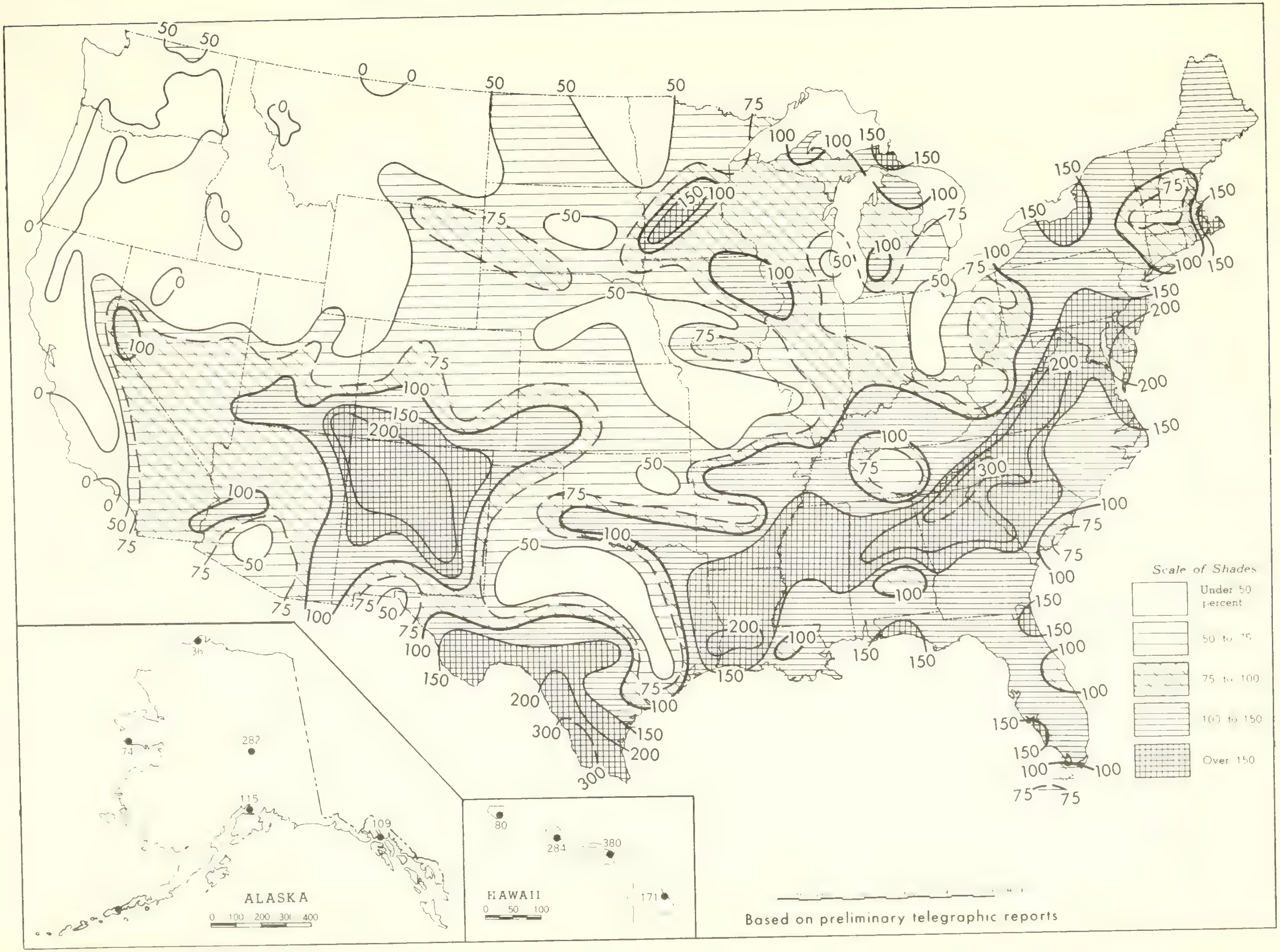
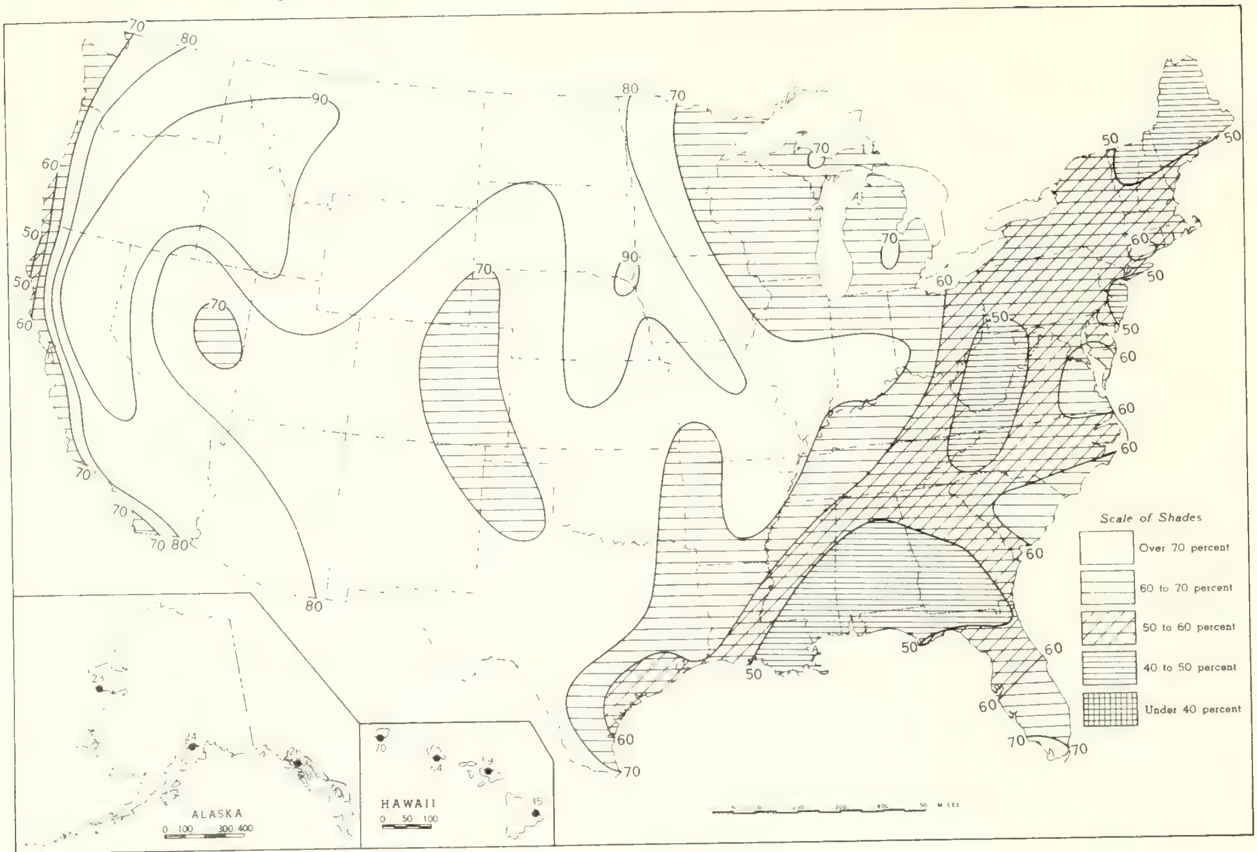
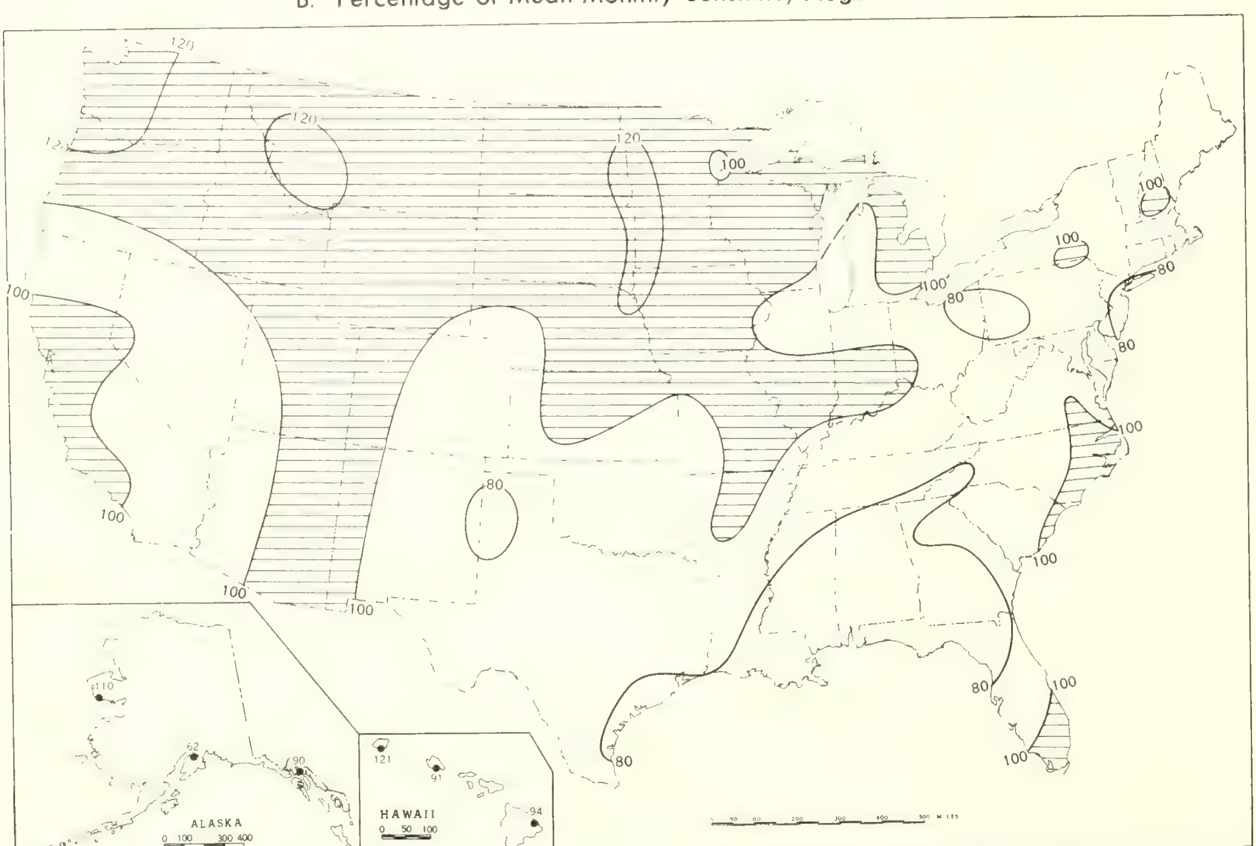


Chart VI. A. Percentage of Possible Sunshine, August 1967.

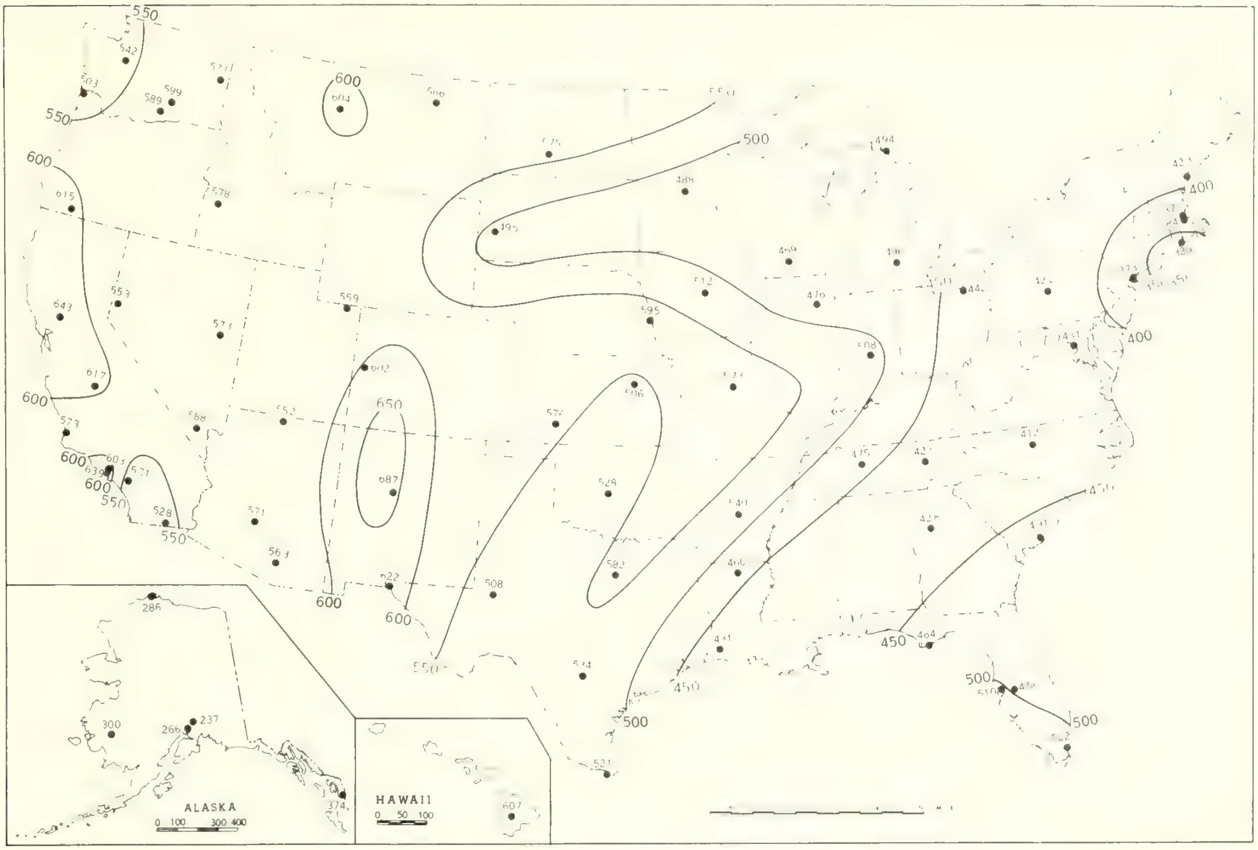


B. Percentage of Mean Monthly Sunshine, August 1967.

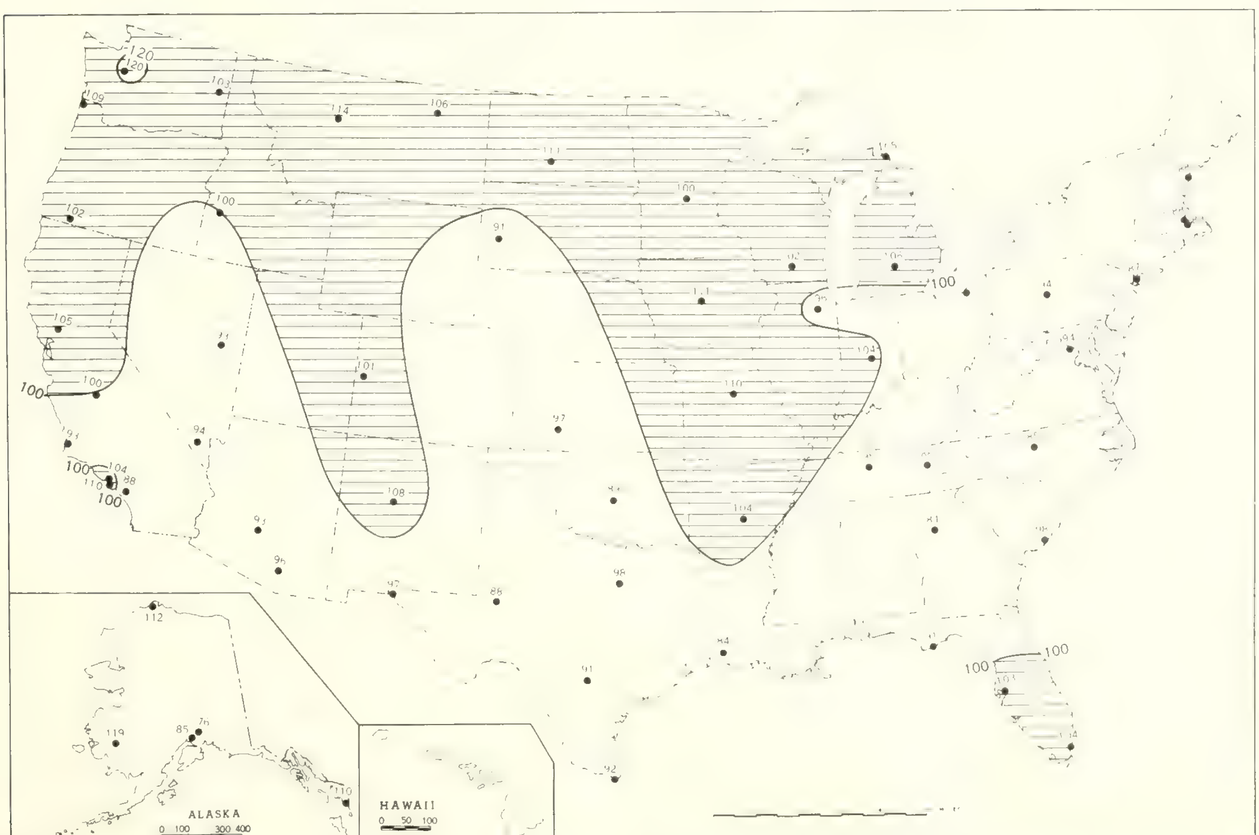


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, August 1967.

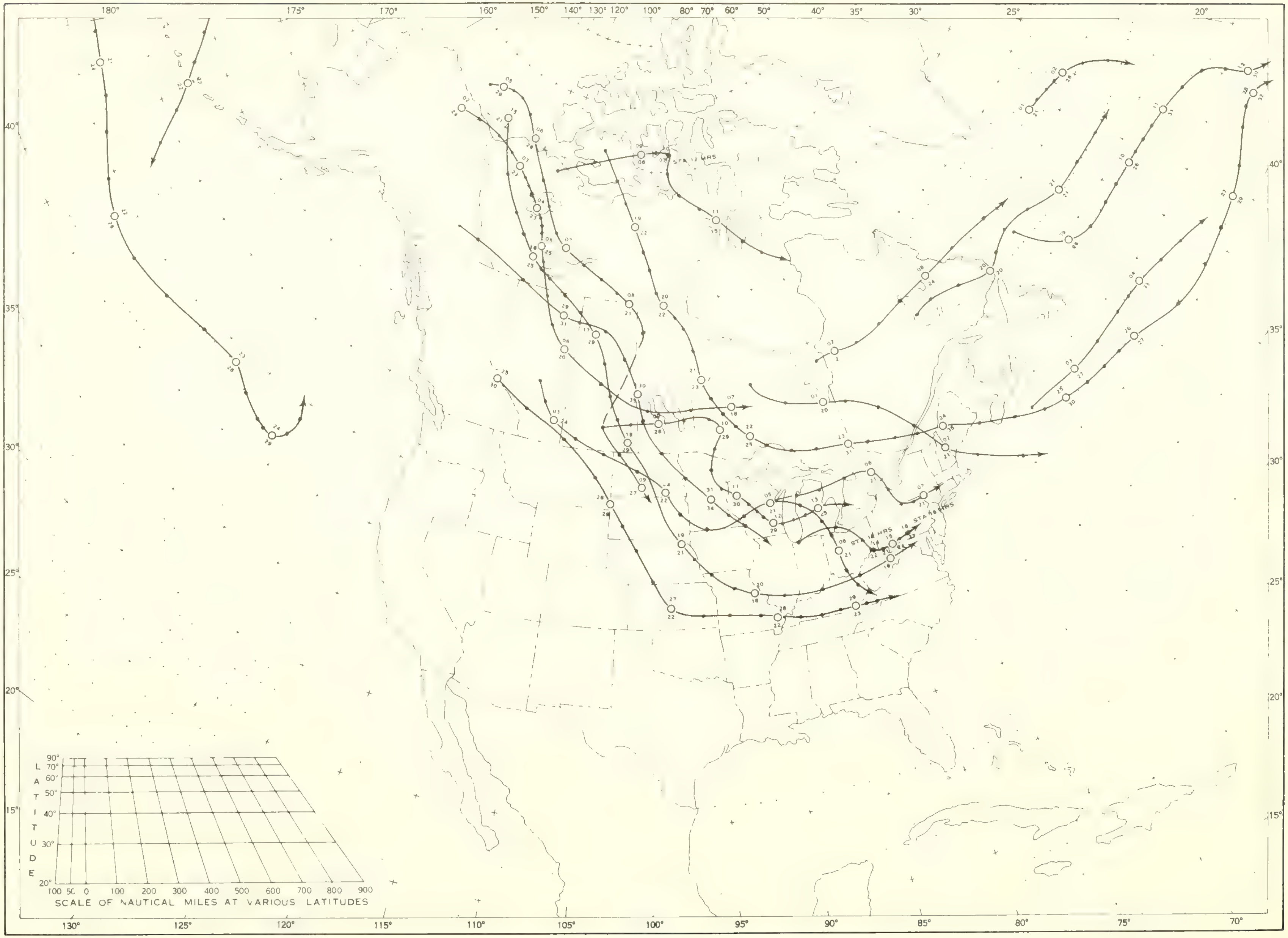


B. Percentage of Mean Daily Solar Radiation, August 1967.



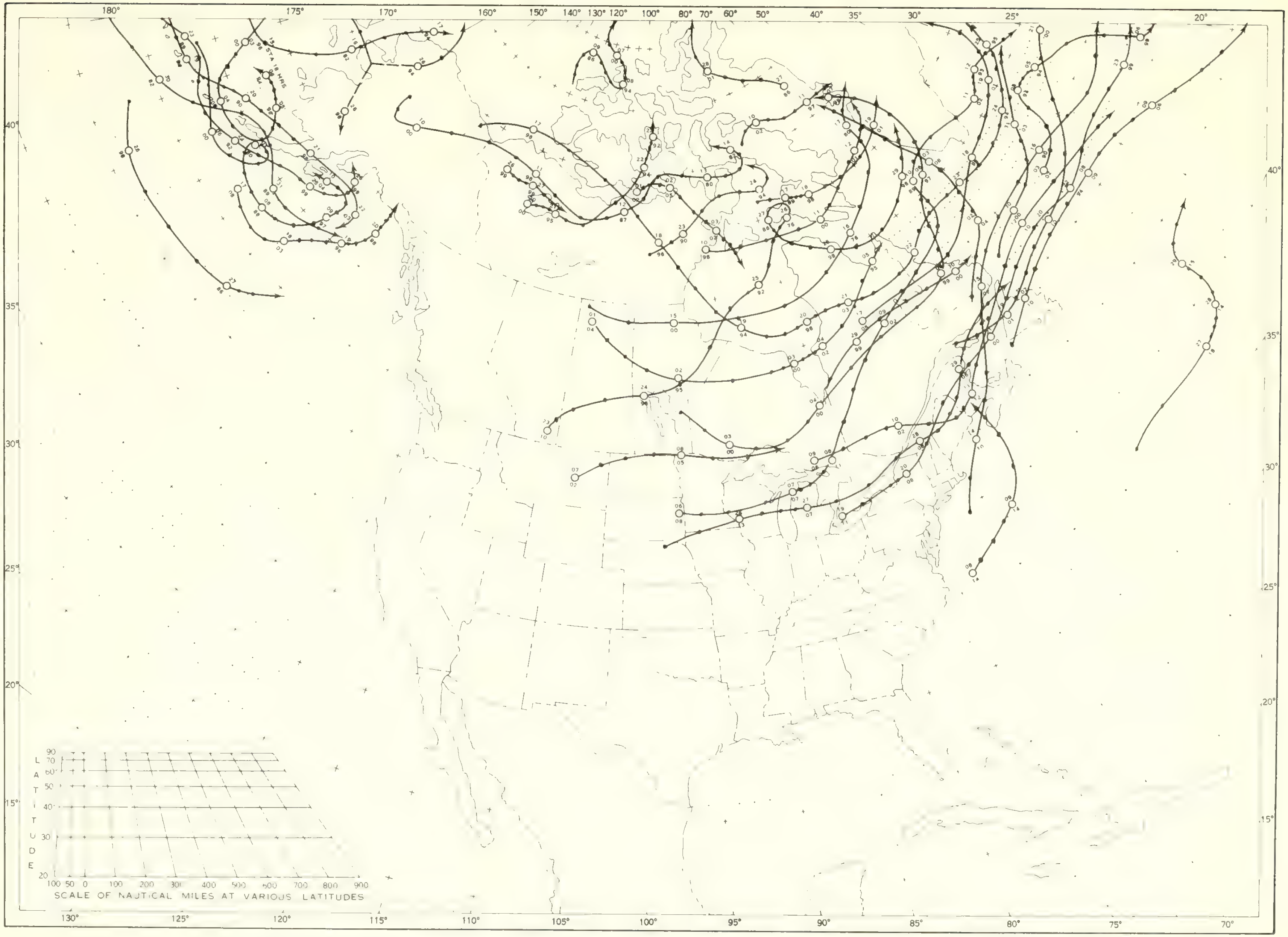
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, August 1967.



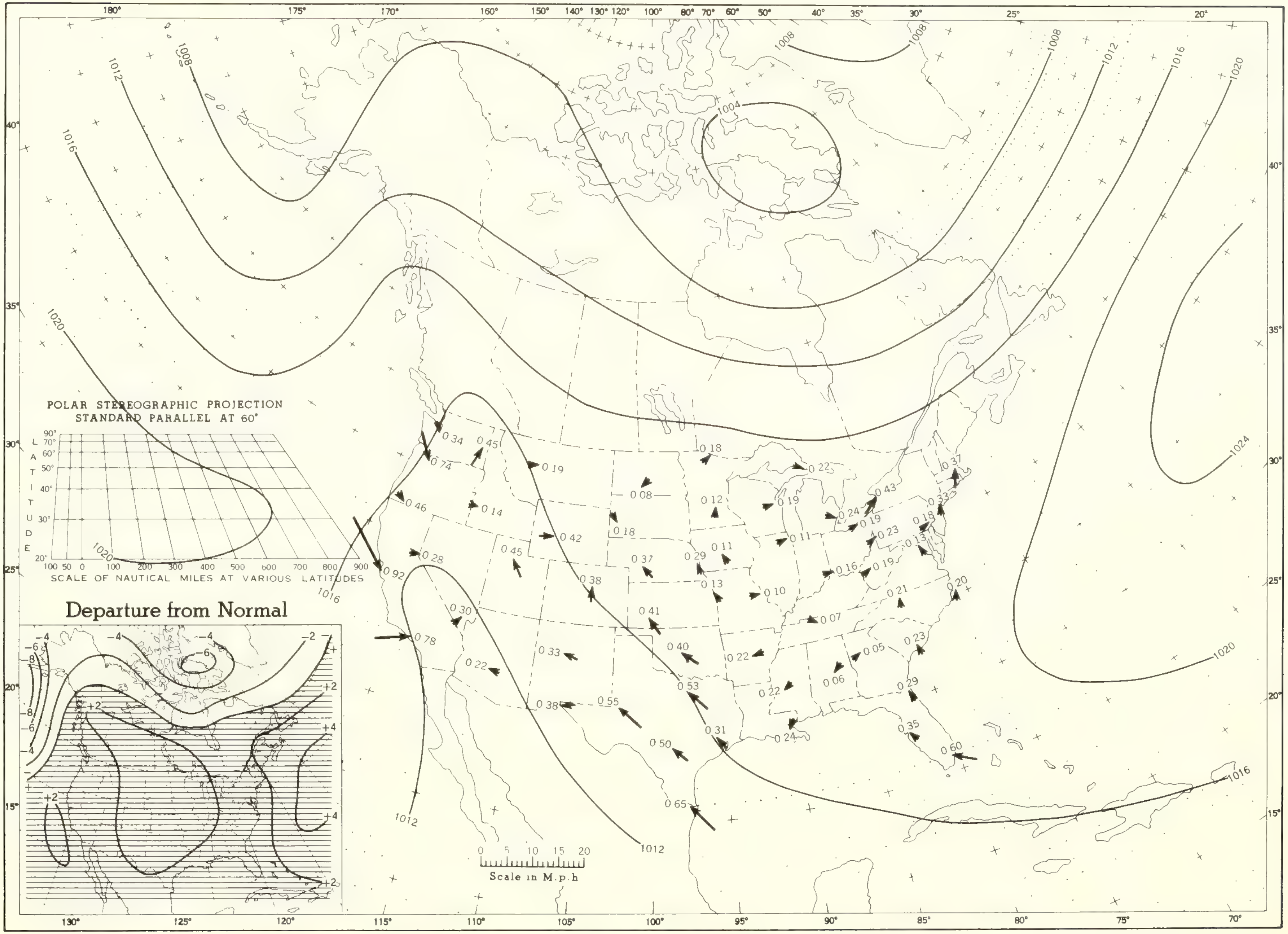
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, August 1967.



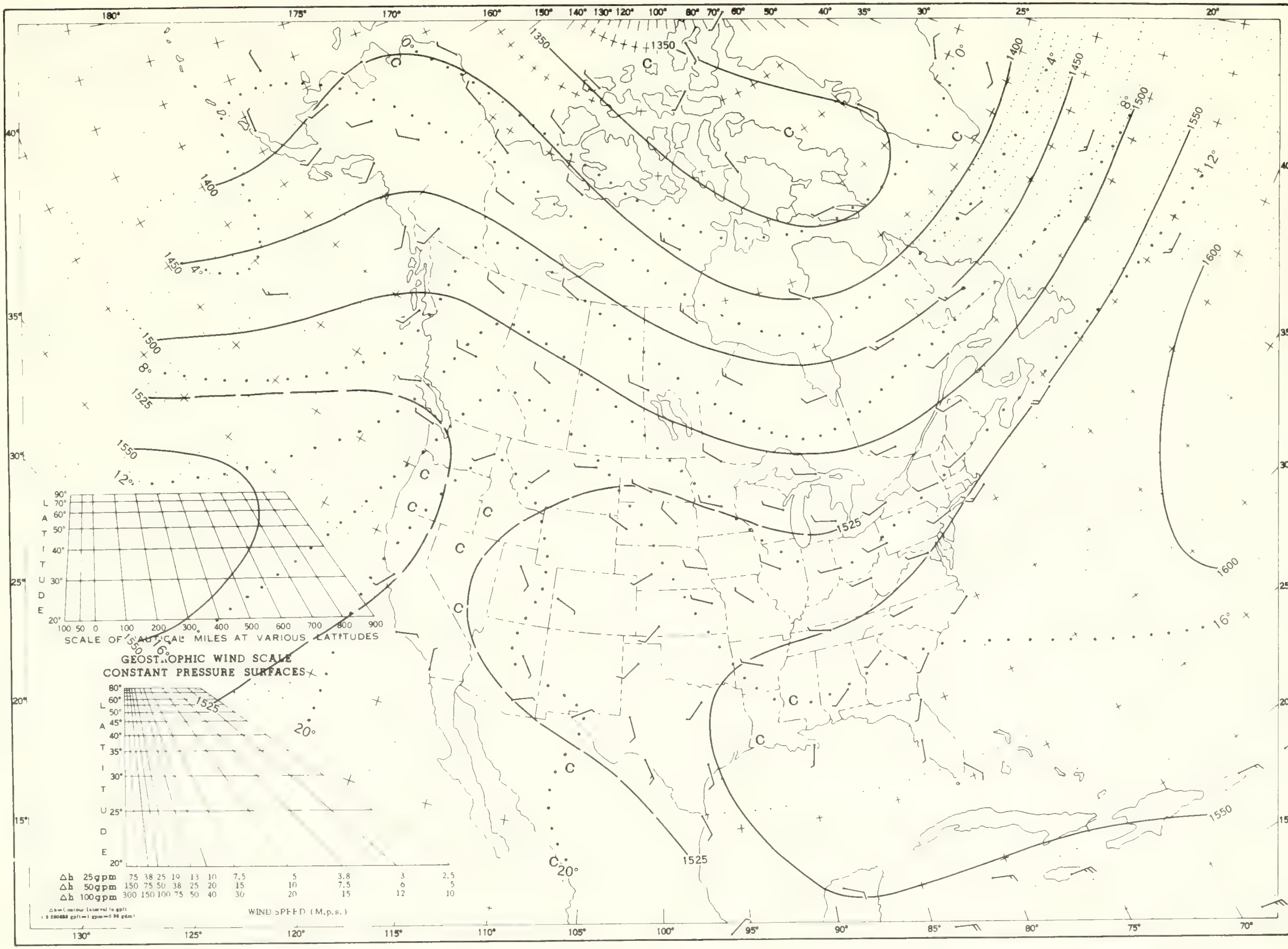
Circle indicates position of center at 7:00 a.m. E.S.T. **Figure above circle indicates date, figure below, pressure to nearest millibar.** Dots indicate intervening 6-hourly positions. **Squares** indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. **Only those centers which could be identified for 24 hours or more are included**

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, **August 1967**. Inset: Departure of Average Pressure (mb) from Normal, **August 1967**.



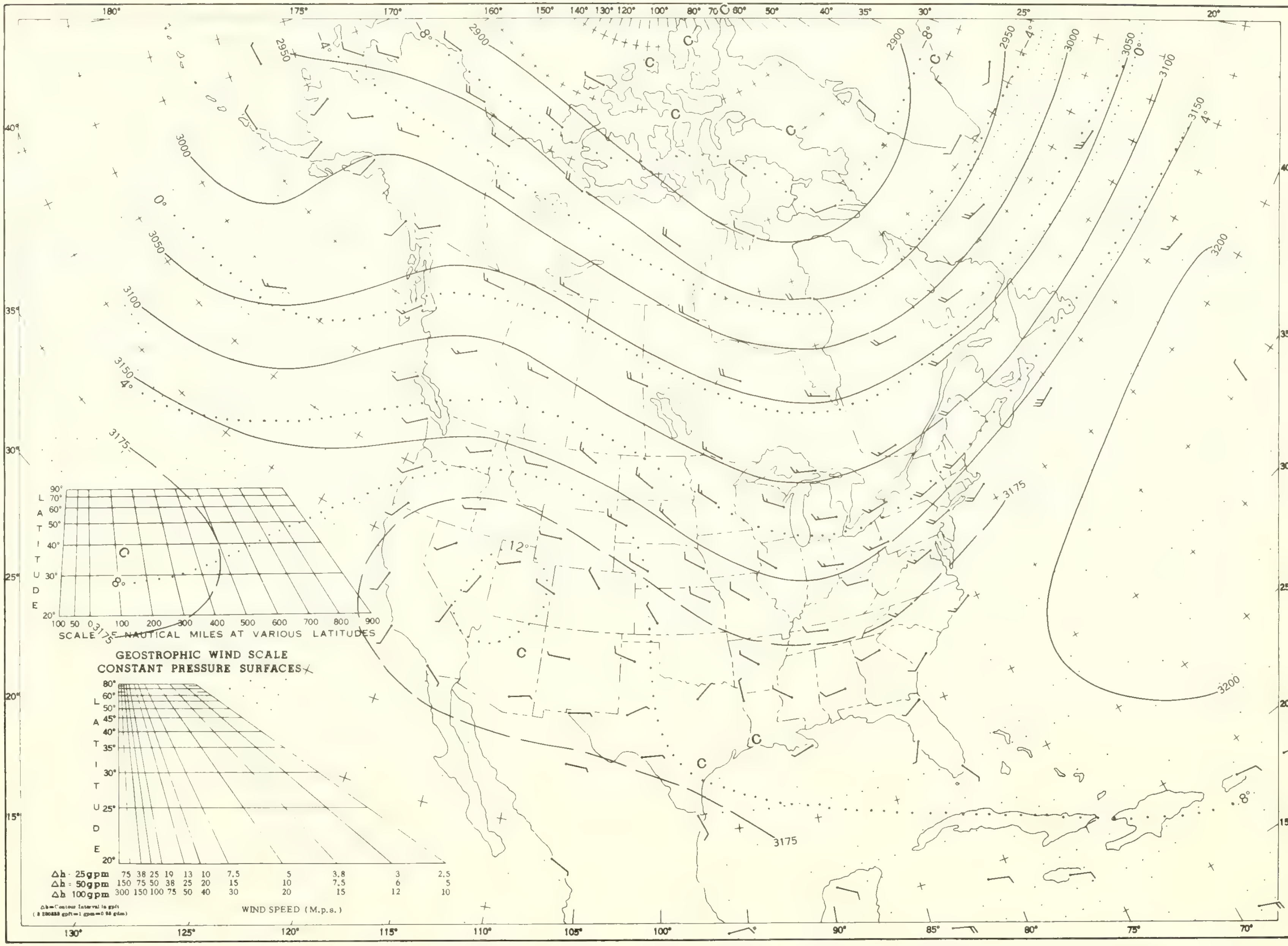
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, **August** 1967. Average Height and Temperature, and Resultant Winds.



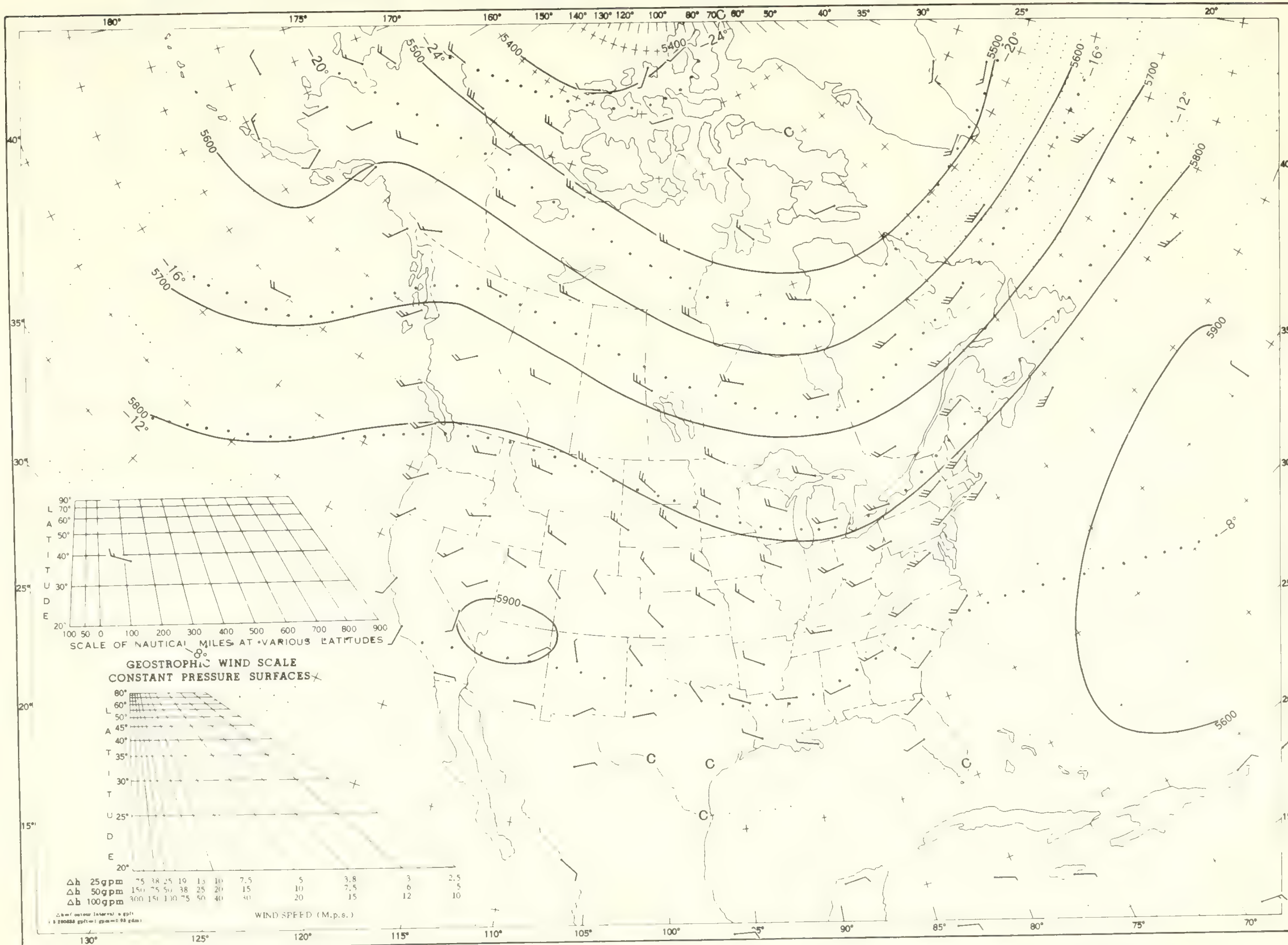
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, August 1967. Average Height and Temperature, and Resultant Winds.



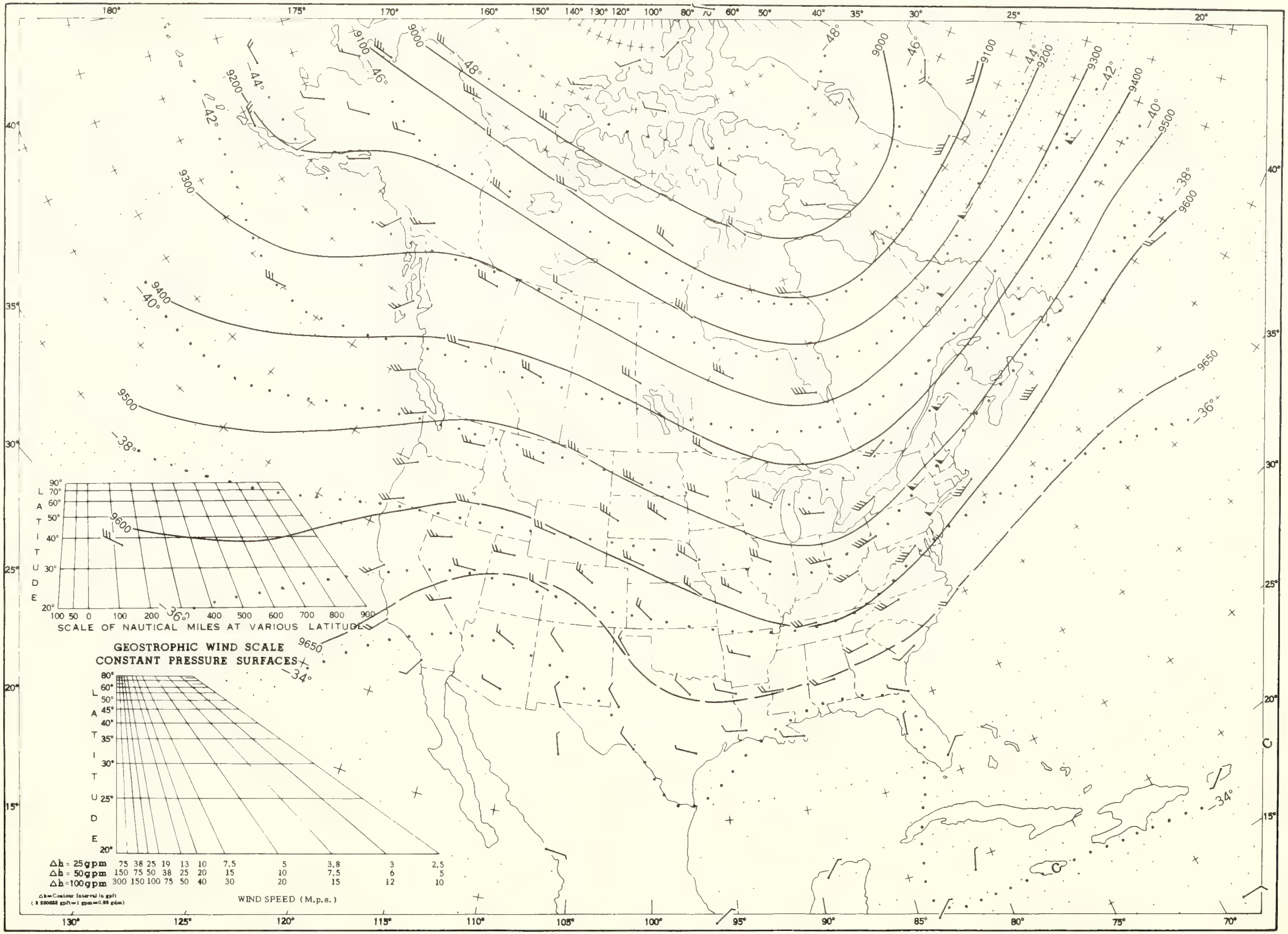
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, August 1967. Average Height and Temperature, and Resultant Winds.



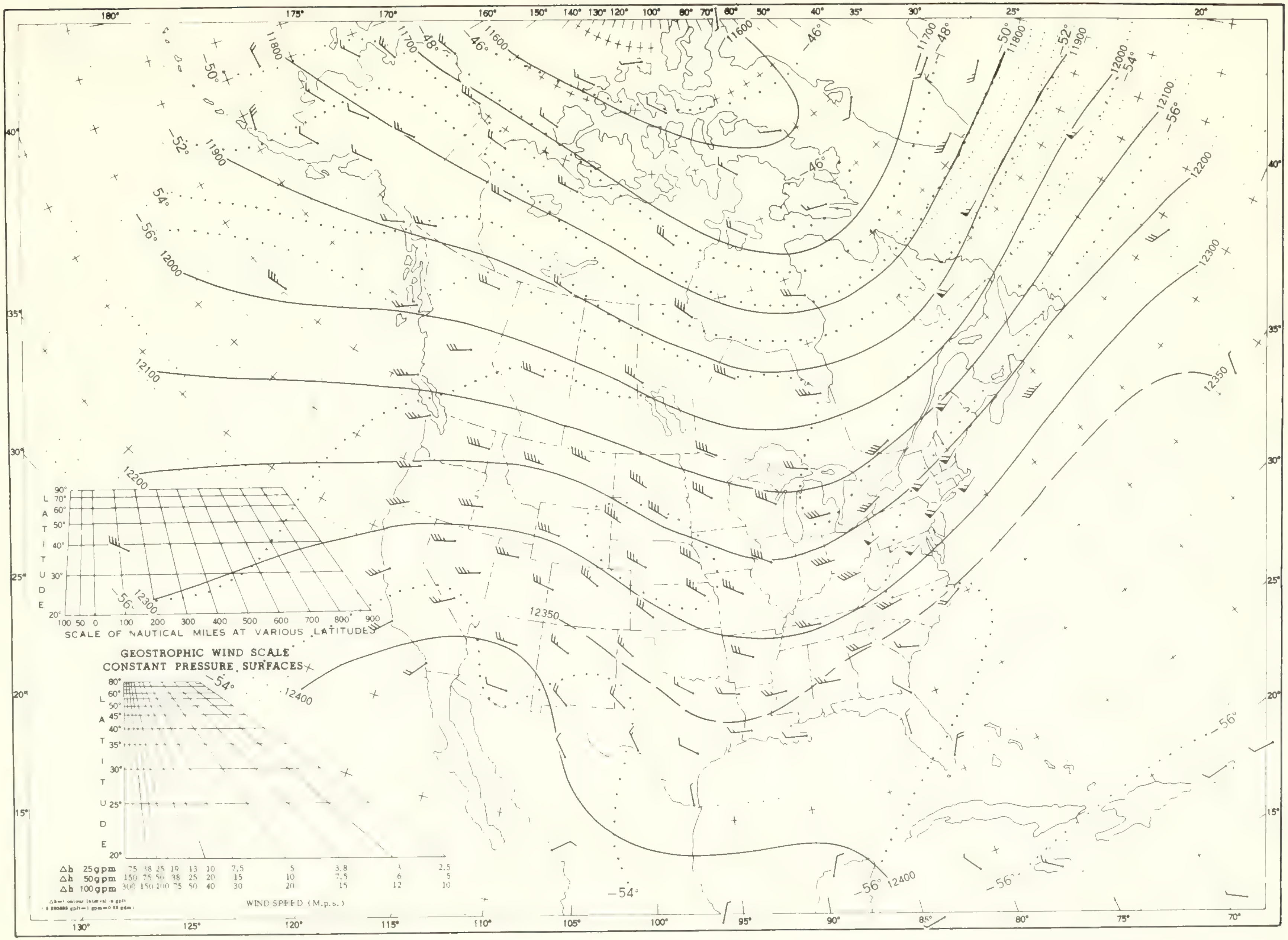
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, August 1967. Average Height and Temperature, and Resultant Winds.



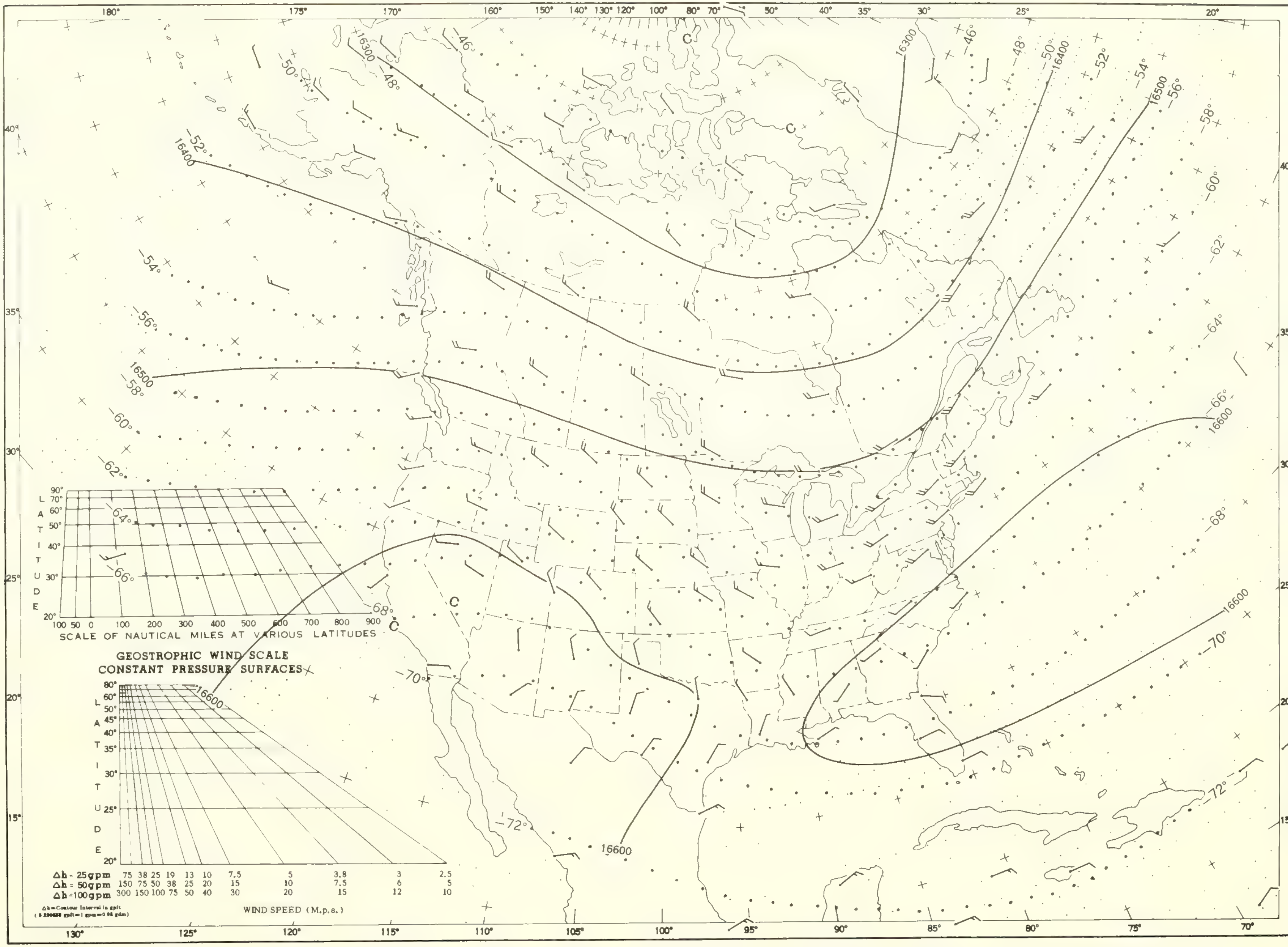
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, August 1967. Average Height and Temperature, and Resultant Winds.



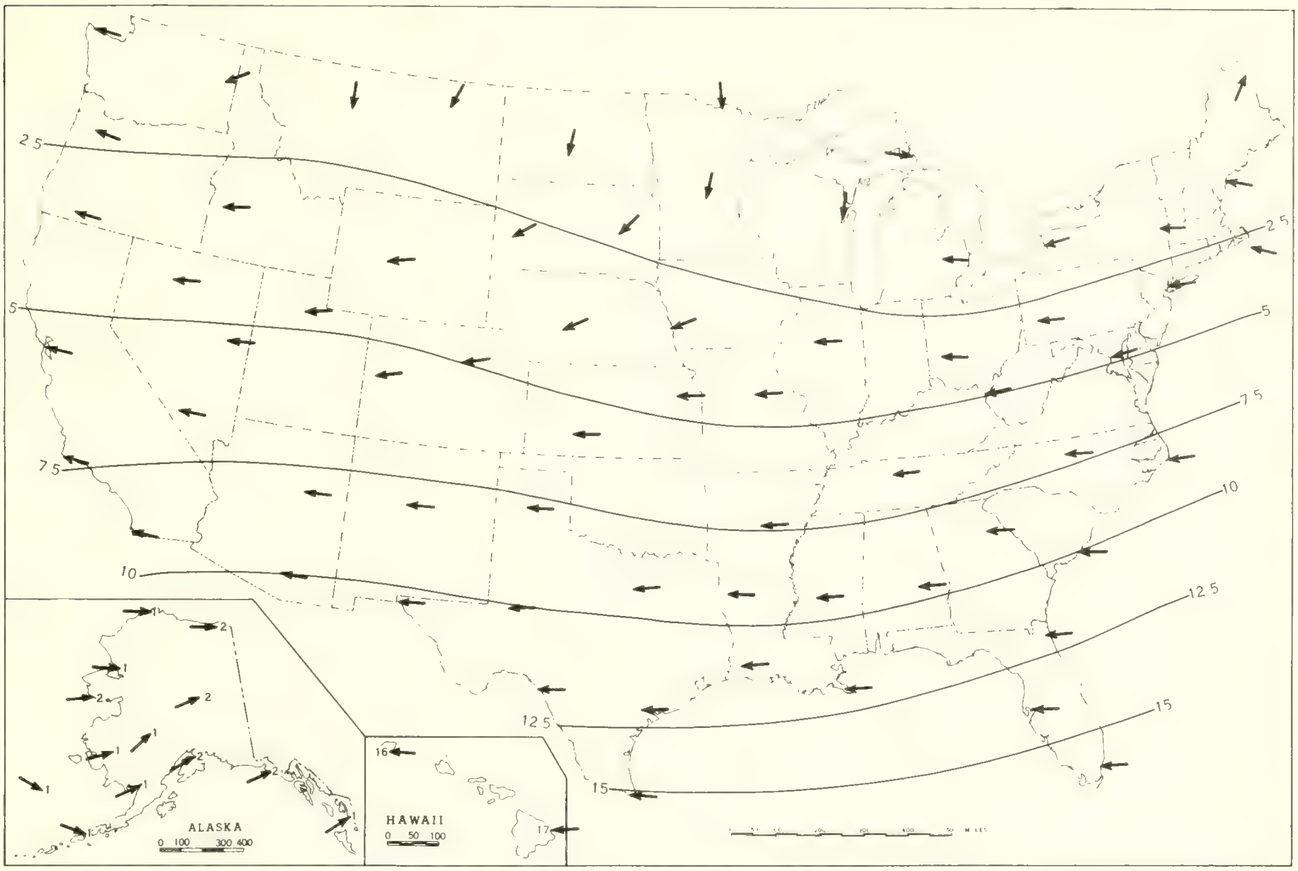
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, August 1967. Average Height and Temperature, and Resultant Winds.

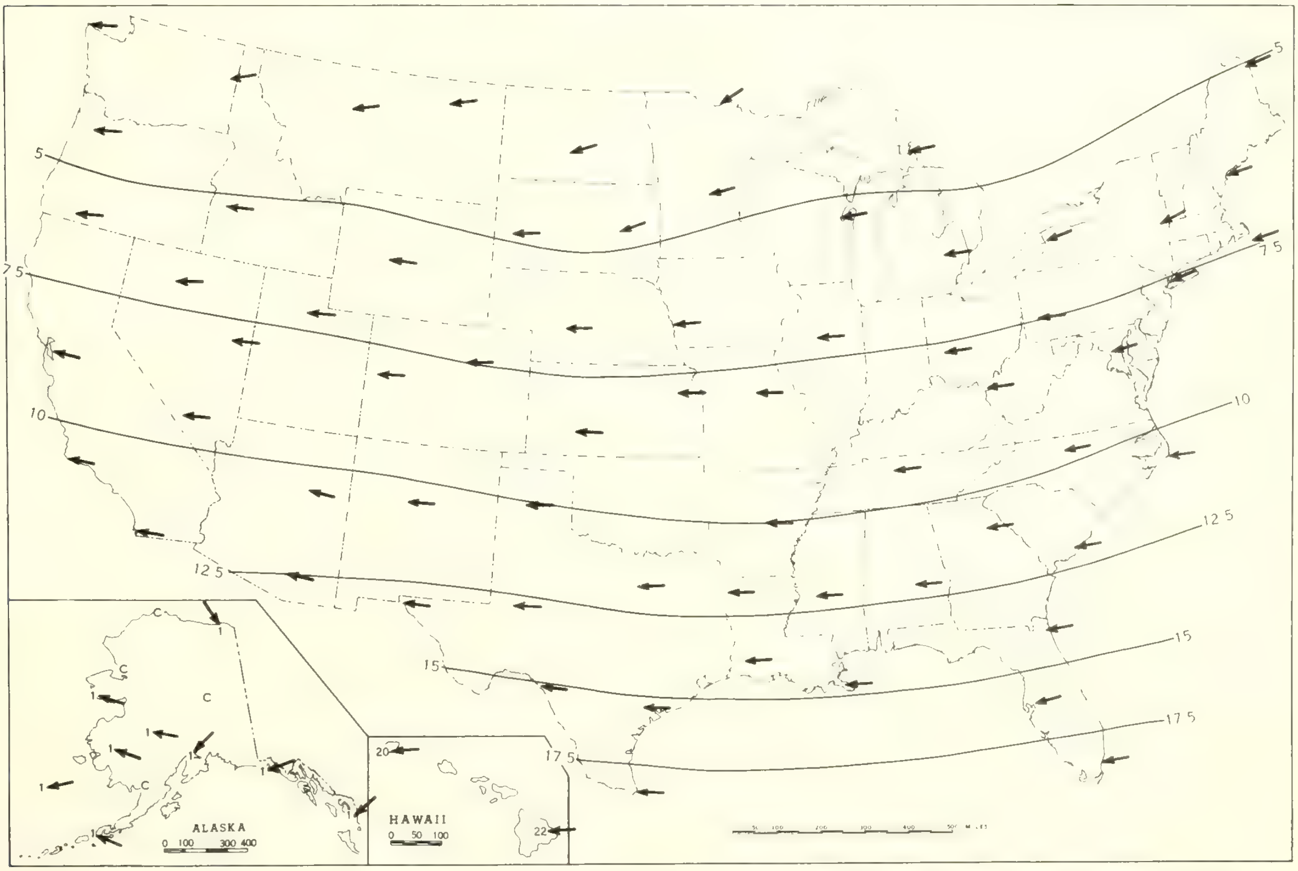


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, August 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, August 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. 11/28/67-1930

U. S. DEPARTMENT OF COMMERCE

ALEXANDER B. TROWBRIDGE, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

SEPTEMBER 1967

Volume 18 No. 9

ASHEVILLE: 1967

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 9 SEPTEMBER 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Continued unseasonably warm Northwest, cold Southeast.
2. Beneficial rains Pacific Northwest 4th week.
3. Early frosts in East.
4. Hurricane Beulah enters south Texas 20th.
5. Hurricane Doria enters North Carolina 16th.
6. Tropical storm Katrina brings heavy rain to southwestern desert area.

TEMPERATURE.--Temperatures for September averaged above normal in Maine, the southern tip of Florida, and west of lines joining Las Vegas, Nev., with Sault Ste. Marie, Mich., and Tucson, Ariz., and below elsewhere.

September, relative to normal, was the fourth consecutive warm month in the Far West and the fifth in the Pacific Northwest. The southern tip of Florida has been warmer than normal every month this year through September.

Temperatures remained unseasonably warm almost the entire month of September in the Far West, and averaged as much as 6° above normal in some northern Rocky Mountain localities. This was the warmest September in many years in much of the Far West. It was the warmest ever for Stockton, Calif., Kalispell, Mont., and Pendleton, Oreg., where records date back to 1869, 1896 and 1889, respectively. Record September highs of 101° and 99° were recorded for Havre and Helena, Mont., respectively.

Warm weather persistence that characterized August in the Far West was again evident in September. A good example occurred at Red Bluff, Calif., where April which relative to normal was the coldest month since beginning of records there in 1877, was followed by the longest warm period ever. Daily maxima were 89° or higher and averaged 98.9° for the period June 14 through September 7, both records for so long a period. Maxima reached 100° or higher on 46 days.

September was unusually cool in central and southeastern areas and the coolest in many years over an even larger area. In the Southeast a number of stations with records dating back into the nineteenth century reported their coolest September ever. Among these were Norfolk and Lynchburg, Va.,; Birmingham and Montgomery, Ala.; Pensacola, Fla.; Macon, Ga.; Jackson, Miss.; Charlotte, N. C.; and Columbia, S. C. September lows were recorded by Meridian, Miss. (34°) and Apalachicola, Fla. (50°), on the 29th, and New Orleans, La. (42°), on the 30th. The New Orleans temperature was 12° lower than any previous September temperature there in 94 years.

Frost was about 3 weeks early in many places. Light frost was reported in northeastern Arizona on the 14th, Concordia, Kans., on the 28th, and scattered light frost in the vicinity of Columbus, Ga., on the 30th. Along the east coast freezing occurred in suburban areas of Boston, Mass., and Providence, R. I., on the 26th, and Norfolk, Va., on the 28th.

Temperatures averaged above normal in Hawaii. In central and southern Alaska the month was abnormally warm, but in northern sections it was relatively cool.

PRECIPITATION.--Precipitation, relative to normal, was very irregular across the 48 States, ranging from more than twice normal in some areas to less than 50 percent in others. On a percentage-of-normal basis, rainfall was heavy in the lower Great Basin area, the northern Rockies, and central and lower Great Plains, and normal to well above along the north Pacific coast and in a few scattered areas in the Northeast. Rainfall was fairly well distributed through the month in most areas. At the end of the month soil moisture was adequate to surplus in most areas east of the Rockies but short in much of the Far West. Fortunately for the West, however, heavy snowfall during the 1966-67 winter provided a good supply of irrigation water for the 1967 crop season.

Heaviest rainfall of the month occurred in southern Texas September 20-24 during the passage of Hurricane Beulah. Brownsville measured 19.26 inches during Beulah's passage, several other stations over 20 inches, and one about 30. Falfurrias had the greatest monthly total of 32.78 inches, most of which was hurricane rainfall.

Tropical storm Katrina brought heavy rainfall to the southwestern desert area. Yuma, Ariz., measured 1.96 inches during the first 3 days of the month.

Hurricane Doria moved into northeastern North Carolina on the 17th, and light showers fell along the coast from New Jersey to Cape Hatteras. Storm totals generally ranged from 1/2 to 1 1/2 inches although 4 1/2 inches fell at Cape Hatteras.

During a heavy rainstorm at Dubuque, Iowa, and surrounding localitites on the 14th, 8.85 inches of rain fell in 24 hours. This was the heaviest 24-hour rainfall at Dubuque during a 93-year record. The 2-day total for the 14th and 15th was nearly 10 inches and for the month 11.88 inches.

Rainfall was also heavy in western New York State. Buffalo measured 6.36 inches for its third wettest September, and 3.63 inches for a new 24-hour record for the month. In the southern portion of this section, Friendship, in Allegany County, measured 8.34 inches, the greatest total in the State for this month.

Following a dry summer in the northern Great Plains, September rains, ranging up to more than twice normal, were very beneficial, but even more rain was needed in the Red River Valley at the end of the month.

Main areas with less than 50 percent of normal rainfall were Minnesota, Indiana, portions of Washington, Oregon, California, New Jersey, Delaware, Maryland, eastern Virginia, southern Georgia, and northern Florida Peninsula. Red Bluff, Calif., has had only 0.07 inch of rain in a 120-day period ending September 30. At Marquette, Mich., 1.20 inches was the least September total since 1902.

Snowfall came unusually early to some northern sections. Snow fell as early as the 12th in the higher mountains of Colorado and Wyoming. Jones Pass, Colo., reported 10 inches on that date.

Widespread areas received snowfall the last week. The Cascades received their first significant snowfall of the season. Columbus, Ohio, observed its earliest snowfall ever on the 29th, and on the same date snowfall, generally only a trace, occurred at several locations in the northern Great Lakes region.

STORMS.--September storms in the conterminous

United States were highlighted by two hurricanes. The worst was Beulah which entered Texas near Brownsville on the 20th. Damaging floods from rainfall ranging up to 30 inches and additional losses from wind and more than two score tornadoes during Beulah's passage took a toll estimated in the neighborhood of $1 billion. Hurricane Doria entered northeastern North Carolina on the 16th and caused two deaths and minor damage along the coast from New Jersey to North Carolina. Local flooding occurred in several areas late in the month, probably the most damaging resulting from heavy rains on the 27th and 28th in western New York State where losses estimated at several million dollars were reported in newspapers.

CONDENSED CLIMATOLOGICAL SUMMARY

SEPTEMBER 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	94	21+	2 Stations	29	30	Coden	17.81	Louisville	0.82
Alaska	Data Delayed									
Arizona	Buckeye	112	11	2 Stations	28	29+	Portal 4SW	7.57	2 Stations	.00
Arkansas	3 Stations	94	22+	do	29	29	Batesville Livestock	10.34	Dierks	.91
California	Death Valley	110	11	do	21	15+	White Mountain 1	3.61	24 Stations	.00
Colorado	Gateway 1SW	97	4	4 Stations	17	30+	Rico	3.42	Glade Park Store	.05
Connecticut	Norwich Pub Util Plt	86	19	West Thompson Dam	29	26	Stafford Springs 2	4.33	New Haven WB Airport	1.09
Delaware	Georgetown 5SW	87	1	Bridgeville 1NW	35	26	Bridgeville 1NW	4.31	Wilmington NCastle WB AP	1.16
Florida	Big Cypress Res	98	13	2 Stations	35	30	Hialeah	12.56	Cedar Key 1WSW	.30
Georgia	2 Stations	95	22+	Blairsville Exp Sta	26	30	Calhoun Exp Sta	6.66	Cairo 2NNW	.20
Hawaii	Data Delayed									
Idaho	3 Stations	107	1	2 Stations	17	14+	McCall	2.46	Aberdeen Exp Sta	.01
Illinois	do	90	21+	5 Stations	30	29	Morris 5N	6.39	Gibson City 3E	1.08
Indiana	Jeffersonville	94	17	Osgood	25	23	Valparaiso Waterworks	3.90	Seymour 2N	.68
Iowa	Hawarden	93	25	Saratoga 2E	18	29	Dubuque WB Airport	11.88	Alton	.47
Kansas	Johnson 11ESE	99	30	Phillipsburg 1SSE	28	28	Minneapolis 2	16.25	Deerfield 10NNW	.37
Kentucky	4 Stations	91	19+	Blaine 2W	30	30	Paducah	5.78	Lockport Lock 2	1.08
Louisiana	10 Stations	93	23+	Converse	30	30+	Reserve	9.23	Sugartown	.41
Maine	Woodland	87	18	St Francis	20	26	Houlton FAA AP	9.86	Upper Dam	2.50
Maryland	Dalecarlia Resvr D C	90	9	Sines Deep Creek 2	28	25	Vienna	4.15	Baltimore WB City	.07
Massachusetts	Lowell	87	8	2 Stations	29	26+	Worcester WB Airport	5.06	South Egremont	1.50
Michigan	2 Stations	88	19+	Champion Van Riper Pk	21	24	Dowagiac 1W	5.22	Munising	.59
Minnesota	do	90	25+	Wannaska 8SE	16	27	Benson	3.59	Tracy	.16
Mississippi	Clarksdale	94	20	2 Stations	31	30+	Pascagoula 2ENE	16.31	Vance	.39
Missouri	3 Stations	90	25+	Caplinger Mills	26	29	Kansas City WB Airport	7.87	Sedalia	.81
Montana	Loma 1WNW	103	5	Wisdom	18	14	Zortman	6.80	Shelby AP	.06
Nebraska	Chadron FAA Airport	97	22	Harrisburg 10NW	19	27	Hardy	8.04	Oshkosh	.24
Nevada	Overton	104	1	Charleston	15	14	Goldfield	2.99	2 Stations	.00
New Hampshire	Franklin	88	8	Mount Washington	19	25	Mount Washington	7.61	Claremont Junction	1.49
New Jersey	Little Falls	89	18	Sussex 1SE	31	26	Shiloh	3.46	Elizabeth	.71
New Mexico	Carlsbad FAA Airport	101	12	Gavilan	21	14	McCauley Ranch	8.13	Alamogordo Dam	.07
New York	2 Stations	89	19+	2 Stations	28	11	Friendship 5SW	8.34	Poughkeepsie	.85
North Carolina	5 Stations	90	20+	Grandfather Mountain	24	30	Cape Hatteras WB	8.73	Southern Pines 2W	.08
North Dakota	Mandan Ft Lincoln Park	97	6	Alexander 16SW	15	27	Mandan Exp Station	3.44	Sherwood 3N	.16
Ohio	Cincinnati WB City	93	16	2 Stations	28	28+	Mohawk Dam	5.93	Willoughby 4N	.52
Oklahoma	Hollis	99	30	do	31	29+	Holdenville	13.96	Regnier	.35
Oregon	Pendleton Brch Exp Sta	105	1	Freemont	15	13	Santiam Pass	3.58	2 Stations	T
Pennsylvania	Everett 1SW	90	19	5 Stations	28	26+	Bradford FAA Airport	7.72	New Park	.53
Puerto Rico	Alex Hamilton Fld FAA	97	25	Aibonito	54	17	Maricao	14.00	Sabater	.39
Rhode Island	Providence WB Airport	85	19	Kingston	31	26	Woonsocket	4.16	Block Island WB AP	2.67
South Carolina	Little Mountain	94	19+	Caesars Head	28	30	Kershaw	6.34	Bamberg	.28
South Dakota	3 Stations	98	30+	Custer	19	27	Deadwood	5.09	Bowdle	.49
Tennessee	2 Stations	91	20+	2 Stations	28	30	Allardt	5.83	Bolton	1.25
Texas	Mentone 2NNE	106	12	Lipscomb	30	29	Falfurrias	32.78	Morse	.00
Utah	Zion National Park	104	5	Woodruff	18	13	Cedar Breaks Nat Mon	6.65	Thompsons	T
Vermont	West Burke	89	18	North Danville	24	26	Mount Mansfield	5.31	Cornwall	1.57
Virginia	Grundy 3NW	92	20+	Burkes Garden	27	25	Meadows of Dan 5SW	6.45	Quantico 1S	.13
Washington	Lower Granite Dam NR	111	1	Mount Adams Ranger Sta	25	13	Clearwater	8.10	Methow 2W	T
West Virginia	2 Stations	92	26+	2 Stations	25	26+	Belington	4.46	Hogsett Gallipolis Dam	.84
Wisconsin	Beloit	87	9	Prentice 4ENE	15	29	Platteville	5.72	Marinette	.31
Wyoming	3 Stations	97	2	Sage 4NNW	16	13	Stroner 2NW	4.77	Guernsey Dam No 2	.13

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

SEPTEMBER 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 °F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	995.6	1018.1	79	58	68.4	-7.9	88	19	37	30	0	0	59	76	2.84	-0.49	1.33	9	2	0.0	0	3.0	8	19	NW	27+	11	5	14	5.7	60
HUNTSVILLE	600	995.3	1018.3	79	58	68.4	-6.1	87	20+	37	30	0	0	56	67	2.87	-0.22	1.97	7	2	0.0	0	1.6	9	22	34	28	10	5	15	5.7	
MOBILE	211	1008.5	1016.2	84	65	74.2	-3.7	92	22	42	29	3	0	64	74	7.76	1.51	6.58	6	1	0.0	0	3.6	7	23	35	28	9	8	13	5.6	
MONTGOMERY	194	1010.2	1017.5	80	61	70.7	-6.4	90	19	39	30	1	0	60	73	3.75	-0.22	1.36	7	3	0.0	0	2.8	7	23	E	11	12	2	16	5.8	55
ALASKA												B																				
ANCHORAGE	114	993.9	998.6	54	42	48.1	0.1	61	2	33	30+	0	0	40	74	2.86	0.36	0.79	17	0	0.0	0	1.1	16	24	9	7	2	2	26	8.8	27
ANNETTE	110	1006.1	1010.0	61	49	55.1	1.0	75	15	38	28	1	0	49	81	15.51	5.63	3.18	26	1	0.0	0	7.4	15	32	16	12	1	5	24	8.8	
BARROW	31	1011.2	1011.6	28	23	25.3	-5.2	32	5+	16	25+	0	30	24	95	0.21	-0.43	0.10	6	0	2.4	3	12.0	8	35	6	18	1	1	28	9.2	
BARTER ISLAND	39	1008.5	1010.2	31	27	28.8	-3.3	35	8	18	21	0	30	25	85	0.72	-0.22	0.35	15	0	4.5	2	13.8	9	45	9	18	1	0	29	9.6	
BETHEL	125	992.6	998.0	54	37	45.3	0.7	62	14	28	30	0	5	39	81	0.63	-1.96	0.25	8	0	0.0	0	4.2	3	26	8	16	4	6	20	7.5	
COLD BAY	96	992.2	996.2	52	41	46.3	-1.2	56	4	32	5	0	1	41	81	2.91	-1.41	0.83	25	0	T	0	5.0	31	45	11	15	0	7	23	8.5	
FAIRBANKS	436	983.7	1000.7	58	35	46.6	3.0	71	17	28	30	1	9	35	67	0.25	-0.85	0.24	3	0	T	0	3.7	3	23	3	2	5	6	19	7.3	
JUNEAU	12	1006.4	1007.2	56	44	50.0	1.1	68	17	30	30	0	2	46	91	8.53	1.86	1.92	23	0	0.0	0	9.5	12	48	12	18	0	4	26	9.3	19
KING SALMON	49	992.9	995.1	52	40	46.3	-1.6	58	23+	32	4	0	1	38	73	1.69	-1.39	0.53	16	0	0.0	0	4.3	6	41	8	16	0	4	26	9.1	
KOTZEBUE	10	1002.4	1003.0	49	36	42.7	1.8	60	16	30	27+	0	6	35	75	0.03	-1.19	0.03	2	0	0.0	0	5.0	4	28	16	19+	10	9	11	5.3	
MC GRATH	344	986.5	999.1	55	36	45.1	1.2	62	17+	28	23	0	6	34	68	0.26	-2.35	0.11	6	0	0.0	0	1.9	1	22	3	3	4	4	22	7.7	
NOME	13	1000.0	1000.8	53	35	43.7	1.8	63	16	28	7+	0	13	29	57	0.45	-2.22	0.17	7	0	0.0	0	4.7	3	30	5	17	11	9	10	4.8	58
ST. PAUL ISLAND	22	998.6	999.5	50	40	45.4	0.8	56	3	32	28+	0	2	40	81	1.59	-1.48	0.29	23	0	0.0	0	9.1	35	35	31	2	1	7	22	8.5	
SHEMYA	122	1006.1	1009.9	50	42	46.1	-2.2	55	12+	34	28+	0	0	42	85	4.03	1.78	2.02	19	0	T	0	8.0	30	49	36	14	0	12	18	8.1	
YAKUTAT	28	1002.7	1003.9	54	42	47.8	-1.4	69	17	28	29	0	3	45	90	19.48	2.93	2.84	26	0	0.0	0	5.9	9	29	11	17	0	5	25	9.1	
ARIZONA																																
FLAGSTAFF	6993	790.4	1015.9	73	43	57.9	-0.6	82	4	34	15	0	0	43	64	2.25	0.67	1.20	9	7	0.0	0	1.5	15	23	17	24	10	10	10	5.3	
PHOENIX	1117	970.9	1008.8	98	72	84.8	2.0	105	23	63	15	28	0	54	37	0.13	-0.60	0.10	4	2	0.0	0	2.0	13	32Y	W	24	20	3	7	3.3	87
TUCSON	2584	923.8	1009.6	93	69	80.7	0.3	100	21	63	15	24	0	54	44	1.35	0.35	0.43	7	7	0.0	0	5.7	13	38	W	13	20	6	4	3.1	81
WINSLOW	4895	852.7	1013.9	84	54	69.3	-1.4	92	4	43	14	4	0	44	45	0.49	-0.42	0.21	7	7	0.0	0	1.7	19	32	21	24	14	11	5	4.2	
YUMA	194	1001.4	1008.4	96	73	84.4	-1.9	102	13	65	23	27	0	60	49	1.97	1.59	1.88	4	1	0.0	0	1.0	18	34	N	26	21	5	4	2.6	79
ARKANSAS																																
FORT SMITH	447	1001.0	1017.3	81	59	70.1	-4.8	89	20+	33	29	0	0	58	71	2.50	-1.14	1.49	9	2	0.0	0	3.1	6	23	N	27	8	8	14	6.4	49
LITTLE ROCK	257	1008.1	1017.5	79	59	69.0	-5.3	89	20	38	29	0	0	59	75	6.25	3.02	4.05	11	2	0.0	0	2.4	6	28	W	21	8	4	18	6.6	61
TEXARKANA	391	1003.7	1016.9	83	63	72.5	-4.0	90	21	39	29	1	0	61		2.28	-0.45	0.81	7	4	0.0	0	1.9	10				8	8	14	6.1	
CALIFORNIA																																
BAKERSFIELD	475	993.9	1011.1	92	69	80.4	3.9	99	15	63	9	22	0	53	43	0.11	0.03	0.07	3	3	0.0	0	2.5	33	20	32	21	19	6	5	2.8	
BISHOP	4108	873.7		86	50	68.1	-0.1	92	3+	42	20+	7	0			0.26	0.07	0.12	6		0.0	0						15	11	4	3.9	
BLUE CANYON	5280			75	56	65.1	2.2	85	26	44	30	0	0			0.85	0.22	0.71	4		0.0	0			20	20	30	21	7	2	2.5	
EUREKA U	43			65	53	59.1	2.7	70	29+	50	27+	0	0			1.32	0.68	1.08	6		0.0	0	1.6	30	19	N	18	9	10	11	5.8	56
FRESNO	328	999.3	1011.0	93	62	77.4	3.2	101	1	57	13	26	0	56	52	T	-0.10	T	0	0	0.0	0	3.2	30	18	NW	3	22	2	6	2.7	85
LONG BEACH	34	1010.8	1012.3	83	69	75.5	4.2	100	1	62	28	4	0	61	66	0.53	0.47	0.28	4	4	0.0	0	2.6	22	23	33	29	5	14	11	6.0	
LOS ANGELES	97	1008.1	1011.8	77	67	72.0	3.5	90	2	64	9	1	0	61	72	0.44	0.27	0.41	3	4	0.0	0	5.0	25	23Y	W	29+	5	10	15	6.7	
LOS ANGELES U	270			83	68	75.2	3.3	100	1	65	9	4	0			1.02	0.79	0.60	3		0.0	0			19	N	29	7	11	12	6.0	52
MT SHASTA R	3544			82	48	64.6	3.1	93	27	38	13	3	0			0.07	-0.80	0.07	1		0.0	0										
OAKLAND	6	1013.2	1013.3	74	59	66.5	1.4	90	20	57	7+	1	0	57	77	0.01	-0.19	0.01	1	0	0.0	0	6.4	29	24	24	21	15	11	4	4.2	
RED BLUFF	342	999.0	1011.3	93	62	77.5	1.5	105	26+	54	8	22	0	47	41	0.03	-0.34	0.03	2	0	0.0	0	0.7	20	29	SE	21	25	4	1	1.7	94
SACRAMENTO	17	1010.5	1011.3	91	59	74.9	3.3	97	20+	54	25	18	0	56	61	0.04	-0.15	0.04	1	0	0.0	0	4.2	21	30	SW	21	23	5	2	2.4	95
SANDBERG R	4517	862.9		76	57	66.4	-2.9	84	13	49	19+	0	0			0.95	0.74	0.82	5		0.0	0			39	6	20	17	6	7	3.8	
SAN DIEGO	13	1010.8	1011.9	77	67	72.0	2.1	88	1	65	22+	0	0	62	74	0.08	-0.07	0.04	2	0	0.0	0	3.3	28	20	S	2	7	9	14	6.2	53
SAN FRANCISCO	8	1012.5	1013.4	75	58	66.4	2.5	92	20+	55	13+	3	0	54	73	0.01	-0.18	0.01	1	0	0.0	0	10.8	30	36	W	5	18	8	4	3.7	
SAN FRANCISCO U	52			69	58	63.5	1.5	87	20+	56	29+	0	0			0.04	-0.18	0.04	1		0.0	0			27	SW	5					70
SANTA CATALINA	1568	957.0		75	61	68.0	-2.2	92	1	56	9	1	0			0.01	-0.19	0.01	1	3	0.0	0						8	11	11	5.8	
SANTA MARIA	236			76	54	64.9	2.1	91	11	49	9	1	0			0.18	0.02	0.10	6		0.0	0						9	13	8	5.2	
STOCKTON	22	1010.8	1012.0	90	61	75.7	3.0	98	2	57	25	16	0	53	52	0.03	-0.16	0.03	1	0	0.0	0	6.1	31	25	28	21	22	5	3	2.6	
COLORADO																																
ALAMOSA	7536	775.5		71	38	54.3	-1.4	79	3	27	14	0	7			0.53	-0.24	0.18	7		0.0	0						16	8	6	4.1	
COLORADO SPRINGS	6145	814.8	1016.6	73	48	60.6	-1.0	83	30+	39	13	0	0	40	53	0.73	-0.34	0.26	8	6	0.0	0	1.4	8	30	35	23	9	13	8	4.6	
DENVER	5283	838.8	1014.8	78	47	62.1	-0.9	88	2	36	13	0	0	40	50	0.60	-0.53	0.43	7	1	0.0	0	1.7	17	40	NW	11	15	7	8	4.2	76
GRAND JUNCTION	4855	853.4	1013.5	82	53	67.5	-0.3	95	4	42	13	5	0	39	39	0.37	-0.54	0.16	6	5	0.0	0	2.2	14	47	NW	11	19	5	6	3.5	84

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	858.1	1015.5	77	50	63.6	- 3.0	90	3	38	28	1	0	43	53	0.83	- 0.01	0.46	6	2	0.0	0	1.5	9	50	N	23	12	12	6	4.2	77
CONNECTICUT																																
BRIDGEPORT	7	1017.6	1018.2	75	56	65.4	- 0.1	85	19+	43	24	0	0	55	70	1.60	- 2.35	0.75	8	1	0.0	0	3.4	31	29	3	15	13	9	8	4.7	
HARTFORD	169	1011.5	1017.9	76	50	62.8	- 0.5	85	8	37	26	0	0	52	71	2.85	- 0.80	1.35	7	1	0.0	0	1.7	31	24	NW	25	9	11	10	5.2	75
NEW HAVEN	6	1018.0		74	53	63.4	- 0.5	83	19+	40	26	0	0			1.09	- 2.84	0.49	7		0.0	0			26	SW	21	13	8	9	4.6	77
DELAWARE																																
WILMINGTON	74	1015.6	1018.6	76	55	65.1	- 2.5	84	19+	42	25+	0	0	55	72	1.16	- 2.79	0.96	6	2	0.0	0	2.0	32	25	2	16	12	10	8	4.9	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1016.6	1019.1	79	57	68.0	- 1.7	87	19	47	25+	0	0	55	65	0.20	- 3.63	0.15	3	1	0.0	0	1.4	33	29	SE	28	11	11	8	5.2	67
FLORIDA																																
APALACHICOLA U	13			82	68	74.7	- 4.2	89	1	50	30+	0	0			9.75	1.22	3.44	10	6	0.0	0			34	E	3	14	2	14	5.4	57
DAYTONA BEACH	31	1014.6	1015.9	83	69	76.0	- 3.2	86	22+	62	30	0	0	68	80	5.56	- 1.44	2.51	12	7	0.0	0	5.8	2	25	36	13	6	5	19	7.3	
FORT MYERS	15	1014.6	1014.8	88	75	81.6	0.3	91	11	68	30	10	0	73	79	7.04	- 1.46	1.76	17	14	0.0	0	2.4	4	23	19	28+	1	18	11	6.7	
JACKSONVILLE	20	1015.6	1016.6	84	67	75.7	- 3.7	92	22	50	30	3	0	65	74	1.80	- 5.76	1.05	6	0	0.0	0	5.3	3	31	NE	12	7	6	17	6.5	57
KEY WEST	4	1013.5	1014.1	88	79	83.9	1.6	90	11+	74	25	6	0	74	73	4.96	- 1.77	1.47	15	13	0.0	0	3.3	11	30	S	27	0	13	17	7.4	74
LAKELAND U	214			87	71	78.7	- 1.5	91	24+	63	30	5	0			3.79	- 2.76	1.44	9		0.0	0						4	12	14	6.7	60
MIAMI	7	1013.9	1014.2	88	75	81.3	0.0	92	7	72	27+	6	0	72	76	9.18	- 0.29	3.50	13	12	0.0	0	1.8	9	30	26	29	0	10	20	7.9	
ORLANDO	108	1011.5	1015.7	88	72	79.7	- 0.3	91	21+	65	30	11	0	69	76	5.88	- 1.35	2.12	11	7	0.0	0	4.9	3	21	20	28+	1	10	19	7.6	
PENSACOLA	112	1012.2	1016.3	82	64	73.2	- 5.0	91	22	43	29	1	0	64	75	10.28	2.59	10.02	6		0.0	0	3.9	7	29	E	6	11	4	15	5.7	62
TALLAHASSEE	55	1014.2	1016.5	86	63	74.8	- 3.3	94	22	40	30	9	0	64	73	1.71	- 3.80	1.17	4	1	0.0	0	3.1	5	16	8	3	11	7	12	5.4	
TAMPA	19	1014.9	1015.1	88	71	79.2	- 1.3	92	11	64	30+	10	0	68	74	2.20	- 4.69	1.09	8	4	0.0	0	4.2	4	22	31	8	4	8	18	7.2	47
WEST PALM BEACH	15	1013.9	1014.5	88	72	80.3	- 1.8	91	23+	68	24+	8	0	70	74	6.91	- 2.75	2.74	16	16	0.0	0	1.6	7	31	20	29	1	8	21	7.9	
GEORGIA																																
ATHENS	802	989.5	1018.3	79	56	67.6	- 5.9	88	20+	36	30	0	0	57	72	1.28	- 1.74	1.18	3	0	0.0	0	3.1	6	15	32	29+	12	6	12	5.0	
ATLANTA	1010	981.7	1018.3	76	57	66.5	- 6.6	85	21+	36	30	0	0	56	72	1.90	- 1.36	0.84	6	0	0.0	0	2.9	7	27	NW	28	12	6	12	5.4	62
AUGUSTA	145	1012.2	1017.6	82	55	68.7	- 6.6	92	21	36	30	1	0	57	72	0.61	- 2.39	0.34	3	0	0.0	0	3.0	1	20	28	28	12	8	10	4.9	
COLUMBUS	385			80	61	70.6	- 5.4	89	20	38	30	0	0	61	76	3.84	1.07	2.36	6		0.0	0	3.3	5	17	7	2	12	4	14	5.5	
MACON	354	1004.7	1017.6	81	56	68.7	- 7.7	90	19	35	30	1	0	57	71	1.44	- 1.33	0.91	5	1	0.0	0	3.1	4	18	NW	28	12	4	14	5.4	66
ROME	637			79	55	66.7	- 5.7	89	20	32	30	0	1			4.90	1.60	2.68	6		0.0	0										
SAVANNAH	46	1015.2	1017.0	82	61	71.6	- 5.1	90	22+	43	30	2	0	60	73	2.12	- 3.13	1.11	4	2	0.0	0	3.9	4	22	E	3	10	6	14	5.8	61
HAWAII																																
HILO	27	1014.6	1015.7	85	69	77.0	1.5	86	29+	67	26+	0	0	68	75	6.78	- 1.72	1.28	23	0	0.0	0	1.3	23	19	NE	20	7	9	14	6.3	48
HONOLULU	7	1014.6	1014.9	90	75	82.4	3.2	92	17+	69	27	23	0	67	63	0.42	- 0.57	0.18	11	1	0.0	0	10.0	6	27	NE	9	11	9	10	5.6	65
KAHULUI	48	1012.2	1014.5	87	69	77.7	- 0.7	90	18+	61	26	3	0	68	75	0.08	- 0.17	0.03	4	0	0.0	0	10.2	4	29	NE	9	12	11	7	4.8	85
LIHUE	103	1011.2	1016.2	85	73	79.0	0.9	86	11	67	26	0	0	71	79	1.56	- 0.52	0.31	14	2	0.0	0	10.4	6	25	NE	8	1	16	13	6.9	76
IDAHO																																
BOISE	2838	915.3	1013.5	83	54	68.6	5.9	98	1	37	13	6	0	45	47	0.58	0.19	0.30	4	4	0.0	0	1.1	16	27	SE	8	20	4	6	3.0	85
IDAHO FALLS 46W R	4934			79	40	59.5	3.0	92	1	27	13	4	5			0.03	- 0.32	0.03	1		0.0	0	1.7	25	37	SW	11+					
LEWISTON	1413			84	55	69.5	6.0	101	21	42	13	8	0			0.60	- 0.30	0.42	5		0.0	0						19	4	7	3.5	
POCATELLO	4454	864.2	1015.1	80	44	61.7	1.4	93	1	30	13	2	3	37	44	0.14	- 0.47	0.14	1	2	0.0	0	2.3	22	33	NW	30	17	6	7	4.0	81
ILLINOIS																																
CAIRO U	314			77	60	68.6	- 3.9	87	19	42	29	0	0			3.61	0.60	1.76	6		0.0	0			32	S	21	10	8	12	5.5	60
CHICAGO O HARE	658	995.3	1019.6	73	50	61.7	- 1.9	85	20	40	25+	0	0	51	72	2.45	- 0.29	1.16	11	2	T	T	0.8	32	26	21	26+	10	10	10	5.1	
CHICAGO MIDWAY	607	997.0		74	55	64.8	- 1.3	89	20	41	29	0	0	50	63	3.17	0.44	1.36	9	2	0.0	0	1.0	9	30	NE	9	11	12	7	4.9	67
MOLINE	582	997.6	1019.0	74	50	62.1	- 3.2	84	20+	32	29	0	1	52	75	4.99	1.74	1.77	7	4	0.0	0	1.3	13	25	SW	20	16	3	11	4.6	60
PEORIA	652	995.3	1019.3	74	53	63.3	- 3.1	85	20	34	30+	0	0	51	69	2.72	- 0.33	1.13	8	3	0.0	0	1.9	11	30	NW	26	13	8	9	4.8	64
ROCKFORD	724	992.2	1019.2	74	51	62.4	- 1.4	86	20	36	30	0	0	53	74	3.11	- 0.40	1.10	8	4	0.0	0	1.0	13	23	32	26	13	7	10	4.6	
SPRINGFIELD	588	996.6	1018.8	75	52	63.7	- 3.9	87	20	39	30+	0	0	53	73	4.03	1.10	1.09	10	5	0.0	0	1.7	11	31	W	20	14	4	12	5.2	68
INDIANA																																
EVANSVILLE	381	1004.7	1018.7	79	54	66.1	- 4.0	93	20	37	29	2	0	55	72	1.19	- 1.68	0.88	5	2	0.0	0	1.1	5	20	S	26	10	10	10	5.2	63
FORT WAYNE	791	989.8	1019.9	74	48	61.2	- 3.6	85	20	32	23	0	1	46	62	1.04	- 1.63	0.42	5	0	0.0	0	0.3	4	26	W	21	12	2	16	5.8	69

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
INDIANAPOLIS	792	990.2	1019.3	78	54	65.9	- 0.6	88	17	37	29	0	0	52	66	0.80	- 2.44	0.31	6	1	0.0	0	0.7	7	28	N	21	11	6	13	5.7	63
SOUTH BEND	773	991.5	1019.3	73	52	62.5	- 1.3	85	20	39	28	0	0	52	72	2.59	- 0.48	1.38	6	2	0.0	0	0.4	17	23	21	26+	10	10	10	5.4	
IOWA																																
BURLINGTON	692			73	53	63.2	- 2.8	82	20+	34	29	0	0	52	70	2.78	- 0.41	0.92	7	2	0.0		1.6	12	23	23	20	17	3	10	4.6	
DES MOINES	938	984.4	1019.1	74	50	62.3	- 3.1	86	25	35	29+	0	0	50	67	2.54	- 0.34	1.45	4	4	0.0	0	2.3	13	26	SW	26	12	5	13	5.2	71
DUBUQUE	1056	980.4		72	50	60.8	- 0.9	83	8	31	29	0	1			11.88	8.14	8.85	7		0.0	0						14	5	11	4.9	
SIOUX CITY	1095	978.0	1017.7	75	50	62.5	- 3.0	90	25	30	28	1	1	50	68	1.08	- 1.66	0.66	9	4	0.0	0	4.2	16	26	SE	12+	12	9	9	4.4	78
WATERLOO	868	987.1	1019.0	72	45	58.1	- 4.8	79	7+	22	29	0	3	49	75	1.40	- 2.40	0.78	7	2	0.0	0	2.1	16	22	18	25	14	6	10	4.7	
KANSAS																																
CONCORDIA	1470	964.4	1017.2	75	53	63.9	- 5.7	87	25+	35	28	0	0	54	75	6.61	3.88	2.17	11	10	0.0	0	3.9	14	31	S	3	10	13	7	4.9	66
DODGE CITY	2582	926.2	1015.9	80	55	67.3	- 3.0	92	12	38	28	3	0	50	60	2.38	0.85	1.02	10	5	0.0	0	4.6	16	37	NE	13	15	6	9	4.4	74
GOODLAND	3650	890.6	1016.1	78	49	63.5	- 2.0	90	30	31	27	1	1	48	64	4.13	2.89	2.04	11	8	0.0	0	4.2	18	51	34	12	11	13	6	4.6	
TOPEKA	876	986.5	1018.1	75	52	63.6	- 5.8	87	25	35	29	0	0	54	75	4.64	1.66	1.69	10	7	0.0	0	1.6	13	24	SW	25+	9	9	12	5.6	63
WICHITA	1321	969.5	1017.0	77	55	65.9	- 5.4	89	25	35	28	0	0	53	67	3.19	- 0.03	1.52	7	6	0.0	0	3.9	14	29	NE	26+	9	10	11	5.5	60
KENTUCKY																																
COVINGTON	869	987.8	1019.2	77	53	65.3	- 1.9	89	16	39	23	0	0	51	64	1.79	- 1.04	0.82	7	0	0.0	0	1.3	8	21	26	30*	11	3	16	5.8	
LEXINGTON	966	983.7	1019.2	76	54	64.9	- 4.4	87	20	39	29	0	0	53	69	2.97	0.17	1.73	7	1	0.0	0	1.3	6	21	18	21	13	5	12	5.1	
LOUISVILLE	477	1001.0	1018.6	77	54	65.7	- 3.8	88	20	38	29	0	0	55	73	1.73	- 0.90	0.79	5	2	0.0	0	1.1	9	24	N	27	9	12	9	5.1	71
LOUISIANA																																
ALEXANDRIA	92	1011.9	1016.2	83	62	72.5	- 4.5	91	22	38	29	1	0	63	78	1.21	- 1.92	0.51	4	1	0.0	0	3.0	3	23	35	27	8	11	11	5.7	
BATON ROUGE	64	1013.2	1016.1	85	65	74.5	- 3.4	91	20	43	29	3	0	64	74	3.48	- 0.04	1.60	7	2	0.0	0	3.4	6	23	36	22	8	11	11	5.5	
LAKE CHARLES	9	1014.9	1015.9	85	67	76.1	- 2.6	90	14	47	29	1	0	67	77	4.21	0.19	1.78	5	4	0.0	0	4.1	7	24	35	27	12	7	11	5.1	
NEW ORLEANS	3	1014.9	1015.7	84	66	75.1	- 3.2	89	20+	42	30	0	0	65	73	3.73	- 1.30	2.29	8	1	0.0	0	3.6	5	23	34	28	10	11	9	4.9	
SHREVEPORT	254	1007.1	1016.1	83	64	73.2	- 5.6	91	19	42	29	2	0	62	73	1.27	- 1.01	0.77	9	0	0.0	0	2.7	9	20	35	28+	10	7	13	5.7	56
MAINE																																
CARIBOU	624	992.9		67	45	55.8	2.0	81	17	31	26	0	2			6.61	3.08	1.89	12		0.0	0						9	6	15	6.4	
PORTLAND	47	1015.2	1017.6	71	49	59.9	1.2	82	17	34	26	0	0	51	73	2.68	- 0.84	1.51	7	0	0.0	0	2.2	22	24	NW	2	8	9	13	6.1	64
MARYLAND																																
BALTIMORE	148	1013.2	1018.7	77	54	65.3	- 2.8	87	18	40	25	0	0	55	72	0.21	- 3.12	0.17	5	1	0.0	0	2.6	30	28	SE	28	13	12	5	4.4	66
MASSACHUSETTS																																
BLUE HILL OBS R	629			70	52	61.2	- 1.2	82	17+	42	26+	0	0			3.06	- 0.89	2.50	7		0.0	0			39	SE	28					70
BOSTON	15	1016.6	1017.7	71	54	62.7	- 2.6	83	8	45	26	0	0	51	67	2.00	- 1.46	1.53	6	0	0.0	0	3.2	27	32	NW	2	12	9	9	4.8	77
NANTUCKET	43	1017.6	1017.9	68	53	60.6	- 2.3	78	19+	40	26	0	0	56	86	2.30	- 1.21	0.86	7	1	0.0	0	1.3	34	32	N	10	10	8	12	5.3	68
PITTSFIELD	1170			71	45	58.2	0.1	81	20+	31	26	0	2			1.92	- 2.58	0.64	9		0.0	0										
WORCESTER	986	981.7	1018.7	70	51	60.6	- 0.2	80	17+	41	24	0	0	51	73	5.06	1.14	2.66	7	1	0.0	0	3.9	28	27	29	25	13	8	9	4.7	
MICHIGAN																																
ALPENA	689	994.2	1019.6	69	41	55.3	- 0.7	82	18+	30	11	0	6	46	73	1.98	- 1.63	0.78	11	2	0.0	0	0.9	30	21	NE	28+	10	11	9	5.3	67
DETROIT	619			73	53	63.1	- 2.0	84	26+	42	30+	0	0	50	65	1.68	- 0.76	0.92	5	0	0.0	0	1.0	32	21	24	26					
DETROIT M WAYNE CO	633	994.9	1019.1	74	47	60.4	- 3.9	84	26+	34	23	0	0	48	67	1.96	- 0.36	1.20	6	1	0.0	0	0.8	30	25	SW	26	11	8	11	5.2	69
DETROIT WILLOW RUN	711	991.5	1019.7	72	46	59.0	- 5.8	82	18+	34	23	0	0	46	65	2.05	- 0.24	1.38	4	1	0.0	0	1.3	30	29	36	28	10	9	11	5.3	
FLINT	770	991.5	1019.3	70	46	58.0	- 4.0	81	18	33	25	0	0	46	67	1.68	- 1.26	0.65	7	1	T	T	0.9	25	29	23	26	10	11	9	5.3	
GRAND RAPIDS	784	990.5	1019.5	73	48	60.3	- 1.9	85	18	35	28	0	0	49	69	2.37	- 0.61	1.04	7	1	T	T	0.5	30	34	SW	26	13	7	10	5.0	68
HOUGHTON LAKE	1149	978.3	1020.4	69	41	55.4		82	18	28	23	0	2	46	72	1.73		0.69	10	2	0.1	T	0.7	31	26	22	26	12	6	12	5.2	
LANSING	841	987.5	1019.3	71	45	58.1	- 3.9	82	26+	32	23	0	1	48	71	2.53	- 0.07	1.12	8	1	T	T	0.7	27	32	SW	26	11	7	12	5.2	78
MARQUETTE U	677			67	51	59.0	1.3	81	19+	36	27	0	0			1.20	- 2.08	0.54	11		0.0	0			29	SW	26	8	10	12	5.9	69
MUSKEGON	627	996.3	1019.4	72	50	61.1	- 1.9	86	16	36	23	0	0	51	71	2.87	- 0.19	0.97	8	3	0.0	0	1.0	30	25	20	26	14	9	7	4.4	
SAULT STE MARIE	721	992.9	1019.4	68	43	55.7	- 0.1	81	6	30	23+	0	4	47	77	1.78	- 2.03	0.94	7	2	T	T	1.2	34	28	NW	23	10	10	10	5.5	67
MINNESOTA																																
DULUTH	1428	967.5	1019.1	67	45	56.0	1.8	79	7+	25	28	0	5	45	69	1.34	- 1.52	0.91	4	1	0.0	0	2.7	17	36	NW	23	13	6	11	5.1	69
INTERNATIONAL FALLS	1179	974.6	1017.8	70	43	56.7	3.8	85	7	25	28	0	5	44	66	1.76	- 1.14	0.73	6	3	0.0	0	3.0	19	25	15	12	10	11	9	5.1	
MINNEAPOLIS	834	988.2	1018.6	73	48	60.3	- 0.1	82	25+	28	29	0	2	49	69	0.63	- 1.80	0.40	7	1	0.0	0	3.0	17	27	NW	23	15	6	9	4.3	84

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ROCHESTER	1297	971.6	1019.4	71	45	58.4	- 2.3	80	8	23	29	0	2	47	70	1.24	- 1.86	1.07	5	1	0.0	0	4.1	19	28	19	25	16	4	10	4.5	
ST CLOUD	1034	980.0	1018.0	71	46	58.8	0.0	83	7	28	28	0	2		69	1.43	- 0.98	0.79	4		0.0	0						15	5	10	4.5	
MISSISSIPPI																																
JACKSON	310	1005.1	1017.1	81	58	69.8	- 6.7	89	21	35	29	0	0	62	83	1.80	- 0.73	1.03	4	2	0.0	0	2.4	9	22	NW	27	10	7	13	5.9	57
MERIDIAN	290	1006.4	1017.4	80	58	68.6	- 7.3	88	18	34	30+	0	0	60	80	2.23	- 1.10	1.16	5	3	0.0	0	2.5	5	21	24	27	12	1	17	6.3	
MISSOURI																																
COLUMBIA	778	989.8	1018.0	78	55	66.6	- 2.7	85	12+	35	29	0	0	53	65	1.96	- 1.92	1.03	5	4	0.0	0	2.6	11	45	NW	26	10	3	17	6.2	59
KANSAS CITY	742	991.2	1017.9	78	58	67.9	- 3.4	89	25	40	29	0	0	56	69	7.87	4.62	3.32	10	6	0.0	0	2.0	11	27	NW	20	12	7	11	5.4	59
ST JOSEPH	811			77	50	63.5	- 5.1	89	25	30	28	0	2	54	76	1.72	- 1.72		7	6	0.0		1.3	13	20	31	21	15	6	9	4.7	
ST LOUIS	535	998.6	1018.8	77	56	66.5	- 3.0	87	20	41	29+	0	0	55	70	4.33	1.57	1.33	9	2	0.0	0	1.8	12	32	SW	20	9	10	11	5.7	63
SPRINGFIELD	1268	973.2	1018.2	79	54	66.4	- 4.0	87	6	33	29	0	0	54	69	3.36	- 0.49	0.95	11	5	0.0	0	2.9	13	23	N	27	10	3	17	6.2	47
MONTANA																																
BILLINGS	3567	891.6	1014.2	74	49	61.9	1.5	92	2	37	27	4	0	42	54	0.66	- 0.53	0.22	7	2	0.0	0	3.9	28	36	W	12	15	5	10	4.4	71
GLASGOW	2284	931.9		76	49	62.2	5.5	94	6+	36	27+	3	0			2.20	1.24	0.73	8		0.0	0						13	3	14	5.0	
GREAT FALLS	3662	888.6	1013.9	78	48	62.9	5.5	98	5	37	23	4	0	36	40	1.59	0.39	1.32	6	3	0.0	0	4.4	23	34	W	2	15	9	6	3.8	83
HAVRE	2582	922.5	1013.2	79	46	62.6	7.0	101	5	37	26	4	0	41	51	1.77	0.76	1.01	5	0	0.0	0	1.9	28	42	NW	2	17	6	7	4.0	77
HELENA	3828	881.8	1015.4	79	45	61.9	5.9	99	5	35	14	4	0	40	50	0.68	- 0.27	0.29	6	3	0.0	0	2.8	27	43	SW	10	17	9	4	3.4	78
KALISPELL	2965	911.3	1014.8	79	40	59.5	4.8	99	1	29	23	3	2	41	55	0.33	- 0.71	0.15	6	2	0.0	0	2.2	19	22	27	22+	16	12	2	3.2	
MILES CITY	2629	921.1	1013.1	78	51	64.5	3.5	94	6+	36	27	6	0	44	54	2.35	1.39		9	3	0.0		1.8	31								
MISSOULA	3190	904.8	1015.8	81	43	62.2	6.8	99	1	33	13	5	0	39	48	0.49	- 0.53	0.31	5	2	0.0	0	1.7	30	34	SW	5	16	11	3	3.2	82
NEBRASKA																																
GRAND ISLAND	1841	951.6	1017.4	76	50	63.1	- 2.1	90	25	30	28	1	1	51	69	1.02	- 1.13	0.48	9	8	0.0	0	4.8	17	26	18	11	14	8	8	4.4	
LINCOLN U	1150			74	53	63.5	- 4.7	88	25	35	28	0	0			2.91	0.04	1.31	6		0.0	0			30	S	11	13	8	9	4.6	70
NORFOLK	1544			75	49	62.1	- 2.9	90	25	28	28	1	1			1.40	- 0.85	0.44	8		0.0	0						12	10	8	4.5	
NORTH PLATTE	2775	919.1	1016.3	77	45	61.2	- 2.5	88	30+	25	27	0	2	45	61	1.12	- 0.55	0.60	4	3	0.0	0	3.3	15	42	NE	23	14	8	8	4.5	73
OMAHA	977	983.1	1018.3	74	51	62.5	- 4.4	86	25	33	28	0	0	53	73	4.15	1.52	2.12	7	5	0.0	0	3.0	15	30	N	23	15	5	10	4.5	73
SCOTTSBLUFF	3957	880.8	1015.3	77	47	61.9	- 0.4	91	22	28	27	2	1	45	60	0.53	- 0.68	0.15	8	5	0.0	0	0.7	4	35	28	12	13	8	9	4.5	
VALENTINE	2587			77	47	62.1	0.3	94	30+	25	27	4	3			0.78	- 0.47	0.32	7		0.0	0			50	W	13	13	8	9	4.7	69
NEVADA																																
ELKO	5050	845.9	1014.4	83	47	64.9	7.0	94	1	29	13	4	1	36	40	0.21	- 0.13	0.14	4	2	0.0	0	0.6	25	23	25	11	13	9	8	4.4	
ELY	6253	811.4	1015.0	75	41	57.9	0.4	85	3+	27	14	0	4	36	53	2.23	1.67	0.65	7	8	0.0	0	3.1	20	29	SW	22	12	11	7	4.5	67
LAS VEGAS	2162	936.0	1010.9	92	68	80.0	0.0	99	21+	58	14	24	0	49	38	1.03	0.69	0.66	8	6	0.0	0	0.8	24	32	NE	18	19	5	6	3.5	78
RENO	4404	866.6	1014.5	83	43	62.6	3.8	92	1	30	14	1	2	40	46	0.82	0.59	0.58	5	2	0.0	0	0.6	27	29	NW	30	16	9	5	3.6	87
WINNEMUCCA	4299	867.9	1013.7	84	43	63.5	4.9	96	1	23	14	5	3	36	39	0.20	- 0.14	0.14	3	3	0.0		0.4	30	31	SW	11	16	7	7	4.2	69
NEW HAMPSHIRE																																
CONCORD	342	1005.4	1018.3	73	44	58.4	- 0.9	84	8	28	26	0	3	50	75	2.04	- 1.71	0.89	6	0	0.0	0	1.1	25	30	NW	2	10	9	11	5.4	66
MT WASHINGTON OBS	6262			48	36	42.0	1.0	58	16	19	25	0	12			7.61	0.61	2.20	14	0	6.9	2			88Y	SE	28	5	4	21	7.3	44
NEW JERSEY																																
ATLANTIC CITY	64	1016.6	1018.9	73	49	61.2	- 6.0	85	18	32	24	0	1	53	76	1.50	- 1.81	0.85	6	1	0.0	0	1.2	31	26	4	16	13	8	9	4.9	64
ATLANTIC CITY U	11			73	59	66.0	- 2.4	84	5+	46	25	0	0			2.01	- 1.39	1.43	5						37	N	15					
NEWARK	7	1017.6	1018.6	76	57	66.6	- 0.7	86	19+	44	24+	0	0	53	63	1.35	- 2.41	0.65	7	0	0.0	0	2.2	31	25	12	28	13	9	8	4.7	
TRENTON U	56			75	56	65.3	- 1.8	85	19	44	23	0	0			2.16	- 1.34	0.97	6		0.0	0			27	N	16	11	10	9	4.9	67
NEW MEXICO																																
ALBUQUERQUE	5311	840.8	1014.6	81	56	68.4	- 1.6	90	4+	46	28+	2	0	44	48	0.79	- 0.16	0.30	7	5	0.0	0	2.5	13	47	E	4	15	10	5	3.7	81
CLAYTON	4969			76	50	63.4	- 2.6	90	3	40	24	1	0			2.43	0.78	0.84	8		0.0	0						12	9	9	5.0	
RATON	6379			74	45	59.3	- 2.6	84	29	34	28	0	0			1.12	- 0.56	0.51	9		0.0	0						11	9	10	4.9	
ROSWELL	3617	893.3		83	54	68.8	- 0.9	97	12	41	30	3	0	54	64	0.85	- 0.97	0.39	7	8	0.0	0	2.8	13	25	NW	13	13	6	11	4.9	72
SILVER CITY	5373			79	55	66.8	- 3.2	85	13+	44	29	0	0			1.64	0.18	0.55	7		0.0	0						9	16	5	4.8	
NEW YORK																																
ALBANY	275	1007.8	1018.5	75	48	61.3	- 0.3	85	8	34	24	0	0	50	68	2.23	- 1.35	1.23	8	0	0.0	0	2.3	26	30	SW	21	5	14	11	5.8	64
BINGHAMTON	1590	960.7	1019.3	69	49	59.1	- 0.4	78	8	39	25+	0	0	51	77	3.11	0.16	1.52	9	2	0.0	0	2.3	28	30	SE	28	8	8	14	5.9	71

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	993.2	1018.9	71	50	60.7	- 0.7	82	8	37	25	0	0	50	71	6.36	3.23	3.63	9	2	0.0	0	3.7	23	32	W	21	10	6	14	6.1	71
NEW YORK U	132	1014.9	1018.1	76	58	66.7	- 1.8	87	19+	45	25	0	0	51	61	1.84	- 2.03	0.86	7	0	0.0	0	1.5	36	29	NE	16					71
J.F. KENNEDY	13	1017.6	1018.5	73	56	64.4	- 3.4	84	19+	45	23	0	0	53	69	1.44	- 2.72	0.51	8	0	0.0	0	1.5	32	28	20	26+	11	12	7	4.9	
NEW YORK LA GUARDIA	11	1016.6	1018.4	74	59	66.5	- 2.3	84	8	48	25+	0	0	53	63	1.39	- 2.53	0.54	7	1	0.0	0	2.0	33	39	NE	16	12	9	9	5.1	
ROCHESTER	547	999.3	1019.7	72	49	60.4	- 2.0	83	8	38	25+	0	0	50	72	3.84	1.31	1.76	11	2	0.0	0	3.8	26	30	SW	21+	10	12	8	5.3	66
SYRACUSE	410	1003.7	1018.6	72	49	60.7	- 1.7	84	8	39	11	0	0	51	73	2.73	- 0.11	1.40	9	0	0.0	0	2.7	27	36	W	21	11	10	9	5.5	72
NORTH CAROLINA																																
ASHEVILLE	2140	943.4	1019.3	73	48	60.2	- 5.7	82	20+	30	30	0	1	52	81	2.53	- 1.09	1.60	5	0	0.0	0	1.4	1	23	36	28	8	10	12	5.7	64
CAPE HATTERAS R	7	1016.9	1017.2	75	62	68.8	- 5.3	84	9	48	24	0	0	61	76	8.73	2.84	4.48	8	2	0.0	0	5.7	2	31	S	28	9	7	14	5.8	57
CHARLOTTE	736	991.2	1018.4	78	56	67.0	- 5.9	88	20	39	30	0	0	55	67	1.60	- 1.89	0.88	3	0	0.0	0	2.4	3	22	N	22	10	12	8	5.0	86
GREENSBORO	897	987.5	1018.9	78	55	66.6	- 3.5	88	16	39	30	0	0	58	78	2.39	- 1.27	1.03	5	2	0.0	0	2.5	2	25	NW	21	11	8	11	5.2	64
RALEIGH	434	1002.7	1018.4	78	57	67.5	- 3.7	86	16	42	30	0	0	57	73	1.74	- 2.11	0.90	7	2	0.0	0	3.2	3	22	36	16	13	8	9	4.9	58
WILMINGTON	28	1016.3	1017.7	82	62	72.0	- 3.2	89	16	50	30+	0	0	59	67	1.55	- 4.74	1.40	4	0	0.0	0	3.8	3	26	N	17	9	10	11	5.9	63
NORTH DAKOTA																																
BISMARCK	1647	955.0	1014.4	74	47	60.4	1.7	87	5	25	27	0	1	43	60	2.09	0.90	0.74	7	2	0.0	0	3.4	17	35	NW	25	14	8	8	4.6	73
FARGO	896	983.4	1016.0	74	47	60.8	2.0	88	7	24	27	0	1	45	60	0.31	- 1.17	0.10	5	2	0.0	0	6.5	18	34	NW	25	16	4	10	4.6	69
WILLISTON	1899	945.1	1012.9	77	47	62.0	4.8	93	6	27	27+	2	2	44	57	0.67	- 0.45	0.34	7	2	0.0	0	0.8	35	42	W	11	13	10	7	4.0	75
OHIO																																
AKRON	1208	975.3	1019.8	72	50	60.9	- 3.0	83	18	39	25	0	0	50	72	3.69	1.07	2.33	7	1	0.0	0	0.4	2	21	32	27	10	8	12	5.6	
CINCINNATI OBS	761			77	52	64.9	- 4.1	90	16	40	23	1	0			1.67	- 1.04	0.80	7		0.0	0			19	W	21					57
CLEVELAND	777	990.5	1019.8	73	50	61.7	- 2.5	85	20	35	25	0	0	49	66	2.08	- 0.82	0.72	7	1	0.0	0	0.5	27	24	SW	26	11	6	13	5.8	60
COLUMBUS	812	989.8	1019.8	73	48	60.4	- 5.5	86	16	33	25	0	0	51	75	2.63	- 0.02	1.59	7	1	T	0	1.3	3	27	N	27	14	3	13	5.4	54
DAYTON	1002	983.7	1019.6	76	51	63.7	- 3.1	88	16	36	23	0	0	50	64	1.09	- 1.50	0.62	8	0	0.0	0	1.2	5	26	SW	30	11	5	14	5.8	66
MANSFIELD	1295			71	49	60.1	- 3.2	83	15	37	25+	0	0	46	62	4.61	1.63	2.16	6	1	0.0	0	1.0	26				10	6	14	5.9	
TOLEDO	669	994.9	1020.0	72	45	58.4	- 5.0	83	15+	30	23	0	1	48	71	2.14	0.01	0.75	7	2	T	0	0.7	32	22	SW	26	9	10	11	5.6	64
YOUNGSTOWN	1178	977.0	1019.9	70	46	58.1	- 4.4	80	20+	34	11	0	0	49	74	3.64	0.75	1.77	8	1	0.0	0	0.2	34	21	28	24	9	9	12	5.8	
OKLAHOMA																																
OKLAHOMA CITY	1285	970.9	1016.7	81	61	70.9	- 2.9	90	12	41	28	1	0	58	69	3.15	0.13	1.04	13	6	0.0	0	3.4	12	30	SE	3	10	4	16	6.0	55
TULSA	650	993.2	1017.4	80	59	69.2	- 4.6	88	19	39	28	0	0	59	74	4.89	0.88	1.37	11	5	0.0	0	2.4	14	28	N	26	11	5	14	5.6	54
OREGON																																
ASTORIA	8	1014.6	1015.4	71	50	60.5	2.5	89	14	41	23	0	0	55	86	3.07	- 0.06	1.18	10	0	0.0	0	2.1	21	32	18	1	12	6	12	5.5	
BURNS U	4151	874.0	1015.2	80	45	62.8	4.0	91	1	31	12	2	1	37	43	0.32	- 0.18	0.16	5		0.0	0	2.7	31				21	6	3	2.6	
EUGENE	359	1001.4	1014.7	82	50	66.0	4.5	96	15	43	12	4	0	51	67	1.83	0.56	0.60	5	0	0.0	0	1.6	26	23	15	30	20	5	5	3.1	
MEACHAM	4050	877.8	1014.3	73	50	61.6	5.9	87	1	38	13	0	0			0.80	- 0.66	0.60	5		0.0	0	2.1	30				18	7	5	3.7	
MEDFORD	1298	967.2	1014.2	88	50	69.2	5.0	98	27	41	13	17	0	47	53	0.28	- 0.32	0.27	2	0	0.0	0	2.5	29	21	29	8+	22	5	3	2.2	
PENDLETON	1482	961.4	1014.4	84	56	69.9	5.7	95	1	43	13	10	0	43	41	0.40	- 0.23	0.23	3	1	0.0	0	2.8	26	30	26	10	21	6	3	2.5	
PORTLAND	21	1013.5	1014.8	80	53	66.4	4.2	94	27	43	12	3	0	51	65	0.76	- 0.87	0.26	6	0	0.0	0	1.8	32	42	S	10	14	9	7	4.2	72
SALEM	196	1007.5	1014.8	82	48	64.9	2.4	98	15	38	12	4	0	49	62	0.84	- 0.54	0.33	5	0	0.0	0	1.9	28	29	19	10	18	6	6	3.6	
SEXTON SUMMIT R	3836	884.2	1013.7	74	52	63.1	3.4	87	27	42	30	0	0			0.62	- 0.63	0.31	5		0.0	0	1.0	2	32	12	14	23	2	5	2.1	
PACIFIC AREA																																
JOHNSTON	7	1011.9	1012.4	85	77	81.0	- 0.6	87	30+	73	21+	0	0	74	79	7.12	4.77	2.65	22	2	0.0	0	10.5	10	33	SE	3	1	12	17	7.4	66
KOROR R	94	1006.1	1009.7	88	77	82.5	1.5	92	23	74	30+	6	0	75	81	6.75	- 7.58	1.85	13	1	0.0	0	6.4	24	28	SW	29+	0	2	28	9.1	79
KWAJALEIN	8	1009.1	1009.8	87	78	82.3	0.4	89	18+	73	26+	0	0	75	79	10.91	0.72	3.11	17	3	0.0	0	2.7	15	35	19	26	2	3	25	9.1	
MAJURO	10	1010.2	1010.4	87	77	82.0	1.6	90	17	72	13	1	0	74	76	13.78	1.72	3.99	20	3	0.0	0	2.5	10	26	N	13	0	5	25	8.9	65
MARCUS ISLAND	20	1005.1	1007.0	87	78	82.2	- 0.9	93	2	74	16	3	0	76	84	4.04	0.17	1.42	11	0	0.0	0	6.6	11	61	N	20	4	12	14	6.7	53
PAGO PAGO	12	1013.2	1013.4	86	73	79.6		89	25+	67	4+	0	0	73	80	4.34		1.33	18	1	0.0	0	9.6	9	29	E	17	5	17	8	5.9	83
PONAPE R	123	1004.4	1009.8	88	72	79.9	0.4	91	29+	69	20	7	0	74	86	19.51	3.70	5.43	19	1	0.0	0	2.3	19	17	NW	1	4	4	22	8.1	52
TAGUAC GUAM R	361			85	73	78.9	- 0.4	88	28+	68	29+	0	0			20.28	6.92	4.89	23		0.0	0			24	SW	12+					38
TRUK MOEN ISLAND	5	1009.1	1009.6	87	75	80.8	0.4	89	25+	73	24+	0	0	75	83	7.82	- 4.76	1.90	13	0	0.0	0	4.6	24	31	N	4	2	3	25	8.9	65
WAKE	11	1008.5	1008.7	85	77	81.0	- 1.5	87	30+	75	26+	0	0	75	83	16.60	11.36	5.15	25	0	0.0	0	7.0	15	104	N	16				9.0	47
YAP R	62	1006.8	1008.5	88	76	81.7	0.3	92	28+	72	4	9	0	75	84	11.72	- 2.29	5.41	23	5	0.0	0	4.7	24	29	SW	29	0	5	25	9.0	52
PENNSYLVANIA																																
ALLENTOWN	387	1004.7	1018.7	75	48	61.3	- 3.4	85	19	35	26	0	0	51	71	0.94	- 2.81	0.35	5	2	0.0	0	1.3	29	35	23	21	13	9	8	4.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ERIE	731	992.9	1019.6	70	50	60.0	- 3.3	81	20+	38	25	0	0	50	73	4.25	0.69	1.78	8	1	0.0	0	1.9	21	23	20	27+	10	7	13	5.6	
HARRISBURG	338	1006.1	1018.8	77	54	65.3	- 1.6	86	19	41	23	0	0	53	68	1.80	- 1.02	0.62	6	2	0.0	0	2.4	29	40	W	21	10	12	8	5.2	75
PHILADELPHIA	5	1017.6	1018.5	77	57	67.0	0.3	86	18	42	25	0	0	54	67	2.96	- 0.50	1.66	6	2	0.0	0	1.9	35	26	NE	16	11	11	8	5.1	71
PITTSBURGH	1137	976.0	1019.8	73	49	61.1	- 3.1	84	16	37	25	0	0	50	70	1.61	- 0.93	1.04	7	1	0.0	0	0.9	33	28	24	21	10	9	11	5.7	57
READING U	266			76	55	65.5	- 2.0	86	19	42	24	0	0			1.32	- 2.00	0.61	6		0.0	0			46	W	21	16	8	6	4.3	69
SCRANTON	930	985.4	1019.5	73	51	61.6	- 0.9	81	8	38	24	0	0	51	72	2.13	- 0.84	1.10	7	2	0.0	0	1.0	22	25	S	28	12	8	10	5.2	67
WILLIAMSPORT	524	1000.0	1019.2	75	51	63.3	- 0.8	84	18	41	25	0	0	54	78	2.20	- 1.07	0.90	7	2	0.0	0	2.8	28	23	11	28	9	10	11	5.6	
RHODE ISLAND																																
BLOCK ISLAND	110			68	55	61.5	- 2.5	78	19	45	26	0	0			2.67	- 0.53	2.44	6		0.0	0						11	11	8	5.2	
PROVIDENCE	51	1015.6	1018.1	74	51	62.7	- 0.5	85	19	37	26	0	0	51	70	3.17	- 0.35	2.71	7	0	0.0	0	1.7	28	30	14	28	13	12	5	4.8	70
SOUTH CAROLINA																																
CHARLESTON	40	1015.2	1017.0	80	60	69.9	- 5.7	87	22+	42	30	0	0	59	73	1.39	- 4.44	0.61	5	0	0.0	0	5.0	1	31Y	SW	28	9	10	11	5.7	48
CHARLESTON U	9			79	65	72.2	- 4.9	86	22+	50	30	0	0			1.13	- 5.19	0.48	5		0.0	0			37	SE	27					
COLUMBIA	213	1010.2	1018.2	80	55	67.3	- 8.0	88	21+	40	30	0	0	57	76	2.38	- 1.93	1.64	3	1	0.0	0	3.0	3	21	33	9	14	9	7	4.6	78
GNVLE-SPARTANBURG	957	984.4	1018.7	78	56	66.8	- 5.9	88	21+	36	30	0	0	55	69	2.05	- 1.83	0.83	4	2	0.0	0	3.6	3	21	SW	21	10	12	8	4.8	71
SOUTH DAKOTA																																
ABERDEEN	1296	968.8	1015.5	76	48	61.7	1.1	92	7	29	27	1	2	46	61	3.41	2.01	2.60	7	4	0.0	0	5.2	17	28	24	12	14	7	9	4.7	
HURON	1282	969.5	1015.9	76	49	62.7	0.8	93	25	31	27	2	1	47	62	1.55	0.02	1.31	6	4	0.0	0	6.5	16	33	N	23	13	5	12	5.1	67
RAPID CITY	3162	904.5	1014.4	77	50	63.4	1.8	93	30+	30	27	3	1	40	48	2.10	1.15	0.90	11	4	0.0	0	2.2	26	37	NE	2	13	7	10	4.6	64
SIOUX FALLS	1418	966.1	1017.4	75	48	61.3	- 0.5	92	25	28	28	1	3	47	63	0.87	- 1.74	0.39	8	5	0.0	0	4.5	17	25	16	12	15	7	8	4.2	
TENNESSEE																																
BRISTOL	1507	965.5	1019.5	77	49	62.6	- 6.5	87	20	34	30	0	0	53	77	2.59	- 0.03	1.29	5	1	0.0	0	1.0	3	29	31	21	16	7	7	4.4	
CHATTANOOGA	665	993.9	1018.3	78	57	67.5	- 6.3	88	20	36	30	0	0	59	79	2.08	- 1.02	1.32	6	3	0.0	0	0.5	2	19	NW	28	8	10	12	5.8	62
KNOXVILLE	980	983.1	1018.0	76	55	65.6	- 6.6	87	20	36	30	0	0	57	78	2.70	0.16	1.46	5	1	0.0	0	1.6	3	20	SW	21	8	7	15	6.3	62
MEMPHIS	258	1008.1	1018.1	80	61	70.3	- 3.6	90	21+	38	29	2	0	58	68	1.86	- 0.96	1.22	4	1	0.0	0	2.8	9	23	N	27	8	5	17	6.4	60
NASHVILLE	590	996.6	1018.1	78	55	66.8	- 6.0	88	20	37	30	0	0	57	74	1.93	- 0.94	0.90	7	2	0.0	0	0.5	16	21	SW	9	7	11	12	6.0	65
OAK RIDGE R	905			77	53	64.9	- 6.1	87	20+	33	30	0	0			3.27	- 0.03	1.81	5		0.0	0			24Y		10	10	4	16	6.2	
TEXAS																																
ABILENE	1762	955.0	1015.8	80	62	71.1	- 4.8	90	12	41	28	1	0	62	77	5.44	3.37	1.96	10	4	0.0	0	3.0	15	31	N	26	10	4	16	5.9	52
AMARILLO	3604	893.3	1014.7	80	57	68.3	- 3.5	96	12	41	28	3	0	52	63	2.47	0.58	0.85	9	3	0.0	0	4.4	18	35	E	3	14	7	9	4.6	71
AUSTIN	597	993.6	1015.4	84	66	75.2	- 3.9	92	15	47	29	6	0	63	71	5.71	2.27	1.55	11	5	0.0	0	3.0	7	29	N	27	10	7	13	5.4	58
BROWNSVILLE	19	1011.5	1012.3	85	71	77.7	- 3.5	90	15+	56	29+	2	0	71	81	19.26	14.27	12.19	12	8	0.0	0	4.0	9	69	NE	20	11	8	11	5.5	63
CORPUS CHRISTI	41	1012.2	1013.7	84	70	77.2	- 3.6	90	15	54	29	1	0	70	81	20.33	15.93	8.76	11	6	0.0	0	6.4	10	72	E	20	8	9	13	6.0	54
DALLAS	481	999.0	1016.1	83	66	74.1	- 3.8	93	12	46	28	1	0	60	66	4.16	1.34	0.92	13	3	0.0	0	3.4	10	26	N	27	11	6	13	5.8	52
DEL RIO	1026	978.7	1014.2	86	66	76.2	- 3.7	93	13+	51	29+	8	0	62	65	7.02	4.41	3.76	10	3	0.0	0	4.7	10	21	36	27+	9	12	9	5.6	
EL PASO	3918	882.8	1012.5	85	62	73.3	- 1.2	94	12	49	29	5	0	51	48	1.54	0.40	0.97	5	3	0.0	0	1.9	9	32	N	10	21	8	1	2.9	83
FORT WORTH	537	995.9	1016.2	83	65	74.1	- 4.3	92	12	46	29+	2	0	61	70	5.94	3.40	1.51	13	6	0.0	0	2.4	10	23	3	26	11	6	13	5.6	
GALVESTON U	7			82	74	77.8	- 2.3	86	16+	55	28	0	0			2.21	- 2.88	1.83	7		0.0	0			31	SE	19					54
HOUSTON	50	1012.9	1015.1	86	69	77.6	- 1.6	92	15	50	29	9	0	66	72	4.84	0.58	3.12	8	5	0.0	0	3.5	8	28	11	20	10	11	9	5.5	61
LUBBOCK	3254	905.5	1015.4	80	57	68.6	- 2.8	97	12	40	28	3	0	55	69	0.98	- 1.38	0.41	7	5	0.0	0	3.3	15	26	36	26	8	11	11	5.6	
MIDLAND	2851	917.4	1014.4	82	60	71.1	- 4.3	95	12	45	28	2	0	57	68	1.59	- 0.20	0.82	8	3	0.0	0	5.3	12	25	5	4	6	12	12	6.1	
PORT ARTHUR	16	1014.9	1015.5	86	67	76.4	- 1.8	91	14	45	29	6	0	65	71	3.35	- 1.53	2.88	6	1	0.0	0	4.0	6	34	NW	27	12	10	8	5.0	66
SAN ANGELO	1903	949.2	1015.0	82	63	72.6	- 5.7	91	12	47	28	1	0	62	73	7.21	4.55	2.92	13	4	0.0	0	2.7	12	29	2	14	9	5	16	6.1	
SAN ANTONIO	788	987.5	1015.2	84	67	75.5	- 3.1	91	14+	47	28	3	0	65	74	11.16	7.67	2.71	12	3	0.0	0	3.7	6	33	NE	21	9	10	11	5.6	49
VICTORIA	104	1010.2	1014.4	85	69	77.4	- 1.7	92	18+	51	29	6	0	68	77	14.52	10.29	8.51	8	3	0.0	0	5.0	8	47Y	E	20	8	10	12	6.0	
WACO	501	998.0	1015.7	86	67	76.8	- 2.2	93	13	48	29	13	0	63		4.31	1.54	1.80	7	3	0.0	0	1.7	7	29	36	27	12	5	13	5.4	
WICHITA FALLS	994	980.0	1016.1	85	62	73.1	- 4.3	95	12	43	28	7	0	60	68	3.93	1.60	0.97	10	6	0.0	0	3.4	14	41	2	3	9	5	16	6.3	
UTAH																																
MILFORD	5028	848.0		81	48	64.2	1.1	94	3	31	20	3	1			2.60	2.17	1.24	6		0.0	0						13	8	9	4.5	
SALT LAKE CITY	4220	872.7	1014.6	82	51	66.7	2.3	96	5	36	13	5	0	42	46	0.73	0.20	0.23	5	6	0.0	0	2.9	17	34	NW	11	14	8	8	4.3	80
WENDOVER	4237			79	57	67.8	1.1	91	4	46	13	1	0			0.42	0.10	0.32	3		0.0	0										
VERMONT																																
BURLINGTON	332	1005.1	1017.6	70	46	58.1	- 0.3	81	8	34	11	0	0	50	76	3.06	- 0.25	1.46	12	1	0.0	0	1.2	20	30	S	27+	8	9	13	6.1	75

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VIRGINIA																																
LYNCHBURG	916	985.8		75	51	63.1	- 5.6	83	21+	36	30	0	0	52	71	1.17	- 2.19	0.50	4	2	0.0	0	2.1	3	22	W	21	12	11	7	4.4	75
NORFOLK	22	1016.9	1018.1	75	58	66.5	- 6.1	84	9	45	24	0	0	57	73	3.02	- 1.20	2.37	7	0	0.0	0	3.9	2	40	NE	16	11	6	13	5.5	73
RICHMOND	164	1012.9	1018.9	78	53	65.7	- 4.5	87	21	40	26+	0	0	57	79	0.95	- 2.70	0.42	5	2	0.0	0	2.1	2	20	SW	28+	10	9	11	5.5	72
ROANOKE	1149	977.3	1019.2	76	50	63.2	- 5.9	87	16	37	30	0	0	50	66	1.78	- 1.48	1.40	4	1	0.0	0	1.7	35	26	18	24	14	9	7	4.3	
WALLOPS ISLAND	9	1018.6	1019.1	71	56	63.5		79	6	45	26	0	0	57	82	2.03		0.69	6	0	0.0	0	2.9	3	60Y	NNE	16	11	6	13	5.8	
WASHINGTON																																
OLYMPIA	195	1008.5	1015.5	78	47	62.3	3.8	94	15	39	24+	3	0	52	76	1.36	- 0.73	0.71	8	0	0.0	0	1.7	22	35	18	10	12	11	7	4.7	
QUILLAYUTE	179	1007.8	1015.4	70	49	59.7	2.5	90	15	40	12	1	0	54	85	7.75	3.07	2.11	14	1	0.0	0	1.3	20	22	S	1	6	8	16	6.4	58
SEATTLE TACOMA	400	999.3	1015.6	76	55	65.7	5.8	93	15	47	12	2	0	53	70	0.94	- 1.11	0.39	7	1	0.0	0	0.8	25	31	22	10	14	9	7	4.4	73
SPOKANE	2356	930.9	1013.5	80	50	65.3	4.4	92	21+	36	12	3	0	39	43	0.24	- 0.51	0.16	3	0	0.0	0	3.8	19	31	SW	10	18	7	5	3.1	84
STAMPEDE PASS R	3958	881.1		65	48	56.6	4.7	78	27	35	12	0	0			2.40	- 1.99	0.99	9		0.0	0						15	6	9	4.3	
WALLA WALLA U	949			83	58	70.9	4.9	94	21+	46	13	5	0			0.70	- 0.08	0.46	5		0.0	0			22	W	11	18	7	5	3.1	83
YAKIMA	1052	976.0	1013.8	83	49	65.7	4.4	90	19+	37	13	4	0	45	51	0.09	- 0.26	0.09	1	0	0.0	0	4.8	28	29	30	22+	21	4	5	2.7	
WEST INDIES																																
SAN JUAN P.R.	13	1012.5	1015.0	88	76	81.8	1.3	94	14	73	23+	5	0	71	71	5.12	- 1.64	1.90	18	5	0.0	0	7.1	9	24	SE	9	5	17	8	6.0	65
SWAN ISLAND	28			87	78	82.1	- 0.9	89	14+	73	25+	0	0			5.90	0.71	3.40	12		0.0	0						2	12	16	7.3	
WEST VIRGINIA																																
BECKLEY	2504	931.6	1019.8	69	46	57.3		79	20+	32	30	0	1	48	75	2.83		2.53	7	1	T	T	1.6	16	46	30	21	11	8	11	5.5	
CHARLESTON	939	985.1	1019.2	76	48	62.1	- 6.1	85	20+	35	25	0	0	52	76	1.68	- 1.24	1.12	7	0	0.0	0	0.5	5	31	26	21	9	11	10	5.8	
ELKINS	1970	948.9	1020.3	71	44	57.5	- 5.1	82	20	30	25	0	2	49	81	3.33	0.26	2.68	6	1	0.0	0	0.8	32	35	26	21	4	14	12	6.7	
HUNTINGTON	827	989.2	1019.3	76	50	62.9	- 5.3	87	16	37	25	0	0	53	74	1.21	- 1.33	0.83	7	0	0.0	0	0.6	10	20	25	21	11	6	13	5.6	
PARKERSBURG U	615			75	51	63.0	- 5.1	87	18	37	25	0	0			1.49	- 1.22	0.84	5		0.0	0			26	SW	27					66
WISCONSIN																																
GREEN BAY	682	993.9	1019.5	71	45	58.0	- 2.5	83	8	32	29	0	1	49	76	0.46	- 2.46	0.21	8	1	0.0	0	1.0	23	29	NW	21	12	9	9	5.2	68
LA CROSSE	651	994.6	1019.3	74	49	61.1	- 1.1	85	8	28	29	0	2	50	73	1.38	- 2.10	0.78	4	3	0.0	0	2.5	14	23	32	23	14	6	10	4.9	
MADISON	858	988.2	1019.6	71	44	57.6	- 3.4	83	8	28	29	0	3	48	73	2.68	- 0.64	1.70	4	4	0.0	0	0.8	22	25	SW	25	13	8	9	4.9	67
MILWAUKEE	672	994.6	1019.7	71	51	60.8	0.5	84	20+	40	29	0	0	52	74	1.69	- 1.03	0.56	10	0	0.0	0	0.4	8	29	SW	26	12	10	8	4.6	64
WYOMING																																
CASPER	5338	839.5	1015.0	76	46	61.0	1.3	91	2	35	27+	2	0	37	48	1.67	0.77	0.70	10	4	0.0	0	4.9	24	44	24	30	12	9	9	4.8	
CHEYENNE	6126	815.4	1016.3	71	45	58.4	- 0.2	85	2	33	27	0	0	38	52	0.88	- 0.22	0.41	8	1	0.0	0	5.1	28	32	NW	11	13	7	10	4.8	65
LANDER	5563	831.4	1015.3	74	47	60.6	1.6	88	2	35	13	0	0	39	50	1.36	0.33	0.68	7	5	0.0	0	2.1	26	32	SW	11	14	6	10	5.0	71
SHERIDAN	3964	879.4	1015.2	75	44	59.2	0.4	92	2	30	27	1	1	41	55	1.56	0.39	0.92	7	2	0.0	0	3.4	30	43	NW	13	12	8	10	5.1	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA
METRIC UNITS

SEPTEMBER 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm			Mm	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	995.6	1018.1	26.1	14.4	20.2	-4.4	31.1	19	2.8	30	0	0	15.0	76	72	- 12	34	9	2	0	0	1.3	8	8.5	NW	27+	11	5	14	5.7	60
HUNTSVILLE	183	995.3	1018.3	26.1	14.4	20.2	-3.4	30.6	20+	2.8	30	0	0	13.3	67	73	- 6	50	7	2	0	0	0.7	9	9.8	34	28	10	5	15	5.7	
MOBILE	64	1008.5	1016.2	28.9	18.3	23.4	-2.1	33.3	22	5.6	29	3	0	17.8	74	197	38	167	6	1	0	0	1.6	7	10.3	35	28	9	8	13	5.6	
MONTGOMERY	59	1010.2	1017.5	26.7	16.1	21.5	-3.6	32.2	19	3.9	30	1	0	15.6	73	95	- 6	35	7	3	0	0	1.3	7	10.3	E	11	12	2	16	5.8	55
ALASKA												B																				
ANCHORAGE	35	993.9	998.6	12.2	5.6	8.9	0.1	16.1	2	0.6	30+	0	0	4.4	74	73	9	20	17	0	0	0	0.5	16	10.7	9	7	2	2	26	8.8	27
ANNETTE	34	1006.1	1010.0	16.1	9.4	12.8	0.6	23.9	15	3.3	28	1	0	9.4	81	394	143	81	26	1	0	0	3.3	15	14.3	16	12	1	5	24	8.8	
BARROW	9	1011.2	1011.6	- 2.2	- 5.0	- 3.7	-2.9	0.0	5+	- 8.9	25+	0	30	- 4.4	95	5	- 11	3	6	0	61	76	5.4	8	15.6	6	18	1	1	28	9.2	
BARTER ISLAND	12	1008.5	1010.2	- 0.6	- 2.8	- 1.8	-1.8	1.7	8	- 7.8	21	0	30	- 3.9	85	18	- 6	9	15	0	114	51	6.2	9	20.1	9	18	1	0	29	9.6	
BETHEL	38	992.6	998.0	12.2	2.8	7.4	0.4	16.7	14	- 2.2	30	0	5	3.9	81	16	- 50	6	8	0	0	0	1.9	3	11.6	8	16	4	6	20	7.5	
COLD BAY	29	992.2	996.2	11.1	5.0	7.9	-0.7	13.3	4	0.0	5	0	1	5.0	81	74	- 36	21	25	0	T	0	2.2	31	20.1	11	15	0	7	23	8.5	
FAIRBANKS	133	983.7	1000.7	14.4	1.7	8.1	1.7	21.7	17	- 2.2	30	1	9	1.7	67	6	- 22	6	3	0	T	0	1.7	3	10.3	3	2	5	6	19	7.3	
JUNEAU	4	1006.4	1007.2	13.3	6.7	10.0	0.6	20.0	17	- 1.1	30	0	2	7.8	91	217	47	49	23	0	0	0	4.2	12	21.5	12	18	0	4	26	9.3	19
KING SALMON	15	992.9	995.1	11.1	4.4	7.9	-0.9	14.4	23+	0.0	4	0	1	3.3	73	43	- 35	13	16	0	0	0	1.9	6	18.3	8	16	0	4	26	9.1	
KOTZEBUE	3	1002.4	1003.0	9.4	2.2	5.9	1.0	15.6	16	- 1.1	27+	0	6	1.7	75	1	- 30	1	2	0	0	0	2.2	4	12.5	16	19+	10	9	11	5.3	
MC GRATH	105	986.5	999.1	12.8	2.2	7.3	0.7	16.7	17+	- 2.2	23	0	6	1.1	68	7	- 60	3	6	0	0	0	0.8	1	9.8	3	3	4	4	22	7.7	
NOME	4	1000.0	1000.8	11.7	1.7	6.5	1.0	17.2	16	- 2.2	7+	0	13	- 1.7	57	11	- 56	4	7	0	0	0	2.1	3	13.4	5	17	11	9	10	4.8	58
ST. PAUL ISLAND	7	998.6	999.5	10.0	4.4	7.4	0.4	13.3	3	0.0	28+	0	2	4.4	81	40	- 38	7	23	0	0	0	4.1	35	15.6	31	2	1	7	22	8.5	
SHEMYA	37	1006.1	1009.9	10.0	5.6	7.8	-1.2	12.8	12+	1.1	28+	0	0	5.6	85	102	45	51	19	0	T	0	3.6	30	21.9	36	14	0	12	18	8.1	
YAKUTAT	9	1002.7	1003.9	12.2	5.6	8.8	-0.8	20.6	17	- 2.2	29	0	3	7.2	90	495	74	72	26	0	0	0	2.6	9	13.0	11	17	0	5	25	9.1	
ARIZONA																																
FLAGSTAFF	2131	790.4	1015.9	22.8	6.1	14.4	-0.3	27.8	4	1.1	15	0	0	6.1	64	57	17	30	9	7	0	0	0.7	15	10.3	17	24	10	10	10	5.3	
PHOENIX	340	970.9	1008.8	36.7	22.2	29.3	1.1	40.6	23	17.2	15	28	0	12.2	37	3	- 15	3	4	2	0	0	0.9	13	14.3Y	W	24	20	3	7	3.3	87
TUCSON	788	923.8	1009.6	33.9	20.6	27.1	0.2	37.8	21	17.2	15	24	0	12.2	44	34	9	11	7	7	0	0	2.5	13	17.0	W	13	20	6	4	3.1	81
WINSLOW	1492	852.7	1013.9	28.9	12.2	20.7	-0.8	33.3	4	6.1	14	4	0	6.7	45	12	- 11	5	7	7	0	0	0.8	19	14.3	21	24	14	11	5	4.2	
YUMA	59	1001.4	1008.4	35.6	22.8	29.1	-1.1	38.9	13	18.3	23	27	0	15.6	49	50	40	48	4	1	0	0	0.4	18	15.2	N	26	21	5	4	2.6	79
ARKANSAS																																
FORT SMITH	136	1001.0	1017.3	27.2	15.0	21.2	-2.7	31.7	20+	0.6	29	0	0	14.4	71	64	- 29	38	9	2	0	0	1.4	6	10.3	N	27	8	8	14	6.4	49
LITTLE ROCK	78	1008.1	1017.5	26.1	15.0	20.6	-2.9	31.7	20	3.3	29	0	0	15.0	75	159	77	103	11	2	0	0	1.1	6	12.5	W	21	8	4	18	6.6	61
TEXARKANA	119	1003.7	1016.9	28.3	17.2	22.5	-2.2	32.2	21	3.9	29	1	0	16.1		58	- 11	21	7	4	0	0	0.8	10				8	8	14	6.1	
CALIFORNIA																																
BAKERSFIELD	145	993.9	1011.1	33.3	20.6	26.9	2.2	37.2	15	17.2	9	22	0	11.7	43	3	1	2	3	3	0	0	1.1	33	8.9	32	21	19	6	5	2.8	
BISHOP	1252	873.7		30.0	10.0	20.1	-0.1	33.3	3+	5.6	20+	7	0			7	2	3	6		0	0						15	11	4	3.9	
BLUE CANYON	1609			23.9	13.3	18.4	1.2	29.4	26	6.7	30	0	0			22	6	18	4		0	0			8.9	20	30	21	7	2	2.5	
EUREKA U	13			18.3	11.7	15.1	1.5	21.1	29+	10.0	27+	0	0			34	17	27	6		0	0	0.7	30	8.5	N	18	9	10	11	5.8	56
FRESNO	100	999.3	1011.0	33.9	16.7	25.2	1.8	38.3	1	13.9	13	26	0	13.3	52	T	- 3	T	0	0	0	0	1.4	30	8.0	NW	3	22	2	6	2.7	85
LONG BEACH	10	1010.8	1012.3	28.3	20.6	24.2	2.3	37.8	1	16.7	28	4	0	16.1	66	13	12	7	4	4	0	0	1.2	22	10.3	33	29	5	14	11	6.0	
LOS ANGELES	30	1008.1	1011.8	25.0	19.4	22.2	1.9	32.2	2	17.8	9	1	0	16.1	72	11	7	10	3	4	0	0	2.2	25	10.3Y	W	29+	5	10	15	6.7	
LOS ANGELES U	82			28.3	20.0	24.0	1.8	37.8	1	18.3	9	4	0			26	20	15	3		0	0			8.5	N	29	7	11	12	6.0	52
MT SHASTA R	1080			27.8	8.9	18.1	1.7	33.9	27	3.3	13	3	0			2	- 20	2	1		0	0										
OAKLAND	2	1013.2	1013.3	23.3	15.0	19.2	0.8	32.2	20	13.9	7+	1	0	13.9	77	T	- 5	T	1	0	0	0	2.9	29	10.7	24	21	15	11	4	4.2	
RED BLUFF	104	999.0	1011.3	33.9	16.7	25.3	0.8	40.6	26+	12.2	8	22	0	8.3	41	1	- 9	1	2	0	0	0	0.3	20	13.0	SE	21	25	4	1	1.7	94
SACRAMENTO	5	1010.5	1011.3	32.8	15.0	23.8	1.8	36.1	20+	12.2	25	18	0	13.3	61	1	- 4	1	1	0	0	0	1.9	21	13.4	SW	21	23	5	2	2.4	95
SANDBERG R	1377	862.9		24.4	13.9	19.1	-1.6	28.9	13	9.4	19+	0	0			24	19	21	5		0	0			17.4	6	20	17	6	7	3.8	
SAN DIEGO	4	1010.8	1011.9	25.0	19.4	22.2	1.2	31.1	1	18.3	22+	0	0	16.7	74	2	- 2	1	2	0	0	0	1.5	28	8.9	S	2	7	9	14	6.2	53
SAN FRANCISCO	2	1012.5	1013.4	23.9	14.4	19.1	1.4	33.3	20+	12.8	13+	3	0	12.2	73	T	- 5	T	1	0	0	0	4.8	30	16.1	W	5	18	8	4	3.7	
SAN FRANCISCO U	16			20.6	14.4	17.5	0.8	30.6	20+	13.3	29+	0	0			1	- 5	1	1		0	0			12.1	SW	5					70
SANTA CATALINA	478	957.0		23.9	16.1	20.0	-1.2	33.3	1	13.3	9	1	0			T	- 5	T	1	3	0	0						8	11	11	5.8	
SANTA MARIA	72			24.4	12.2	18.3	1.2	32.8	11	9.4	9	1	0			5	1	3	6		0	0						9	13	8	5.2	
STOCKTON	7	1010.8	1012.0	32.2	16.1	24.3	1.7	36.7	2	13.9	25	16	0	11.7	52	1	- 4	1	1	0	0	0	2.7	31	11.2	28	21	22	5	3	2.6	
COLORADO																																
ALAMOSA	2297	775.5		21.7	3.3	12.4	-0.8	26.1	3	- 2.8	14	0	7			13	- 6	5	7		0	0						16	8	6	4.1	
COLORADO SPRINGS	1873	814.8	1016.6	22.8	8.9	15.9	-0.6	28.3	30+	3.9	13	0	0	4.4	53	19	- 9	7	8	6	0	0	0.6	8	13.4	35	23	9	13	8	4.6	
DENVER	1610	838.8	1014.8	25.6	8.3	16.7	-0.5	31.1	2	2.2	13	0	0	4.4	50	15	- 13	11	7	1	0	0	0.8	17	17.9	NW	11	15	7	8	4.2	76
GRAND JUNCTION	1480	853.4	1013.5	27.8	11.7	19.7	-0.2	35.0	4	5.6	13	5	0	3.9	39	9	- 14	4	6	5	0	0	1.0	14	21.0	NW	11	19	5	6	3.5	84
PUEBLO	1428	858.1	1015.5	25.0	10.0	17.6	-1.7	32.2	3	3.3	28	1	0	6.1	53	21	0	12	6	2	0	0	0.7	9	22.4	N	23	12	12	6	4.2	77

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1017.6	1018.2	23.9	13.3	18.6	-0.1	29.4	19+	6.1	24	0	0	12.8	70	41	- 60	19	8	1	0	0	1.5	31	13.0	3	15	13	9	8	4.7	
HARTFORD	52	1011.5	1017.9	24.4	10.0	17.1	-0.3	29.4	8	2.8	26	0	0	11.1	71	72	- 20	34	7	1	0	0	0.8	31	10.7	NW	25	9	11	10	5.2	75
NEW HAVEN	2	1018.0		23.3	11.7	17.4	-0.3	28.3	19+	4.4	26	0	0			28	- 72	12	7		0	0			11.6	SW	21	13	8	9	4.6	77
DELAWARE																																
WILMINGTON	23	1015.6	1018.6	24.4	12.8	18.4	-1.4	28.9	19+	5.6	25+	0	0	12.8	72	29	- 71	24	6	2	0	0	0.9	32	11.2	2	16	12	10	8	4.9	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1016.6	1019.1	26.1	13.9	20.0	-0.9	30.6	19	8.3	25+	0	0	12.8	65	5	- 92	4	3	1	0	0	0.6	33	13.0	SE	28	11	11	8	5.2	67
FLORIDA																																
APALACHICOLA U	4			27.8	20.0	23.7	-2.3	31.7	1	10.0	30+	0	0			248	31	87	10	6	0	0			15.2	E	3	14	2	14	5.4	57
DAYTONA BEACH	9	1014.6	1015.9	28.3	20.6	24.4	-1.8	30.0	22+	16.7	30	0	0	20.0	80	141	- 37	64	12	7	0	0	2.6	2	11.2	36	13	6	5	19	7.3	
FORT MYERS	5	1014.6	1014.8	31.1	23.9	27.6	0.2	32.8	11	20.0	30	10	0	22.8	79	179	- 37	45	17	14	0	0	1.1	4	10.3	19	28+	1	18	11	6.7	
JACKSONVILLE	6	1015.6	1016.6	28.9	19.4	24.3	-2.1	33.3	22	10.0	30	3	0	18.3	74	46	-146	27	6	0	0	0	2.4	3	13.9	NE	12	7	6	17	6.5	57
KEY WEST	1	1013.5	1014.1	31.1	26.1	28.8	0.9	32.2	11+	23.3	25	6	0	23.3	73	126	- 45	37	15	13	0	0	1.5	11	13.4	S	27	0	13	17	7.4	74
LAKELAND U	65			30.6	21.7	25.9	-0.8	32.8	24+	17.2	30	5	0			96	- 70	37	9		0	0						4	12	14	6.7	60
MIAMI	2	1013.9	1014.2	31.1	23.9	27.4	0.0	33.3	7	22.2	27+	6	0	22.2	76	233	- 7	89	13	12	0	0	0.8	9	13.4	26	29	0	10	20	7.9	
ORLANDO	33	1011.5	1015.7	31.1	22.2	26.5	-0.2	32.8	21+	18.3	30	11	0	20.6	76	149	- 34	54	11	7	0	0	2.2	3	9.4	20	28+	1	10	19	7.6	
PENSACOLA	34	1012.2	1016.3	27.8	17.8	22.9	-2.8	32.8	22	6.1	29	1	0	17.8	75	261	66	255	6		0	0	1.7	7	13.0	E	6	11	4	15	5.7	62
TALLAHASSEE	17	1014.2	1016.5	30.0	17.2	23.8	-1.8	34.4	22	4.4	30	9	0	17.8	73	43	- 97	30	4	1	0	0	1.4	5	7.2	8	3	11	7	12	5.4	
TAMPA	6	1014.9	1015.1	31.1	21.7	26.2	-0.7	33.3	11	17.8	30+	10	0	20.0	74	56	-119	28	8	4	0	0	1.9	4	9.8	31	8	4	8	18	7.2	47
WEST PALM BEACH	5	1013.9	1014.5	31.1	22.2	26.8	-1.0	32.8	23+	20.0	24+	8	0	21.1	74	176	- 70	70	16	16	0	0	0.7	7	13.9	20	29	1	8	21	7.9	
GEORGIA																																
ATHENS	244	989.5	1018.3	26.1	13.3	19.8	-3.3	31.1	20+	2.2	30	0	0	13.9	72	33	- 44	30	3	0	0	0	1.4	6	6.7	32	29+	12	6	12	5.0	
ATLANTA	308	981.7	1018.3	24.4	13.9	19.2	-3.7	29.4	21+	2.2	30	0	0	13.3	72	48	- 35	21	6	0	0	0	1.3	7	12.1	NW	28	12	6	12	5.4	62
AUGUSTA	44	1012.2	1017.6	27.8	12.8	20.4	-3.7	33.3	21	2.2	30	1	0	13.9	72	15	- 61	9	3	0	0	0	1.3	1	8.9	28	28	12	8	10	4.9	
COLUMBUS	117			26.7	16.1	21.4	-3.0	31.7	20	3.3	30	0	0	16.1	76	98	27	60	6		0	0	1.5	5	7.6	7	2	12	4	14	5.5	
MACON	108	1004.7	1017.6	27.2	13.3	20.4	-4.3	32.2	19	1.7	30	1	0	13.9	71	37	- 34	23	5	1	0	0	1.4	4	8.0	NW	28	12	4	14	5.4	66
ROME	194			26.1	12.8	19.3	-3.2	31.7	20	0.0	30	0	1			124	41	68	6		0	0										
SAVANNAH	14	1015.2	1017.0	27.8	16.1	22.0	-2.8	32.2	22+	6.1	30	2	0	15.6	73	54	- 80	28	4	2	0	0	1.7	4	9.8	E	3	10	6	14	5.8	61
HAWAII																																
HILO	8	1014.6	1015.7	29.4	20.6	25.0	0.8	30.0	29+	19.4	26+	0	0	20.0	75	172	- 44	33	23	0	0	0	0.6	23	8.5	NE	20	7	9	14	6.3	48
HONOLULU	2	1014.6	1014.9	32.2	23.9	28.0	1.8	33.3	17+	20.6	27	23	0	19.4	63	11	- 14	5	11	1	0	0	4.5	6	12.1	NE	9	11	9	10	5.6	65
KAHULUI	15	1012.2	1014.5	30.6	20.6	25.4	-0.4	32.2	18+	16.1	26	3	0	20.0	75	2	- 4	1	4	0	0	0	4.6	4	13.0	NE	9	12	11	7	4.8	85
LIHUE	31	1011.2	1016.2	29.4	22.8	26.1	0.5	30.0	11	19.4	26	0	0	21.7	79	40	- 13	8	14	2	0	0	4.6	6	11.2	NE	8	1	16	13	6.9	76
IDAHO																																
BOISE	865	915.3	1013.5	28.3	12.2	20.3	3.3	36.7	1	2.8	13	6	0	7.2	47	15	5	8	4	4	0	0	0.5	16	12.1	SE	8	20	4	6	3.0	85
IDAHO FALLS 46W R	1504			26.1	4.4	15.3	1.7	33.3	1	- 2.8	13	4	5			1	- 8	1	1		0	0	0.8	25	16.5	SW	11+					
LEWISTON	431			28.9	12.8	20.8	3.3	38.3	21	5.6	13	8	0			15	- 8	11	5		0	0						19	4	7	3.5	
POCATELLO	1358	864.2	1015.1	26.7	6.7	16.5	0.8	33.9	1	- 1.1	13	2	3	2.8	44	4	- 12	4	1	2	0	0	1.0	22	14.8	NW	30	17	6	7	4.0	81
ILLINOIS																																
CAIRO U	96			25.0	15.6	20.3	-2.2	30.6	19	5.6	29	0	0			92	15	45	6		0	0			14.3	S	21	10	8	12	5.5	60
CHICAGO O HARE	201	995.3	1019.6	22.8	10.0	16.5	-1.1	29.4	20	4.4	25+	0	0	10.6	72	62	- 7	29	11	2	T	T	0.4	32	11.6	21	26+	10	10	10	5.1	
CHICAGO MIDWAY	185	997.0		23.3	12.8	18.2	-0.7	31.7	20	5.0	29	0	0	10.0	63	81	11	35	9	2	0	0	0.4	9	13.4	NE	9	11	12	7	4.9	67
MOLINE	177	997.6	1019.0	23.3	10.0	16.7	-1.8	28.9	20+	0.0	29	0	1	11.1	75	127	44	45	7	4	0	0	0.6	13	11.2	SW	20	16	3	11	4.6	60
PEORIA	199	995.3	1019.3	23.3	11.7	17.4	-1.7	29.4	20	1.1	30+	0	0	10.6	69	69	- 8	29	8	3	0	0	0.8	11	13.4	NW	26	13	8	9	4.8	64
ROCKFORD	221	992.2	1019.2	23.3	10.6	16.9	-0.8	30.0	20	2.2	30	0	0	11.7	74	79	- 10	28	8	4	0	0	0.4	13	10.3	32	26	13	7	10	4.6	
SPRINGFIELD	179	996.6	1018.8	23.9	11.1	17.6	-2.2	30.6	20	3.9	30+	0	0	11.7	73	102	28	28	10	5	0	0	0.8	11	13.9	W	20	14	4	12	5.2	68
INDIANA																																
EVANSVILLE	116	1004.7	1018.7	26.1	12.2	18.9	-2.2	33.9	20	2.8	29	2	0	12.8	72	30	- 43	22	5	2	0	0	0.5	5	8.9	S	26	10	10	10	5.2	63
FORT WAYNE	241	989.8	1019.9	23.3	8.9	16.2	-2.0	29.4	20	0.0	23	0	1	7.8	62	26	- 41	11	5	0	0	0	0.1	4	11.6	W	21	12	2	16	5.8	69
INDIANAPOLIS	241	990.2	1019.3	25.6	12.2	18.8	-0.3	31.1	17	2.8	29	0	0	11.1	66	20	- 62	8	6	1	0	0	0.3	7	12.5	N	21	11	6	13	5.7	63
SOUTH BEND	236	991.5	1019.3	22.8	11.1	16.9	-0.7	29.4	20	3.9	28	0	0	11.1	72	66	- 12	35	6	2	0	0	0.2	17	10.3	21	26+	10	10	10	5.4	
IOWA																																
BURLINGTON	211			22.8	11.7	17.3	-1.6	27.8	20+	1.1	29	0	0	11.1	70	71	- 10	23	7	2	0		0.7	12	10.3	23	20	17	3	10	4.6	
DES MOINES	286	984.4	1019.1	23.3	10.0	16.8	-1.7	30.0	25	1.7	29+	0	0	10.0	67	65	- 9	37	4	4	0	0	1.0	13	11.6	SW	26	12	5	13	5.2	71

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

SEPTEMBER 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DUBUQUE	322	980.4		22.2	10.0	16.0	-0.5	28.3	8	- 0.6	29	0	1			302	207	225	7		0	0						14	5	11	4.9	
SIOUX CITY	334	978.0	1017.7	23.9	10.0	16.9	-1.7	32.2	25	- 1.1	28	1	1	10.0	68	27	- 42	17	9	4	0	0	1.9	16	11.6	SE	12+	12	9	9	4.4	78
WATERLOO	265	987.1	1019.0	22.2	7.2	14.5	-2.7	26.1	7+	- 5.6	29	0	3	9.4	75	36	- 61	20	7	2	0	0	0.9	16	9.8	18	25	14	6	10	4.7	
KANSAS																																
CONCORDIA	448	964.4	1017.2	23.9	11.7	17.7	-3.2	30.6	25+	1.7	28	0	0	12.2	75	168	99	55	11	10	0	0	1.7	14	13.9	S	3	10	13	7	4.9	66
DODGE CITY	787	926.2	1015.9	26.7	12.8	19.6	-1.7	33.3	12	3.3	28	3	0	10.0	60	60	22	26	10	5	0	0	2.1	16	16.5	NE	13	15	6	9	4.4	74
GOODLAND	1113	890.6	1016.1	25.6	9.4	17.5	-1.1	32.2	30	- 0.6	27	1	1	8.9	64	105	73	52	11	[illegible]	0	0	1.9	18	22.8	34	12	11	13	6	4.6	
TOPEKA	267	986.5	1018.1	23.9	11.1	17.6	-3.2	30.6	25	1.7	29	0	0	12.2	75	118	42	43	10	7	0	0	0.7	13	10.7	SW	25+	9	9	12	5.6	63
WICHITA	403	969.5	1017.0	25.0	12.8	18.8	-3.0	31.7	25	1.7	28	0	0	11.7	67	81	- 1	39	7	6	0	0	1.7	14	13.0	NE	26+	9	10	11	5.5	60
KENTUCKY																																
COVINGTON	265	987.8	1019.2	25.0	11.7	18.5	-1.1	31.7	16	3.9	23	0	0	10.6	64	45	- 26	21	7	0	0	0	0.6	8	9.4	26	30+	11	3	16	5.8	
LEXINGTON	294	983.7	1019.2	24.4	12.2	18.3	-2.4	30.6	20	3.9	29	0	0	11.7	69	75	4	44	7	1	0	0	0.6	6	9.4	18	21	13	5	12	5.1	
LOUISVILLE	145	1001.0	1018.6	25.0	12.2	18.7	-2.1	31.1	20	3.3	29	0	0	12.8	73	44	- 23	20	5	2	0	0	0.5	9	10.7	N	27	9	12	9	5.1	71
LOUISIANA																																
ALEXANDRIA	28	1011.9	1016.2	28.3	16.7	22.5	-2.5	32.8	22	3.3	29	1	0	17.2	78	31	- 49	13	4	1	0	0	1.3	3	10.3	35	27	8	11	11	5.7	
BATON ROUGE	20	1013.2	1016.1	29.4	18.3	23.6	-1.9	32.8	20	6.1	29	3	0	17.8	74	88	- 1	41	7	2	0	0	1.5	6	10.3	36	22	8	11	11	5.5	
LAKE CHARLES	3	1014.9	1015.9	29.4	19.4	24.5	-1.4	32.2	14	8.3	29	1	0	19.4	77	107	5	45	5	4	0	0	1.8	7	10.7	35	27	12	7	11	5.1	
NEW ORLEANS	1	1014.9	1015.7	28.9	18.9	23.9	-1.8	31.7	20+	5.6	30	0	0	18.3	73	95	- 33	58	8	1	0	0	1.6	5	10.3	34	28	10	11	9	4.9	
SHREVEPORT	77	1007.1	1016.1	28.3	17.8	22.9	-3.1	32.8	19	5.6	29	2	0	16.7	73	32	- 26	20	9	0	0	0	1.2	9	8.9	35	28+	10	7	13	5.7	56
MAINE																																
CARIBOU	190	992.9		19.4	7.2	13.2	1.1	27.2	17	- 0.6	26	0	2			168	78	48	12		0	0						9	6	15	6.4	
PORTLAND	14	1015.2	1017.6	21.7	9.4	15.5	0.7	27.8	17	1.1	26	0	0	10.6	73	68	- 21	38	7	0	0	0	1.0	22	10.7	NW	2	8	9	13	6.1	64
MARYLAND																																
BALTIMORE	45	1013.2	1018.7	25.0	12.2	18.5	-1.6	30.6	18	4.4	25	0	0	12.8	72	5	- 79	4	5	1	0	0	1.2	30	12.5	SE	28	13	12	5	4.4	66
MASSACHUSETTS																																
BLUE HILL OBS R	192			21.1	11.1	16.2	-0.7	27.8	17+	5.6	26+	0	0			78	- 23	64	7		0	0			17.4	SE	28					70
BOSTON	5	1016.6	1017.7	21.7	12.2	17.1	-1.4	28.3	8	7.2	26	0	0	10.6	67	51	- 37	39	6	0	0	0	1.4	27	14.3	NW	2	12	9	9	4.8	77
NANTUCKET	13	1017.6	1017.9	20.0	11.7	15.9	-1.3	25.6	19+	4.4	26	0	0	13.3	86	58	- 31	22	7	1	0	0	0.6	34	14.3	N	10	10	8	12	5.3	68
PITTSFIELD	357			21.7	7.2	14.6	0.1	27.2	20+	- 0.6	26	0	2			49	- 66	16	9		0	0										
WORCESTER	301	981.7	1018.7	21.1	10.6	15.9	-0.1	26.7	17+	5.0	24	0	0	10.6	73	129	29	68	7	1	0	0	1.7	28	12.1	29	25	13	8	9	4.7	
MICHIGAN																																
ALPENA	210	994.2	1019.6	20.6	5.0	12.9	-0.4	27.8	18+	- 1.1	11	0	6	7.8	73	50	- 41	20	11	2	0	0	0.4	30	9.4	NE	28+	10	11	9	5.3	67
DETROIT	189			22.8	11.7	17.3	-1.1	28.9	26+	5.6	30+	0	0	10.0	65	43	- 19	23	5	0	0	0	0.4	32	9.4	24	26					
DETROIT M WAYNE CO	193	994.9	1019.1	23.3	8.3	15.8	-2.2	28.9	26+	1.1	23	0	0	8.9	67	50	- 9	30	6	1	0	0	0.4	30	11.2	SW	26	11	8	11	5.2	69
DETROIT WILLOW RUN	217	991.5	1019.7	22.2	7.8	15.0	-3.2	27.8	18+	1.1	23	0	0	7.8	65	52	- 6	35	4	1	0	0	0.6	30	13.0	36	28	10	9	11	5.3	
FLINT	235	991.5	1019.3	21.1	7.8	14.4	-2.2	27.2	18	0.6	25	0	0	7.8	67	43	- 32	17	7	1	T	T	0.4	25	13.0	23	26	10	11	9	5.3	
GRAND RAPIDS	239	990.5	1019.5	22.8	8.9	15.7	-1.1	29.4	18	1.7	28	0	0	9.4	69	60	- 15	26	7	1	T	T	0.2	30	15.2	SW	26	13	7	10	5.0	68
HOUGHTON LAKE	350	978.3	1020.4	20.6	5.0	13.0		27.8	18	- 2.2	23	0	2	7.8	72	44		18	10	2	T	T	0.3	31	11.6	22	26	12	6	12	5.2	
LANSING	256	987.5	1019.3	21.7	7.2	14.5	-2.2	27.8	26+	0.0	23	0	1	8.9	71	64	- 2	28	8	1	T	T	0.3	27	14.3	SW	26	11	7	12	5.2	78
MARQUETTE U	206			19.4	10.6	15.0	0.7	27.2	19+	2.2	27	0	0			30	- 53	14	11		0	0			13.0	SW	26	8	10	12	5.9	69
MUSKEGON	191	996.3	1019.4	22.2	10.0	16.2	-1.1	30.0	16	2.2	23	0	0	10.6	71	73	- 5	25	8	3	0	0	0.4	30	11.2	20	26	14	9	7	4.4	
SAULT STE MARIE	220	992.9	1019.4	20.0	6.1	13.2	-0.1	27.2	6	- 1.1	23+	0	4	8.3	77	45	- 52	24	7	2	T	T	0.5	34	12.5	NW	23	10	10	10	5.5	67
MINNESOTA																																
DULUTH	435	967.5	1019.1	19.4	7.2	13.3	1.0	26.1	7+	- 3.9	28	0	5	7.2	69	34	- 39	23	4	1	0	0	1.2	17	16.1	NW	23	13	6	11	5.1	69
INTERNATIONAL FALLS	359	974.6	1017.8	21.1	6.1	13.7	2.1	29.4	7	- 3.9	28	0	5	6.7	66	45	- 29	19	6	3	0	0	1.3	19	11.2	15	12	10	11	9	5.1	
MINNEAPOLIS	254	988.2	1018.6	22.8	8.9	15.7	-0.1	27.8	25+	- 2.2	29	0	2	9.4	69	16	- 46	10	7	1	0	0	1.3	17	12.1	NW	23	15	6	9	4.3	84
ROCHESTER	395	971.6	1019.4	21.7	7.2	14.7	-1.3	26.7	8	- 5.0	29	0	2	8.3	70	31	- 47	27	5	1	0	0	1.8	19	12.5	19	25	16	4	10	4.5	
ST CLOUD	315	980.0	1018.0	21.7	7.8	14.9	0.0	28.3	7	- 2.2	28	0	2		69	36	- 25	20	4		0	0						15	5	10	4.5	
MISSISSIPPI																																
JACKSON	94	1005.1	1017.1	27.2	14.4	21.0	-3.7	31.7	21	1.7	29	0	0	16.7	83	46	- 19	26	4	2	0	0	1.1	9	9.8	NW	27	10	7	13	5.9	57
MERIDIAN	88	1006.4	1017.4	26.7	14.4	20.3	-4.1	31.1	18	1.1	30+	0	0	15.6	80	57	- 28	29	5	3	0	0	1.1	5	9.4	24	27	12	1	17	6.3	
MISSOURI																																
COLUMBIA	237	989.8	1018.0	25.6	12.8	19.2	-1.5	29.4	12+	1.7	29	0	0	11.7	65	50	- 49	26	5	4	0	0	1.2	11	20.1	NW	26	10	3	17	6.2	59

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
KANSAS CITY	226	991.2	1017.9	25.6	14.4	19.9	-1.9	31.7	25	4.4	29	0	0	13.3	69	200	117	84	10	6	0	0	0.9	11	12.1	NW	20	12	7	11	5.4	59
ST JOSEPH	247			25.0	10.0	17.5	-2.8	31.7	25	-1.1	28	0	2	12.2	76	44	-44		7	6	0		0.6	13	8.9	31	21	15	6	9	4.7	
ST LOUIS	163	998.6	1018.8	25.0	13.3	19.2	-1.7	30.6	20	5.0	29+	0	0	12.8	70	110	40	34	9	2	0	0	0.8	12	14.3	SW	20	9	10	11	5.7	63
SPRINGFIELD	386	973.2	1018.2	26.1	12.2	19.1	-2.2	30.6	6	0.6	29	0	0	12.2	69	85	-12	24	11	5	0	0	1.3	13	10.3	N	27	10	3	17	6.2	47
MONTANA																																
BILLINGS	1087	891.6	1014.2	23.3	9.4	16.6	0.8	33.3	2	2.8	27	4	0	5.6	54	17	-13	6	7	2	0	0	1.7	28	16.1	W	12	15	5	10	4.4	71
GLASGOW	696	931.9		24.4	9.4	16.8	3.1	34.4	6+	2.2	27+	3	0			56	31	19	8		0	0						13	3	14	5.0	
GREAT FALLS	1116	888.6	1013.9	25.6	8.9	17.2	3.1	36.7	5	2.8	23	4	0	2.2	40	40	10	34	6	3	0	0	2.0	23	15.2	W	2	15	9	6	3.8	83
HAVRE	787	922.5	1013.2	26.1	7.8	17.0	3.9	38.3	5	2.8	26	4	0	5.0	51	45	19	26	5	0	0	0	0.8	28	18.8	NW	2	17	6	7	4.0	77
HELENA	1167	881.8	1015.4	26.1	7.2	16.6	3.3	37.2	5	1.7	14	4	0	4.4	50	17	-7	7	6	3	0	0	1.3	27	19.2	SW	10	17	9	4	3.4	78
KALISPELL	904	911.3	1014.8	26.1	4.4	15.3	2.7	37.2	1	-1.7	23	3	2	5.0	55	8	-18	4	6	2	0	0	1.0	19	9.8	27	22+	16	12	2	3.2	
MILES CITY	801	921.1	1013.1	25.6	10.6	18.1	1.9	34.4	6+	2.2	27	6	0	6.7	54	60	35		9	3	0		0.8	31								
MISSOULA	972	904.8	1015.8	27.2	6.1	16.8	3.8	37.2	1	0.6	13	5	0	3.9	48	12	-13	8	5	2	0	0	0.8	30	15.2	SW	5	16	11	3	3.2	82
NEBRASKA																																
GRAND ISLAND	561	951.6	1017.4	24.4	10.0	17.3	-1.2	32.2	25	-1.1	28	1	1	10.6	69	26	-29	12	9	8	0	0	2.1	17	11.6	18	11	14	8	8	4.4	
LINCOLN U	351			23.3	11.7	17.5	-2.6	31.1	25	1.7	28	0	0			74	1	33	6		0	0			13.4	S	11	13	8	9	4.6	70
NORFOLK	471			23.9	9.4	16.7	-1.6	32.2	25	-2.2	28	1	1			36	-22	11	8		0	0						12	10	8	4.5	
NORTH PLATTE	846	919.1	1016.3	25.0	7.2	16.2	-1.4	31.1	30+	-3.9	27	0	2	7.2	61	28	-14	15	4	3	0	0	1.5	15	18.8	NE	23	14	8	8	4.5	73
OMAHA	298	983.1	1018.3	23.3	10.6	16.9	-2.4	30.0	25	0.6	28	0	0	11.7	73	105	39	54	7	5	0	0	1.3	15	13.4	N	23	15	5	10	4.5	73
SCOTTSBLUFF	1206	880.8	1015.3	25.0	8.3	16.6	-0.2	32.8	22	-2.2	27	2	1	7.2	60	13	-17	4	8	5	0	0	0.3	4	15.6	28	12	13	8	9	4.5	
VALENTINE	789			25.0	8.3	16.7	0.2	34.4	30+	-3.9	27	4	3			20	-12	8	7		0	0			22.4	W	13	13	8	9	4.7	69
NEVADA																																
ELKO	1539	845.9	1014.4	28.3	8.3	18.3	3.9	34.4	1	-1.7	13	4	1	2.2	40	5	-3	4	4	2	0	0	0.3	25	10.3	25	11	13	9	8	4.4	
ELY	1906	811.4	1015.0	23.9	5.0	14.4	0.2	29.4	3+	-2.8	14	0	4	2.2	53	57	42	17	7	8	0	0	1.4	20	13.0	SW	22	12	11	7	4.5	67
LAS VEGAS	659	936.0	1010.9	33.3	20.0	26.7	0.0	37.2	21+	14.4	14	24	0	9.4	38	26	18	17	8	6	0	0	0.4	24	14.3	NE	18	19	5	6	3.5	78
RENO	1342	866.6	1014.5	28.3	6.1	17.0	2.1	33.3	1	-1.1	14	1	2	4.4	46	21	15	15	5	2	0	0	0.3	27	13.0	NW	30	16	9	5	3.6	87
WINNEMUCCA	1310	867.9	1013.7	28.9	6.1	17.5	2.7	35.6	1	-5.0	14	5	3	2.2	39	5	-4	4	3	3	0		0.2	30	13.9	SW	11	16	7	7	4.2	69
NEW HAMPSHIRE																																
CONCORD	104	1005.4	1018.3	22.8	6.7	14.7	-0.5	28.9	8	-2.2	26	0	3	10.0	75	52	-43	23	6	0	0	0	0.5	25	13.4	NW	2	10	9	11	5.4	66
MT WASHINGTON OBS	1909			8.9	2.2	5.6	0.6	14.4	16	-7.2	25	0	12			193	15	56	14	0	175	51			39.3Y	SE	28	5	4	21	7.3	44
NEW JERSEY																																
ATLANTIC CITY	20	1016.6	1018.9	22.8	9.4	16.2	-3.3	29.4	18	0.0	24	0	1	11.7	76	38	-46	22	6	1	0	0	0.5	31	11.6	4	16	13	8	9	4.9	64
ATLANTIC CITY U	3			22.8	15.0	18.9	-1.3	28.9	5+	7.8	25	0	0			51	-35	36	5						16.5	N	15					
NEWARK	2	1017.6	1018.6	24.4	13.9	19.2	-0.4	30.0	19+	6.7	24+	0	0	11.7	63	34	-61	17	7	0	0	0	1.0	31	11.2	12	28	13	9	8	4.7	
TRENTON U	17			23.9	13.3	18.5	-1.0	29.4	19	6.7	23	0	0			55	-34	25	6		0	0			12.1	N	16	11	10	9	4.9	67
NEW MEXICO																																
ALBUQUERQUE	1619	840.8	1014.6	27.2	13.3	20.2	-0.9	32.2	4+	7.8	28+	2	0	6.7	48	20	-4	8	7	5	0	0	1.1	13	21.0	E	4	15	10	5	3.7	81
CLAYTON	1515			24.4	10.0	17.4	-1.4	32.2	3	4.4	24	1	0			62	20	21	8		0	0						12	9	9	5.0	
RATON	1944			23.3	7.2	15.2	-1.4	28.9	29	1.1	28	0	0			28	-14	13	9		0	0						11	9	10	4.9	
ROSWELL	1102	893.3		28.3	12.2	20.4	-0.5	36.1	12	5.0	30	3	0	12.2	64	22	-25	10	7	8	0	0	1.3	13	11.2	NW	13	13	6	11	4.9	72
SILVER CITY	1638			26.1	12.8	19.3	-1.8	29.4	13+	6.7	29	0	0			42	5	14	7		0	0						9	16	5	4.8	
NEW YORK																																
ALBANY	84	1007.8	1018.5	23.9	8.9	16.3	-0.2	29.4	8	1.1	24	0	0	10.0	68	57	-34	31	8	0	0	0	1.0	26	13.4	SW	21	5	14	11	5.8	64
BINGHAMTON	485	960.7	1019.3	20.6	9.4	15.1	-0.2	25.6	8	3.9	25+	0	0	10.6	77	79	4	39	9	2	0	0	1.0	28	13.4	SE	28	8	8	14	5.9	71
BUFFALO	215	993.2	1018.9	21.7	10.0	15.9	-0.4	27.8	8	2.8	25	0	0	10.0	71	162	82	92	9	2	0	0	1.7	23	14.3	W	21	10	6	14	6.1	71
J.F. KENNEDY	4	1017.6	1018.5	22.8	13.3	18.0	-1.9	28.9	19+	7.2	23	0	0	11.7	69	37	-69	13	8	0	0	0	0.7	32	12.5	20	26+	11	12	7	4.9	
NEW YORK U	40	1014.9	1018.1	24.4	14.4	19.3	-1.0	30.6	19+	7.2	25	0	0	10.6	61	47	-52	22	7	0	0	0	0.7	36	13.0	NE	16					71
NEW YORK LA GUARDIA	3	1016.6	1018.4	23.3	15.0	19.2	-1.3	28.9	8	8.9	25+	0	0	11.7	63	35	-64	14	7	1	0	0	0.9	33	17.4	NE	16	12	9	9	5.1	
ROCHESTER	167	999.3	1019.7	22.2	9.4	15.8	-1.1	28.3	8	3.3	25+	0	0	10.0	72	98	33	45	11	2	0	0	1.7	26	13.4	SW	21+	10	12	8	5.3	66
SYRACUSE	125	1003.7	1018.6	22.2	9.4	15.9	-0.9	28.9	8	3.9	11	0	0	10.6	73	69	-3	36	9	0	0	0	1.2	27	16.1	W	21	11	10	9	5.5	72
NORTH CAROLINA																																
ASHEVILLE	652	943.4	1019.3	22.8	8.9	15.7	-3.2	27.8	20+	-1.1	30	0	1	11.1	81	64	-28	41	5	0	0	0	0.6	1	10.3	36	28	8	10	12	5.7	64
CAPE HATTERAS R	2	1016.9	1017.2	23.9	16.7	20.4	-2.9	28.9	9	8.9	24	0	0	16.1	76	222	72	114	8	2	0	0	2.5	2	13.9	S	28	9	7	14	5.8	57
CHARLOTTE	224	991.2	1018.4	25.6	13.3	19.4	-3.3	31.1	20	3.9	30	0	0	12.8	67	41	-48	22	3	0	0	0	1.1	3	9.8	N	22	10	12	8	5.0	86
GREENSBORO	273	987.5	1018.9	25.6	12.8	19.2	-1.9	31.1	16	3.9	30	0	0	14.4	78	61	-32	26	5	2	0	0	1.1	2	11.2	NW	21	11	8	11	5.2	64

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
RALEIGH	132	1002.7	1018.4	25.6	13.9	19.7	-2.1	30.0	16	5.6	30	0	0	13.9	73	44	- 54	23	7	2	0	0	1.4	3	9.8	36	16	13	8	9	4.9	58
WILMINGTON	9	1016.3	1017.7	27.8	16.7	22.2	-1.8	31.7	16	10.0	30+	0	0	15.0	67	39	-120	36	4	0	0	0	1.7	3	11.6	N	17	9	10	11	5.9	63
NORTH DAKOTA																																
BISMARCK	502	955.0	1014.4	23.3	8.3	15.8	0.9	30.6	5	- 3.9	27	0	1	6.1	60	53	23	19	7	2	0	0	1.5	17	15.6	NW	25	14	8	8	4.6	73
FARGO	273	983.4	1016.0	23.3	8.3	16.0	1.1	31.1	7	- 4.4	27	0	1	7.2	60	8	- 30	3	5	2	0	0	2.9	18	15.2	NW	25	16	4	10	4.6	69
WILLISTON	579	945.1	1012.9	25.0	8.3	16.7	2.7	33.9	6	- 2.8	27+	2	2	6.7	57	17	- 11	9	7	2	0	0	0.4	35	18.8	W	11	13	10	7	4.0	75
OHIO																																
AKRON	368	975.3	1019.8	22.2	10.0	16.1	-1.7	28.3	18	3.9	25	0	0	10.0	72	94	27	59	7	1	0	0	0.2	2	9.4	32	27	10	8	12	5.6	
CINCINNATI OBS	232			25.0	11.1	18.3	-2.3	32.2	16	4.4	23	1	0			42	- 26	20	7		0	0			8.5	W	21					57
CLEVELAND	237	990.5	1019.8	22.8	10.0	16.5	-1.4	29.4	20	1.7	25	0	0	9.4	66	53	- 21	18	7	1	0	0	0.2	27	10.7	SW	26	11	6	13	5.8	60
COLUMBUS	247	989.8	1019.8	22.8	8.9	15.8	-3.1	30.0	16	0.6	25	0	0	10.6	75	67	- 1	40	7	1	T	0	0.6	3	12.1	N	27	14	3	13	5.4	54
DAYTON	305	983.7	1019.6	24.4	10.6	17.6	-1.7	31.1	16	2.2	23	0	0	10.0	64	28	- 38	16	8	0	0	0	0.5	5	11.6	SW	30	11	5	14	5.8	66
MANSFIELD	395			21.7	9.4	15.6	-1.8	28.3	15	2.8	25+	0	0	7.8	62	117	41	55	6	1	0	0	0.4	26				10	6	14	5.9	
TOLEDO	204	994.9	1020.0	22.2	7.2	14.7	-2.8	28.3	15+	- 1.1	23	0	1	8.9	71	54	0	19	7	2	T	0	0.3	32	9.8	SW	26	9	10	11	5.6	64
YOUNGSTOWN	359	977.0	1019.9	21.1	7.8	14.5	-2.4	26.7	20+	1.1	11	0	0	9.4	74	92	19	45	8	1	0	0	0.1	34	9.4	28	24	9	9	12	5.8	
OKLAHOMA																																
OKLAHOMA CITY	392	970.9	1016.7	27.2	16.1	21.6	-1.6	32.2	12	5.0	28	1	0	14.4	69	80	3	26	13	6	0	0	1.5	12	13.4	SE	3	10	4	16	6.0	55
TULSA	198	993.2	1017.4	26.7	15.0	20.7	-2.6	31.1	19	3.9	28	0	0	15.0	74	124	22	35	11	5	0	0	1.1	14	12.5	N	26	11	5	14	5.6	54
OREGON																																
ASTORIA	2	1014.6	1015.4	21.7	10.0	15.8	1.4	31.7	14	5.0	23	0	0	12.8	86	78	- 2	30	10	0	0	0	0.9	21	14.3	18	1	12	6	12	5.5	
BURNS U	1265	874.0	1015.2	26.7	7.2	17.1	2.2	32.8	1	- 0.6	12	2	1	2.8	43	8	- 5	4	5		0	0	1.2	31				21	6	3	2.6	
EUGENE	109	1001.4	1014.7	27.8	10.0	18.9	2.5	35.6	15	6.1	12	4	0	10.6	67	46	14	15	5	0	0	0	0.7	26	10.3	15	30	20	5	5	3.1	
MEACHAM	1234	877.8	1014.3	22.8	10.0	16.4	3.3	30.6	1	3.3	13	0	0			20	- 17	15	5		0	0	0.9	30				18	7	5	3.7	
MEDFORD	396	967.2	1014.2	31.1	10.0	20.7	2.8	36.7	27	5.0	13	17	0	8.3	53	7	- 8	7	2	0	0	0	1.1	29	9.4	29	8+	22	5	3	2.2	
PENDLETON	452	961.4	1014.4	28.9	13.3	21.1	3.2	35.0	1	6.1	13	10	0	6.1	41	10	- 6	6	3	1	0	0	1.3	26	13.4	26	10	21	6	3	2.5	
PORTLAND	6	1013.5	1014.8	26.7	11.7	19.1	2.3	34.4	27	6.1	12	3	0	10.6	65	19	- 22	7	6	0	0	0	0.8	32	18.8	S	10	14	9	7	4.2	72
SALEM	60	1007.5	1014.8	27.8	8.9	18.3	1.3	36.7	15	3.3	12	4	0	9.4	62	21	- 14	8	5	0	0	0	0.8	28	13.0	19	10	18	6	6	3.6	
SEXTON SUMMIT R	1169	884.2	1013.7	23.3	11.1	17.3	1.9	30.6	27	5.6	30	0	0			16	- 16	8	5		0	0	0.4	2	14.3	12	14	23	2	5	2.1	
PACIFIC AREA																																
JOHNSTON	2	1011.9	1012.4	29.4	25.0	27.2	-0.3	30.6	30+	22.8	21+	0	0	23.3	79	181	121	67	22	2	0	0	4.7	10	14.8	SE	3	1	12	17	7.4	66
KOROR R	29	1006.1	1009.7	31.1	25.0	28.1	0.8	33.3	23	23.3	30+	6	0	23.9	81	171	-193	47	13	1	0	0	2.9	24	12.5	SW	29+	0	2	28	9.1	79
KWAJALEIN	2	1009.1	1009.8	30.6	25.6	27.9	0.2	31.7	18+	22.8	26+	0	0	23.9	79	277	18	79	17	3	0	0	1.2	15	15.6	19	26	2	3	25	9.1	
MAJURO	3	1010.2	1010.4	30.6	25.0	27.8	0.9	32.2	17	22.2	13	1	0	23.3	76	350	44	101	20	3	0	0	1.1	10	11.6	N	13	0	5	25	8.9	65
MARCUS ISLAND	6	1005.1	1007.0	30.6	25.6	27.9	-0.5	33.9	2	23.3	16	3	0	24.4	84	103	4	36	11	0	0	0	3.0	11	27.3	N	20	4	12	14	6.7	53
PAGO PAGO	4	1013.2	1013.4	30.0	22.8	26.4		31.7	25+	19.4	4+	0	0	22.8	80	110		34	18	1	0	0	4.3	9	13.0	E	17	5	17	8	5.9	83
PONAPE R	37	1004.4	1009.8	31.1	22.2	26.6	0.2	32.8	29+	20.6	20	7	0	23.3	86	496	94	138	19	1	0	0	1.0	19	7.6	NW	1	4	4	22	8.1	52
TAGUAC GUAM R	110			29.4	22.8	26.1	-0.2	31.1	28+	20.0	29+	0	0			515	176	124	23		0	0			10.7	SW	12+					38
TRUK MOEN ISLAND	2	1009.1	1009.6	30.6	23.9	27.1	0.2	31.7	25+	22.8	24+	0	0	23.9	83	199	-121	48	13	0	0	0	2.1	24	13.9	N	4	2	3	25	8.9	65
WAKE	3	1008.5	1008.7	29.4	25.0	27.2	-0.8	30.6	30+	23.9	26+	0	0	23.9	83	422	289	131	25	0	0	0	3.1	15	46.5	N	16				9.0	47
YAP R	19	1006.8	1008.5	31.1	24.4	27.6	0.2	33.3	28+	22.2	4	9	0	23.9	84	298	- 58	137	23	5	0	0	2.1	24	13.0	SW	29	0	5	25	9.0	52
PENNSYLVANIA																																
ALLENTOWN	118	1004.7	1018.7	23.9	8.9	16.3	-1.9	29.4	19	1.7	26	0	0	10.6	71	24	- 71	9	5	2	0	0	0.6	29	15.6	23	21	13	9	8	4.6	
ERIE	223	992.9	1019.6	21.1	10.0	15.6	-1.8	27.2	20+	3.3	25	0	0	10.0	73	108	18	45	8	1	0	0	0.8	21	10.3	20	27+	10	7	13	5.6	
HARRISBURG	103	1006.1	1018.8	25.0	12.2	18.5	-0.9	30.0	19	5.0	23	0	0	11.7	68	46	- 26	16	6	2	0	0	1.1	29	17.9	W	21	10	12	8	5.2	75
PHILADELPHIA	2	1017.6	1018.5	25.0	13.9	19.4	0.2	30.0	18	5.6	25	0	0	12.2	67	75	- 13	42	6	2	0	0	0.8	35	11.6	NE	16	11	11	8	5.1	71
PITTSBURGH	347	976.0	1019.8	22.8	9.4	16.2	-1.7	28.9	16	2.8	25	0	0	10.0	70	41	- 24	26	7	1	0	0	0.4	33	12.5	24	21	10	9	11	5.7	57
READING U	81			24.4	12.8	18.6	-1.1	30.0	19	5.6	24	0	0			34	- 51	15	6		0	0			20.6	W	21	16	8	6	4.3	69
SCRANTON	283	985.4	1019.5	22.8	10.6	16.4	-0.5	27.2	8	3.3	24	0	0	10.6	72	54	- 21	28	7	2	0	0	0.4	22	11.2	S	28	12	8	10	5.2	67
WILLIAMSPORT	160	1000.0	1019.2	23.9	10.6	17.4	-0.4	28.9	18	5.0	25	0	0	12.2	78	56	- 27	23	7	2	0	0	1.3	28	10.3	11	28	9	10	11	5.6	
RHODE ISLAND																																
BLOCK ISLAND	34			20.0	12.8	16.4	-1.4	25.6	19	7.2	26	0	0			68	- 13	62	6		0	0						11	11	8	5.2	
PROVIDENCE	16	1015.6	1018.1	23.3	10.6	17.1	-0.3	29.4	19	2.8	26	0	0	10.6	70	81	- 9	69	7	0	0	0	0.8	28	13.4	14	28	13	12	5	4.8	70
SOUTH CAROLINA																																
CHARLESTON	12	1015.2	1017.0	26.7	15.6	21.1	-3.2	30.6	22+	5.6	30	0	0	15.0	73	35	-113	15	5	0	0	0	2.2	1	13.9Y	SW	28	9	10	11	5.7	48
CHARLESTON U	3			26.1	18.3	22.3	-2.7	30.0	22+	10.0	30	0	0			29	-132	12	5		0	0			16.5	SE	27					

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
COLUMBIA	65	1010.2	1018.2	26.7	12.8	19.6	-4.4	31.1	21+	4.4	30	0	0	13.9	76	60	- 49	42	3	1	0	0	1.3	3	9.4	33	9	14	9	7	4.6	78
GNVLE SPARTANBURG	292	984.4	1018.7	25.6	13.3	19.3	-3.3	31.1	21+	2.2	30	0	0	12.8	69	52	- 46	21	4	2	0	0	1.6	3	9.4	SW	21	10	12	8	4.8	71
SOUTH DAKOTA																																
ABERDEEN	395	968.8	1015.5	24.4	8.9	16.5	0.6	33.3	7	- 1.7	27	1	2	7.8	61	87	51	66	7	4	0	0	2.3	17	12.5	24	12	14	7	9	4.7	
HURON	391	969.5	1015.9	24.4	9.4	17.1	0.4	33.9	25	- 0.6	27	2	1	8.3	62	39	1	33	6	4	0	0	2.9	16	14.8	N	23	13	5	12	5.1	67
RAPID CITY	964	904.5	1014.4	25.0	10.0	17.4	1.0	33.9	30+	- 1.1	27	3	1	4.4	48	53	29	23	11	4	0	0	1.0	26	16.5	NE	2	13	7	10	4.6	64
SIOUX FALLS	432	966.1	1017.4	23.9	8.9	16.3	-0.3	33.3	25	- 2.2	28	1	3	8.3	63	22	- 44	10	8	5	0	0	2.0	17	11.2	16	12	15	7	8	4.2	
TENNESSEE																																
BRISTOL	459	965.5	1019.5	25.0	9.4	17.0	-3.6	30.6	20	1.1	30	0	0	11.7	77	66	- 1	33	5	1	0	0	0.4	3	13.0	31	21	16	7	7	4.4	
CHATTANOOGA	203	993.9	1018.3	25.6	13.9	19.7	-3.5	31.1	20	2.2	30	0	0	15.0	79	53	- 26	34	6	3	0	0	0.2	2	8.5	NW	28	8	10	12	5.8	62
KNOXVILLE	299	983.1	1018.0	24.4	12.8	18.7	-3.7	30.6	20	2.2	30	0	0	13.9	78	69	4	37	5	1	0	0	0.7	3	8.9	SW	21	8	7	15	6.3	62
MEMPHIS	79	1008.1	1018.1	26.7	16.1	21.3	-2.0	32.2	21+	3.3	29	2	0	14.4	68	47	- 24	31	4	1	0	0	1.3	9	10.3	N	27	8	5	17	6.4	60
NASHVILLE	180	996.6	1018.1	25.6	12.8	19.3	-3.3	31.1	20	2.8	30	0	0	13.9	74	49	- 24	23	7	2	0	0	0.2	16	9.4	SW	9	7	11	12	6.0	65
OAK RIDGE R	276			25.0	11.7	18.3	-3.4	30.6	20+	0.6	30	0	0			83	- 1	46	5		0	0			10.7Y		10	10	4	16	6.2	
TEXAS																																
ABILENE	537	955.0	1015.8	26.7	16.7	21.7	-2.7	32.2	12	5.0	28	1	0	16.7	77	138	86	50	10	4	0	0	1.3	15	13.9	N	26	10	4	16	5.9	52
AMARILLO	1098	893.3	1014.7	26.7	13.9	20.2	-1.9	35.6	12	5.0	28	3	0	11.1	63	63	15	22	9	3	0	0	2.0	18	15.6	E	3	14	7	9	4.6	71
AUSTIN	182	993.6	1015.4	28.9	18.9	24.0	-2.2	33.3	15	8.3	29	6	0	17.2	71	145	58	39	11	5	0	0	1.3	7	13.0	N	27	10	7	13	5.4	58
BROWNSVILLE	6	1011.5	1012.3	29.4	21.7	25.4	-1.9	32.2	15+	13.3	29+	2	0	21.7	81	489	362	310	12	8	0	0	1.8	9	30.8	NE	20	11	8	11	5.5	63
CORPUS CHRISTI	12	1012.2	1013.7	28.9	21.1	25.1	-2.0	32.2	15	12.2	29	1	0	21.1	81	516	405	223	11	6	0	0	2.9	10	32.2	E	20	8	9	13	6.0	54
DALLAS	147	999.0	1016.1	28.3	18.9	23.4	-2.1	33.9	12	7.8	28	1	0	15.6	66	106	34	23	13	3	0	0	1.5	10	11.6	N	27	11	6	13	5.8	52
DEL RIO	313	978.7	1014.2	30.0	18.9	24.6	-2.1	33.9	13+	10.6	29+	8	0	16.7	65	178	112	96	10	3	0	0	2.1	10	9.4	36	27+	9	12	9	5.6	
EL PASO	1194	882.8	1012.5	29.4	16.7	22.9	-0.7	34.4	12	9.4	29	5	0	10.6	48	39	10	25	5	3	0	0	0.8	9	14.3	N	10	21	8	1	2.9	83
FORT WORTH	164	995.9	1016.2	28.3	18.3	23.4	-2.4	33.3	12	7.8	29+	2	0	16.1	70	151	86	38	13	6	0	0	1.1	10	10.3	3	26	11	6	13	5.6	
GALVESTON U	2			27.8	23.3	25.4	-1.3	30.0	16+	12.8	28	0	0			56	- 73	46	7		0	0			13.9	SE	19					54
HOUSTON	15	1012.9	1015.1	30.0	20.6	25.3	-0.9	33.3	15	10.0	29	9	0	18.9	72	123	15	79	8	5	0	0	1.6	8	12.5	11	20	10	11	9	5.5	61
LUBBOCK	992	905.5	1015.4	26.7	13.9	20.3	-1.6	36.1	12	4.4	28	3	0	12.8	69	25	- 35	10	7	5	0	0	1.5	15	11.6	36	26	8	11	11	5.6	
MIDLAND	869	917.4	1014.4	27.8	15.6	21.7	-2.4	35.0	12	7.2	28	2	0	13.9	68	40	- 5	21	8	3	0	0	2.4	12	11.2	5	4	6	12	12	6.1	
PORT ARTHUR	5	1014.9	1015.5	30.0	19.4	24.7	-1.0	32.8	14	7.2	29	6	0	18.3	71	85	- 39	73	6	1	0	0	1.8	6	15.2	NW	27	12	10	8	5.0	66
SAN ANGELO	580	949.2	1015.0	27.8	17.2	22.6	-3.2	32.8	12	8.3	28	1	0	16.7	73	183	116	74	13	4	0	0	1.2	12	13.0	2	14	9	5	16	6.1	
SAN ANTONIO	240	987.5	1015.2	28.9	19.4	24.2	-1.7	32.8	14+	8.3	28	3	0	18.3	74	283	195	69	12	3	0	0	1.7	6	14.8	NE	21	9	10	11	5.6	49
VICTORIA	32	1010.2	1014.4	29.4	20.6	25.2	-0.9	33.3	18+	10.6	29	6	0	20.0	77	369	261	216	8	3	0	0	2.2	8	21.0Y	E	20	8	10	12	6.0	
WACO	153	998.0	1015.7	30.0	19.4	24.9	-1.2	33.9	13	8.9	29	13	0	17.2		109	39	46	7	3	0	0	0.8	7	13.0	36	27	12	5	13	5.4	
WICHITA FALLS	303	980.0	1016.1	29.4	16.7	22.8	-2.4	35.0	12	6.1	28	7	0	15.6	68	100	41	25	10	6	0	0	1.5	14	18.3	2	3	9	5	16	6.3	
UTAH																																
MILFORD	1533	848.0		27.2	8.9	17.9	0.6	34.4	3	- 0.6	20	3	1			66	55	31	6		0	0						13	8	9	4.5	
SALT LAKE CITY	1286	872.7	1014.6	27.8	10.6	19.3	1.3	35.6	5	2.2	13	5	0	5.6	46	19	5	6	5	6	0	0	1.3	17	15.2	NW	11	14	8	8	4.3	80
WENDOVER	1291			26.1	13.9	19.9	0.6	32.8	4	7.8	13	1	0			11	3	8	3		0	0										
VERMONT																																
BURLINGTON	101	1005.1	1017.6	21.1	7.8	14.5	-0.2	27.2	8	1.1	11	0	0	10.0	76	78	- 6	37	12	1	0	0	0.5	20	13.4	S	27+	8	9	13	6.1	75
VIRGINIA																																
LYNCHBURG	279	985.8		23.9	10.6	17.3	-3.1	28.3	21+	2.2	30	0	0	11.1	71	30	- 56	13	4	2	0	0	0.9	3	9.8	W	21	12	11	7	4.4	75
NORFOLK	7	1016.9	1018.1	23.9	14.4	19.2	-3.4	28.9	9	7.2	24	0	0	13.9	73	77	- 30	60	7	0	0	0	1.7	2	17.9	NE	16	11	6	13	5.5	73
RICHMOND	50	1012.9	1018.9	25.6	11.7	18.7	-2.5	30.6	21	4.4	26+	0	0	13.9	79	24	- 69	11	5	2	0	0	0.9	2	8.9	SW	28+	10	9	11	5.5	72
ROANOKE	350	977.3	1019.2	24.4	10.0	17.3	-3.3	30.6	16	2.8	30	0	0	10.0	66	45	- 38	36	4	1	0	0	0.8	35	11.6	18	24	14	9	7	4.3	
WALLOPS ISLAND	3	1018.6	1019.1	21.7	13.3	17.5		26.1	6	7.2	26	0	0	13.9	82	52		18	6	0	0	0	1.3	3	26.8Y	NNE	16	11	6	13	5.8	
WASHINGTON																																
OLYMPIA	59	1008.5	1015.5	25.6	8.3	16.8	2.1	34.4	15	3.9	24+	3	0	11.1	76	35	- 19	18	8	0	0	0	0.8	22	15.6	18	10	12	11	7	4.7	
QUILLAYUTE	55	1007.8	1015.4	21.1	9.4	15.4	1.4	32.2	15	4.4	12	1	0	12.2	85	197	78	54	14	1	0	0	0.6	20	9.8	S	1	6	8	16	6.4	58
SEATTLE TACOMA	122	999.3	1015.6	24.4	12.8	18.7	3.2	33.9	15	8.3	12	2	0	11.7	70	24	- 28	10	7	1	0	0	0.4	25	13.9	22	10	14	9	7	4.4	73
SPOKANE	718	930.9	1013.5	26.7	10.0	18.5	2.4	33.3	21+	2.2	12	3	0	3.9	43	6	- 13	4	3	0	0	0	1.7	19	13.9	SW	10	18	7	5	3.1	84
STAMPEDE PASS R	1206	881.1		18.3	8.9	13.7	2.6	25.6	27	1.7	12	0	0			61	- 51	25	9		0	0						15	6	9	4.3	
WALLA WALLA U	289			28.3	14.4	21.6	2.7	34.4	21+	7.8	13	5	0			18	- 2	12	5		0	0			9.8	W	11	18	7	5	3.1	83
YAKIMA	321	976.0	1013.8	28.3	9.4	18.7	2.4	32.2	19+	2.8	13	4	0	7.2	51	2	- 7	2	1	0	0	0	2.1	28	13.0	30	22+	21	4	5	2.7	

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1012.5	1015.0	31.1	24.4	27.7	0.7	34.4	14	22.8	23+	5	0	21.7	71	130	-42	48	18	5	0	0	3.2	9	10.7	SE	9	5	17	8	6.0	65
SWAN ISLAND	9			30.6	25.6	27.8	-0.5	31.7	14+	22.8	25+	0	0			150	18	86	12		0	0						2	12	16	7.3	
WEST VIRGINIA																																
BECKLEY	763	931.6	1019.8	20.6	7.8	14.1		26.1	20+	0.0	30	0	1	8.9	75	72		64	7	1	T	T	0.7	16	20.6	30	21	11	8	11	5.5	
CHARLESTON	286	985.1	1019.2	24.4	8.9	16.7	-3.4	29.4	20+	1.7	25	0	0	11.1	76	43	-31	28	7	0	0	0	0.2	5	13.9	26	21	9	11	10	5.8	
ELKINS	600	948.9	1020.3	21.7	6.7	14.2	-2.8	27.8	20	-1.1	25	0	2	9.4	81	85	7	68	6	1	0	0	0.4	32	15.6	26	21	4	14	12	6.7	
HUNTINGTON	252	989.2	1019.3	24.4	10.0	17.2	-2.9	30.6	16	2.8	25	0	0	11.7	74	31	-34	21	7	0	0	0	0.3	10	8.9	25	21	11	6	13	5.6	
PARKERSBURG U	187			23.9	10.6	17.2	-2.8	30.6	18	2.8	25	0	0			38	-31	21	5		0	0			11.6	SW	27					66
WISCONSIN																																
GREEN BAY	208	993.9	1019.5	21.7	7.2	14.4	-1.4	28.3	8	0.0	29	0	1	9.4	76	12	-62	5	8	1	0	0	0.4	23	13.0	NW	21	12	9	9	5.2	68
LA CROSSE	198	994.6	1019.3	23.3	9.4	16.2	-0.6	29.4	8	-2.2	29	0	2	10.0	73	35	-53	20	4	3	0	0	1.1	14	10.3	32	23	14	6	10	4.9	
MADISON	262	988.2	1019.6	21.7	6.7	14.2	-1.9	28.3	8	-2.2	29	0	3	8.9	73	68	-16	43	4	4	0	0	0.4	22	11.2	SW	25	13	8	9	4.9	67
MILWAUKEE	205	994.6	1019.7	21.7	10.6	16.0	0.3	28.9	20+	4.4	29	0	0	11.1	74	43	-26	14	10	0	0	0	0.2	8	13.0	SW	26	12	10	8	4.6	64
WYOMING																																
CASPER	1627	839.5	1015.0	24.4	7.8	16.1	0.7	32.8	2	1.7	27+	2	0	2.8	48	42	20	18	10	4	0	0	2.2	24	19.7	24	30	12	9	9	4.8	
CHEYENNE	1867	815.4	1016.3	21.7	7.2	14.7	-0.1	29.4	2	0.6	27	0	0	3.3	52	22	-6	10	8	1	0	0	2.3	28	14.3	NW	11	13	7	10	4.8	65
LANDER	1696	831.4	1015.3	23.3	8.3	15.9	0.9	31.1	2	1.7	13	0	0	3.9	50	35	8	17	7	5	0	0	0.9	26	14.3	SW	11	14	6	10	5.0	71
SHERIDAN	1208	879.4	1015.2	23.9	6.7	15.1	0.2	33.3	2	-1.1	27	1	1	5.0	55	40	10	23	7	2	0	0	1.5	30	19.2	NW	13	12	8	10	5.1	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

SEPTEMBER 1967

State and station	Current season This month	Current season Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	41	41	6
HUNTSVILLE	42	42	12
MOBILE	23	23	0
MONTGOMERY	30	30	0
ALASKA			
ANCHORAGE	501	873	1003
ANNETTE	290	632	777
BARROW	1185	2920	2678
BARTER ISLAND	1079	2697	2497
BETHEL	584	1263	1325
COLD BAY	555	1341	1424
FAIRBANKS	545	936	1145
JUNEAU	444	1087	1122
KING SALMON	556	1184	1148
KOTZEBUE	663	1466	1550
MC GRATH	589	1165	1179
NOME	635	1658	1670
ST. PAUL ISLAND	581	1566	1756
SHEMYA	559	1575	1553
YAKUTAT	507	1265	1159
ARIZONA			
FLAGSTAFF	207	251	315
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	11	11	6
YUMA	0	0	0
ARKANSAS			
FORT SMITH	32	32	12
LITTLE ROCK	39	39	9
TEXARKANA	24	24	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	9	9	42
BLUE CANYON	56	56	204
EUREKA U	170	676	785
FRESNO	0	0	0
LONG BEACH	0	0	12
LOS ANGELES	0	1	71
LOS ANGELES U	0	0	6
MT SHASTA R	55	60	182
OAKLAND	10	100	148
RED BLUFF	0	0	0
SACRAMENTO	0	0	12
SANDBERG R	37	37	30
SAN DIEGO	0	0	21
SAN FRANCISCO	11	159	219
SAN FRANCISCO U	67	424	468
SANTA CATALINA	8	28	25
SANTA MARIA	26	90	288
STOCKTON	0	0	6
COLORADO			
ALAMOSA	313	471	443
COLORADO SPRINGS	138	196	166
DENVER	108	128	132
GRAND JUNCTION	28	28	30
PUEBLO	76	91	54
CONNECTICUT			
BRIDGEPORT	69	71	66
HARTFORD	112	122	105
NEW HAVEN	93	102	99
DELAWARE			
WILMINGTON	80	80	51
DIST. OF COLUMBIA			
WASH NATL AP	34	34	33
FLORIDA			
APALACHICOLA U	10	10	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	3	3	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	21	21	0
TALLAHASSEE	12	12	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	36	36	12
ATLANTA	52	52	18
AUGUSTA	21	21	0
COLUMBUS	29	29	0
MACON	33	33	0
ROME	50	50	24
SAVANNAH	12	12	0
IDAHO			
BOISE	49	49	132
IDAHO FALLS 46W R	178	185	320
LEWISTON	31	31	123
POCATELLO	128	131	172

State and station	Current season This month	Current season Period July through this month	Normals July through this month
ILLINOIS			
CAIRO U	37	39	36
CHICAGO O HARE	160	252	129
CHICAGO MIDWAY	104	146	81
MOLINE	136	190	108
PEORIA	113	153	93
ROCKFORD	134	227	129
SPRINGFIELD	104	147	72
INDIANA			
EVANSVILLE	72	84	66
FORT WAYNE	154	212	114
INDIANAPOLIS	83	95	90
SOUTH BEND	137	198	117
IOWA			
BURLINGTON	109	154	93
DES MOINES	109	141	108
DUBUQUE	156	249	199
SIOUX CITY	107	142	117
WATERLOO	208	330	169
KANSAS			
CONCORDIA	82	96	57
DODGE CITY	45	51	33
GOODLAND	87	109	87
TOPEKA	87	95	57
WICHITA	63	66	33
KENTUCKY			
COVINGTON	82	84	75
LEXINGTON	83	88	54
LOUISVILLE	68	68	54
LOUISIANA			
ALEXANDRIA	26	26	0
BATON ROUGE	23	23	0
LAKE CHARLES	10	10	0
NEW ORLEANS	20	20	0
SHREVEPORT	15	15	0
MAINE			
CARIBOU	276	345	529
PORTLAND	155	197	260
MARYLAND			
BALTIMORE	75	75	48
MASSACHUSETTS			
BLUE HILL OBS R	145	164	130
BOSTON	110	114	69
NANTUCKET	135	176	127
PITTSFIELD	211	264	303
WORCESTER	151	183	187
MICHIGAN			
ALPENA	289	503	446
DETROIT	123	176	87
DETROIT M WAYNE CO	158	219	122
DETROIT WILLOW RUN	188	258	90
FLINT	216	334	165
GRAND RAPIDS	179	264	170
HOUGHTON LAKE	288	473	38[illegible]
LANSING	217	321	166
MARQUETTE U	203	406	380
MUSKEGON	162	210	160
SAULT STE MARIE	283	589	480
MINNESOTA			
DULUTH	269	493	510
INTERNATIONAL FALLS	260	463	546
MINNEAPOLIS	166	267	242
ROCHESTER	197	337	245
ST CLOUD	199	313	300
MISSISSIPPI			
JACKSON	35	35	0
MERIDIAN	40	40	0
MISSOURI			
COLUMBIA	67	77	54
KANSAS CITY	48	51	39
ST JOSEPH	93	114	66
ST LOUIS	67	77	60
SPRINGFIELD	63	77	45
MONTANA			
BILLINGS	149	167	207
GLASGOW	136	167	348
GREAT FALLS	136	146	339
HAVRE	125	143	387
HELENA	130	131	384
KALISPELL	176	230	470
MILES CITY	116	126	186
MISSOULA	116	122	411
NEBRASKA			
GRAND ISLAND	93	112	114
LINCOLN U	83	94	81
NORFOLK	118	165	120
NORTH PLATTE	132	180	129
OMAHA	109	132	96
SCOTTSBLUFF	125	149	138
VALENTINE	133	193	186

State and station	Current season This month	Current season Period July through this month	Normals July through this month
NEVADA			
ELKO	56	56	268
ELY	210	223	305
LAS VEGAS	0	0	0
RENO	87	91	334
WINNEMUCCA	80	80	244
NEW HAMPSHIRE			
CONCORD	208	250	233
MT WASHINGTON OBS	684	1680	1749
NEW JERSEY			
ATLANTIC CITY	149	150	39
ATLANTIC CITY U	49	49	29
NEWARK	58	59	39
TRENTON U	80	81	57
NEW MEXICO			
ALBUQUERQUE	13	13	12
CLAYTON	65	116	72
RATON	165	232	163
ROSWELL	9	11	18
SILVER CITY	24	25	6
NEW YORK			
ALBANY	153	172	157
BINGHAMTON	178	244	288
BUFFALO	162	200	197
NEW YORK U	55	59	30
J.F. KENNEDY	72	76	36
NEW YORK LA GUARDIA	56	57	27
ROCHESTER	164	217	166
SYRACUSE	154	213	166
NORTH CAROLINA			
ASHEVILLE	158	167	75
CAPE HATTERAS R	11	11	0
CHARLOTTE	40	40	6
GREENSBORO	49	49	33
RALEIGH	35	35	21
WILMINGTON	4	4	0
NORTH DAKOTA			
BISMARCK	164	262	284
FARGO	158	272	284
WILLISTON	151	222	335
OHIO			
AKRON	146	185	105
CINCINNATI OBS	91	97	54
CLEVELAND	137	177	116
COLUMBUS	164	194	90
DAYTON	115	131	84
MANSFIELD	171	220	145
TOLEDO	206	290	133
YOUNGSTOWN	214	296	145
OKLAHOMA			
OKLAHOMA CITY	27	27	15
TULSA	37	37	18
OREGON			
ASTORIA	135	321	486
BURNS U	94	100	259
EUGENE	28	34	197
MEACHAM	136	205	496
MEDFORD	10	10	78
PENDLETON	24	24	111
PORTLAND	29	32	167
SALEM	47	60	179
SEXTON SUMMIT R	113	211	333
PENNSYLVANIA			
ALLENTOWN	146	166	90
ERIE	164	221	127
HARRISBURG	65	90	63
PHILADELPHIA	55	55	60
PITTSBURGH	146	169	114
PITTSBURGH U	123	142	80
READING U	80	85	54
SCRANTON	139	161	151
WILLIAMSPORT	109	126	120
RHODE ISLAND			
BLOCK ISLAND	115	126	94
PROVIDENCE	103	110	112
SOUTH CAROLINA			
CHARLESTON	15	15	0
CHARLESTON U	7	7	0
COLUMBIA	32	32	0
GNVLE-SPARTANBURG	41	41	9
SOUTH DAKOTA			
ABERDEEN	134	208	239
HURON	118	180	186
RAPID CITY	129	179	199
SIOUX FALLS	141	209	212
TENNESSEE			
BRISTOL	107	121	51
CHATTANOOGA	45	46	18
KNOXVILLE	63	64	30
MEMPHIS	34	34	18
NASHVILLE	58	61	30
OAK RIDGE R	70	72	39

State and station	Current season This month	Current season Period July through this month	Normals July through this month
TEXAS			
ABILENE	17	17	0
AMARILLO	23	24	18
AUSTIN	7	7	0
BROWNSVILLE	1	1	0
CORPUS CHRISTI	0	0	0
DALLAS	13	13	0
DEL RIO	1	1	0
EL PASO	2	2	0
FORT WORTH	13	13	0
GALVESTON U	3	3	0
HOUSTON	3	3	0
LUBBOCK	17	21	18
MIDLAND	9	9	0
PORT ARTHUR	10	10	0
SAN ANGELO	5	5	0
SAN ANTONIO	8	8	0
VICTORIA	4	4	0
WACO	6	6	0
WICHITA FALLS	14	14	0
UTAH			
MILFORD	88	88	99
SALT LAKE CITY	57	57	81
WENDOVER	29	29	48
VERMONT			
BURLINGTON	223	269	30
VIRGINIA			
LYNCHBURG	97	97	51
NORFOLK	36	36	0
RICHMOND	64	64	36
ROANOKE	105	105	51
WALLOPS ISLAND	77	80	
WASHINGTON			
OLYMPIA	94	158	337
QUILLAYUTE	163	399	568
SEATTLE TACOMA	44	60	280
SPOKANE	71	81	202
STAMPEDE PASS R	260	604	957
WALLA WALLA U	19	19	87
YAKIMA	49	53	156
WEST VIRGINIA			
BECKLEY	228	314	155
CHARLESTON	124	134	63
ELKINS	226	296	169
HUNTINGTON	111	122	63
PARKERSBURG U	119	125	60
WISCONSIN			
GREEN BAY	235	375	252
LA CROSSE	153	216	184
MADISON	239	420	239
MILWAUKEE	164	263	264
WYOMING			
CASPER	149	176	214
CHEYENNE	202	259	260
LANDER	157	166	229
SHERIDAN	183	221	275

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

HURRICANE BEULAH

SEPTEMBER 5 - 22

Killer hurricane Beulah ripped through the Caribbean Sea, across the Yucatan Peninsula to the Gulf of Mexico, before bringing her wrath to southern Texas. In her devastating wake Buelah left 59 people dead, thousands homeless, and more than $200 million in porperty and crop damage. Texas was hardest hit; floods resulting from the storm's torrential rains, aided initially by strong winds, caused most of the damage.

Beulah began harmlessly as a weak tropical depression, east of the Windward Islands, on September 5th. Early on the 7th reports from the Islands and reconnaissance aircraft indicated tropical storm development about 35 mi. west of Martinique (14.5°N., 61.5°W.). Beulah's torrential rains battered the Islands from St. Lucia to Guadeloupe. An 18-hr. rainfall of 11.85 in. was recorded at Martinique on the 8th. Moving into the warm Caribbean waters, the storm intensified to hurricane strength late on the 8th, some 330 mi. southeast of San Juan, Puerto Rico. Winds, at this time, were 85 m.p.h. near the center with gales extending out 75 mi. in all directions. Late the following day pressure fell to 940 mb. Beulah passed within 70 mi. of Puerto Rico lashing the southern coast with gale force winds and rough surf. On the 10th maximum winds increased to 150 m.p.h., highest in the storm's history, before Beulah brushed the southern coast of the Dominican Republic early on the 11th. Moving westward across the Barahona Peninsula Beulah's circulation was disrupted by rugged, mountainous terrain and upper atmospheric conditions; consequently, winds dropped to 75 m.p.h. as the storm moved back into the Caribbean late in the day. The next two days saw Beulah degenerate to tropical storm intensity as it dipped south of Jamaica.

Beulah caused considerable damage and some good among the Caribbean Islands. Fifteen victims were counted on the island of Martinique. Homes were destroyed, flood waters poured three feet deep in Fort de France and banana crops were flattened on the French Island. Damage was estimated at $4.5 million. At St. Vincent, gales and torrential rains caused two deaths along with much crop destruction. St. Lucia was hit badly also and damage was estimated at $3 million. With Puerto Rico, particularly the southern coastal regions, in the throes of its most severe drought, Beulah's torrential rains were a blessing. Pastures on the south coast were completely burned and the cattle industry was depending on emergency supplies. A drought-caused disease was killing off the coffee trees. Puerto Rico, therefore, fared the best with only gale force winds and much-needed rains. One person was killed in a storm-related accident.

For the fourth year in the last five Haiti and the Dominican Republic reeled under the destructive force of a hurricane. Two lives were lost in the Dominican Republic with high winds and torrential rains wreaking havoc among the sugar cane and coffee crops.

Beulah degenerated to tropical storm strength on the 13th some 150 mi. south of Kingston, Jamaica. The storm moved westward and slowly reorganized. Beulah regained hurricane strength on the 14th about 425 mi. south-southeast of Havana, Cuba. The hurricane plowed through the northwest Caribbean on a northwesterly course that would take it over the Yucatan Peninsula. Generating winds up to 125 m.p.h. around a 964 mb. pressure center, Beulah moved over the Mexican resort island of Cozumel and across the Yucatan Peninsula. Once inland the storm rapidly diminished; when it entered the Gulf of Mexico, just west of Progresso, winds had died to minimum hurricane intensity.

Damage on Cozumel Island was severe; 40 percent of the houses were destroyed along with several major resort hotels. Coastal towns along the east Yucatan coast were hard hit as piers were destroyed and lobster fishing boats were badly damaged. The biggest blow to Yucatan was the loss of almost the entire corn crop in an area which supplies almost half the entire State's production.

Once over the warm waters of the Gulf of Mexico, Beulah regained the momentum and intensity she had lost on land. She continued west-northwestward and early on the 18th was located about 420 mi. southeast of Brownsville, Texas; maximum winds at this time were 105 m.p.h. The intense hurricane turned to a northwesterly course and headed for the south Texas coast. On the 19th, Beulah, some 175 mi. southeast of Brownsville, was generating 120 m.p.h. winds close to the center and gale force winds out to 250 mi. to the north. Reconnaissance reports indicated that the central pressure had dropped to 923 mb. This was the lowest reported pressure during the life of the storm.

Great hurricane Beulah moved inland just east of Brownsville, near the mouth of the Rio Grande, at 6 a.m. c.s.t. on the 20th. Brownsville's pressure dropped to 951 mb. Winds at the airport gusted to 109 m.p.h. before damaging the anemometer. Tides from Port Isabel to Rockport ran 7 to 10 ft. above normal.

Beulah moved north-northwestward to just south of Riviera. Early on the 21st the hurricane dropped to tropical storm intensity and turned slowly southwestward. Continuing to weaken, the storm corssed the border south of Laredo early on the 22d. Later in the day Beulah broke up in the mountains near Monterrey, Mexico.

Northern Mexico suffered extensive damage from Beulah's torrential rains and resultant flooding. Matamoros, San Fernando, Reynosa, San Miguel de Camargo, and Ciudad Carmargo were hard hit. Some 100,000 Mexicans were left homeless but only 19 people lost their lives. Timely and accurate warnings allowed evacuation of low-lying areas.

The SHIRLEY LYKES, in Port Brownsville, reported a 136 m.p.h. wind gust, during Beulah's passage. Winds gusted to 125 m.p.h. or more over portions of Cameron and Willacy counties. Hurricane force winds were felt as far north as the Matagorda Peninsula in the east and northern McMullen County in the west. Corpus Christi recorded a peak gust of 86 m.p.h. early on the 20th.

More damaging than the wind or tides was the torrential rainfall which resulted in mammoth flooding of all streams and rivers south of San Antonio. Rainfall totals greater than 20 in. were recorded between Corpus Christi and San Antonio and between Brownsville and Laredo. Five inches or more fell over an area bounded roughly by Laredo, Austin and Houston. Rio Grande City, Edoy, Falfurrias, and Skidmore all reported 30 in. or more.

Record breaking floods resulted from the hurricane rainfall. The San Antonio River reached a record crest of 53.4 ft. near Goliad; flood stage at that point is 35 ft. The Nueces River crested at 46 ft.; the previous record crest on that river was 44 ft. The Lavaca River crested at 26.2 ft. at Edna, 5.2 ft. over flood stage,

and the Navidad River crested at 31.9 ft. at Ganado, 10.9 ft. over flood stage. Most of the area south and east of a Laredo-San Antonio-Matagorda arc was isolated for over a week because of flooded roads. The Arroyo Colorado, swollen with water from a broken flood-control waterway, left its banks and caused extensive damage to an exclusive residential section in Harlingen. At Sinton, Three Rivers, and George West, flooding was the heaviest in the history of the towns. To compound the misery at Three Rivers, the floodwaters brought a smelly film of oil from nearby oil fields that left a stain on all city structures, marking the high water level.

Beulah spawned 47 tornadoes; all occurred in Texas. This number surpassed the previous high of 26 hurricane-associated tornadoes during Carla in 1961. Most of the tornadoes were confined to the Upper Coast, South Central, and Coastal Bend sections; however, tornadoes occurred as far north as Burleson in Johnson County and as far west as the Big Bend area. Most of these tornadoes were small in size and occurred in rural areas where they dipped down just long enough to cause very minor damage. One tragic exception was the tornado that struck near Palacios on the morning of the 20th, killing four persons and injuring six others. All ten people were lifted into the vortex of the funnel and dropped in a nearby field. Another tornado struck Louise in Wharton County the same day, causing one death. Other tornadoes that resulted in heavy damage occurred at Burnet at 6:30 p.m. c.s.t. on the 20th where the funnel moved across the entire width of the city causing an estimated $100,000 damage and one injury, and at New Braunfels, where at 3:00 p.m. the same day, the tornado completely destroyed several homes and caused an estimated $250,000 damage. A tornado hit the Lavaca County community of Sweet Home at 12:37 p.m. on the 20th destroying the Post Office and causing $750,000 damage and three injuries, and another tornado hit Fulton Beach near Rockport at 10:15 p.m. on the same day causing $200,000 damage.

Fifteen persons died in Texas as a result of Hurricane Beulah. Five of these deaths were caused by tornadoes; 10 were the result of flooding. Only 35 injuries were reported. Property losses over the state are conservatively estimated at $160 million and crop losses at $40 million. Fence damage alone in the flooded area is estimated to be at least $10 million. At least 3,000 head of cattle were lost. Wind and flood damage to peppers, tomatoes, and cucumbers was extensive throughout the Rio Grande Valley. Millions of tons of rich topsoil were washed away; some areas lost up to three inches. The Red Cross gave the following breakdown of storm damage to property: homes: 542 destroyed, 25,890 damaged; farm buildings: 607 destroyed, 1,146 damaged; boats: 110 destroyed or major damage; small businesses: 520 destroyed or major damage. A Red Cross official said 31,263 families in Texas suffered losses or property of all categories.

TROPICAL CYCLONE DATA
HURRICANE BEULAH
SEPTEMBER 5 - 22 1967

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet) #		Storm Rainfall (inches)
		Low	Time+	Fastest Mile	Time+	Gusts	Time+		Time+	
TEXAS	Sept.									
Alice	21	29.15	0100	ENE 58*	20/1900	ENE 97*	20/1915			14.84
Aransas Pass	20	29.44		SE 68*	1920	SE 84*	1920			16.71
Beaumont	20	29.85	1900	E 30	1505			3.0	1500	0.04
Brownsville (WBAS)	20	28.07	0700			NE 109†	0119			15.57
Corpus Christi (WBAS)	20	29.24	1710	ESE 72	1934	ESE 86	1935	7.0	2200	14.43
Edinburg	20			NW 85*	1500	NW 104*				15.34
Galveston (WBAS)	20	29.80	0600	SE 31	19/2155	SE 37	1458	3.4	2230	0.01
Houston (WBAS)	20	29.78	1756	ESE 28	1355	ESE 41	1355			2.80
Kingsville	20	29.00	1758	E 90*	0900-1000	E 108*	1000-1100			11.41
Laredo (WBAS)	21	29.41	0900-1000	N 29	1400	ENE 53	1400			7.25
Pharr	20	27.98	1530	NW 70*	0930	NW 102*	1000			21.50
Premont	20	28.82	1900	S 85*	1900	S 100*	21/0100			18.00*
Raymondville	20	28.12	1250	NE 115*	1100	NE 120*	1220			16.15
Rockport	20	29.52	1430	E 58*	2230	ESE 81*	2230			18.38*
San Antonio (WBAS)	20	28.91	1917	NE 27	1938	35	1607			5.55
Victoria	20	29.64	1645	E 35		E 47				12.97

+ Times are Central Standard
* Estimated
\# Tide above normal
† Anemometer damaged

HURRICANE DORIA

SEPTEMBER 7 - 19

Doria developed from a tropical depression that had lingered off the central Florida coast for several days. The depression reached tropical storm strength on the 9th some 90 mi. east of Melbourne, Florida. The pressure at this time was 1004 mb. Moving northeastward Doria intensified reaching hurricane strength near 30.3°N., 77.2°W., early on the 10th. Later in the day winds reached 80 m.p.h. around a 984-mb. pressure center. The hurricane turned east-northeastward, dropped back to tropical storm intensity, then regained hurricane force within the space of 24 hours. At 7 p.m. e.s.t. on the 12th the pressure was 989 mb. and winds were 75 m.p.h.; the storm was centered near 36.8°N., 64.2°W.

Doria then reversed her direction and slowly turned westward. Late on the 14th, Doria was generating 80-m.p.h. winds around a 973-mb. pressure center; this was the lowest reported pressure in this storm's history. Winds increased to 104 m.p.h. as Doria continued to drift toward the Maryland-Virginia coast. Early on the 16th, less than 60 mi. offshore, Doria turned sharply southward. Winds along the Virginia-Maryland-North Carolina coast gusted from 55 to 65 m.p.h., tides ran 2-3 ft. above normal, and rainfall totaled 1/2 - 1 1/2 in. Only minor damage was reported along the coast from New Jersey to North Carolina. Three people lost their lives off Ocean City, New Jersey.

The hurricane dropped to tropical storm intensity late on the 16th before making landfall at the Virginia-North Carolina border. Doria moved over extreme eastern North Carolina weakening to depression stage on the 17th. The storm, continuing to weaken, turned southeastward after leaving North Carolina. On the 18th the depression crossed the 75th parallel near the 32nd meridian. The following day Doria turned eastward and dissipated.

TROPICAL CYCLONE DATA
HURRICANE DORIA
SEPTEMBER 7 - 19 1967

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet)		Storm Rainfall (inches)
		Low	Time+	Fastest Mile	Time+	Gusts	Time+	#	Time+	
NEW JERSEY										
Atlantic City (WBAS)	16	29.84	0245	NE 26	0056	NE 39	0214	3.0	0554	0.53
DELAWARE										
Indian River Inlet	16			WNW 50*	0215	WNW 83*	0215			
MARYLAND										
Ocean City (USCG)	16					NE 58	0600	6.0 MLW	15/1900	1.44
Ocean City (Motel)	16			NE 55		NE 59	0530			1.03
Salisbury	16	29.65	0800	NE 29	1100	NE 55	1100			0.68
VIRGINIA										
Wallops Island (NASA 37°56'N. 75°28'W.)	16	29.63	1000	NE 49	1234	NE 59	1122			0.65
Wallops Island (NASA 37°51'N. 75°29'W.)	16	29.63	1005	NE 51	1131	NNE 60	0944			0.66
Norfolk (WBAS)	16	29.60	1615	NE 40	1619	N 55	1652	5.2 MLW	1950	0.53
NORTH CAROLINA										
Cape Hatteras (WBO)	16			SW 26	2018	SW 27	2019	2.0		1.04
Wilmington (WBAS)	17	29.83	10/0435	N 26	1313	N 25	1355	1.5		1.40 (9th and 10th)

\+ Times are Eastern Standard
* Estimated
\# Tide above normal except where noted

STORM SUMMARY

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS
Alabama										0	0	5	0													0	0	5	4
Alaska *																													
Arizona																										0	0	4	3
Arkansas *																													
California														2	73	5	3									0	0	4	0
Colorado	1	1	0	0	0																								
Connecticut *																													
Delaware *																													
Florida	1	1	0	0	4	0	0	3	0	0	0	3	0	0	0	3	0									0	0	4	4
Georgia *																													
Hawaii *																													
Idaho								°4	C			3		1		4													
Illinois *																													
Indiana	1	1	0	1	4																								
Iowa																										1	5	5	5
Kansas	2	2	0	0	3	0	0	5	4	0	0	4	0	0	0	4	4									0	0	5	4
Kentucky														0	1	0	0												
Louisiana	2	1	0	0	4					0	0	3	0	0	0	3	0												
Maine																										0	0	4	0
Maryland *																													
Massachusetts										0	1	4	0													0	0	4	0
Michigan	1	1	0	0	2					7	?	4	0																
Minnesota						0	0	0	4					0	0	3	0												
Mississippi										0	0	3	0	0	0	4	0									0	0	5	0
Missouri *																													
Montana														0	0	0	?												
Nebraska	1	1	0	0	0	0	0	4	5																				
Nevada	1	1	0	0	0																								
New Hampshire *																													
New Jersey										3	1																		
New Mexico						0	0	?	?	0	2	°4	C													4	0	4	4
New York																										2	0	°6	C
North Carolina										0	0	4	0	0	0	4	0									0	0	5	5
North Dakota *																													
Ohio *																													
Oklahoma	2	2	0	0	3	0	0	4	4	0	0	3	0	0	1	4	0									0	0	2	0
Oregon *																													
Pacific Area																										0	7	6	0
Pennsylvania	1	1	0	0	5					0	5	5	0	0	0	5	0									0	0	5	0
Puerto Rico																										1	0	5	0
Rhode Island *																													
South Carolina *																													
South Dakota	2	2	0	0	3	0	0	3	5																				
Tennessee *																													
Texas	3	3	0	0	0	0	0	0	6	0	2	6	4													13	35	8	7
Utah *																													
Vermont *																													
U. S. Virgin Is. *																													
Virginia																										0	0	4	0
Washington *																													
West Virginia *																													
Wisconsin *																													
Wyoming														0	2	0	0												

° Includes crop damage
C Crop damage

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

SEPTEMBER 1967

The most significant flooding during September was the flood disaster which followed in the wake of Hurricane Beulah in extreme southern Texas and the adjacent areas of Mexico. Heavy flooding occurred on all streams from the Guadalupe River westward to the Rio Grande with many streams reaching record high levels. It was estimated that over one million persons were immobilized due to the floods. The loss of life was light. Surveys are being made to estimate flood damages.

ST. LAWRENCE DRAINAGE

Lake Erie.--Heavy rains on the 27-28th produced serious local flooding on Cazenovia Creek near Colden, N. Y. The high water destroyed 250 feet of highway 240 near the town. One man was drowned when his truck plunged into the creek at the washed-out section. In the West Falls-Colden-Glenwood area some families were evacuated from along the banks of Cazenovia Creek. A rapid moving flood crest along Cattaraugus Creek swept the Sunset Bay area at the mouth, destroying many docks and washing 150 pleasure boats of various kinds into Lake Erie. The rainfall producing these floods set a new September record of 3.63 inches for a 24-hour period at Buffalo, N. Y. Rainfall amounts ranged from 4 to 6 inches in many communities.

Lake Ontario.--Heavy rains on the 27-29th caused flooding in the Genesee Basin. Oatka Creek at Garbutt, N. Y., crested 1.2 feet below flood stage on the morning of the 29th. Black Creek at Churchville, N. Y., rose about a half foot above flood stage on the night of the 29th. Canaseraga Creek at Groveland, N. Y., rose at least 2 feet out of its banks on the 29th. The upper Genesee River at Portageville, N. Y., exceeded flood stage by 5.7 feet on the morning of the 29th. Flood damages were mainly confined to tributary creeks. Friendship, N. Y., on Van Campen Creek had flood damages estimated at $280,000. Considerable damage occurred in Canaseraga Creek Valley.

ATLANTIC SLOPE DRAINAGE

Heavy rains of 3 to 5 inches between the 27th and 29th caused minor flooding on small streams in the Susquehanna Basin. Minor damage resulted to some boats and docks in the Lock Haven, Pa., area.

Minor flooding occurred on the Neuse River at Goldsboro, N. C., on the 13th. No damage was reported from the brief overflow.

The Lumber River at Lumberton, N. C., was above flood stage from August 23 to September 4. It crested 3.3 feet above flood stage on August 25. Heavy general rains (3 inches) on the 9-10th caused additional flooding at Lumberton from the 10th to the 21st. The crest on September 11 was nearly 1 foot higher than in August. Two to 3 feet of overflow occurred in low inhabited portions. Several homes were evacuated; low streets and roads were blocked off. No destructive damage occurred but water approached the floor level of some of the houses.

Extensive rains in the central and upper portions of the Santee River Basin in South Carolina on August 20-25 caused flooding along the lower Santee from below Lake Marion eastward to the coast. The Santee was out of its banks at Jamestown, S. C., from August 31 to September 7. It crested nearly 6 feet above flood stage on the 2d. Losses were minor and consisted mainly of swampland.

The Savannah River at Clyo, Ga., was in minor flood from August 31 to September 13. It crested 1 foot above flood stage on September 7. Only slight damage, if any, resulted from the overflow.

Minor flooding occurred on the Satilla River at Atkinson, Ga., from August 31 to September 3. No damage was reported from the flooding.

MISSISSIPPI SYSTEM

Missouri Basin.--The heaviest flooding since July 1951 occurred on the lower Solomon River at Niles, Kans., where a crest of 29.0 ft., on the 20th was 5 feet above flood stage. Elsewhere light to moderate flooding occurred in parts of the upper Solomon River and in the lower Smoky Hill River Basin in Kansas. Principal tributary flooding in the Smoky Hill Basin was on the Gypsum, Chapman, and Lyon Creeks. This flooding was due to local torrential rains, centered in north-central Kansas, during the 3d week of the month. Heavy surface water accumulation was reported at Ellsworth, Kans., on the night of September 18-19, following rainfall of 5.87 inches. Rainfall of 7 inches was also reported in the vicinity of Russell, Kans. Losses from flooding were comparatively light on the upper Solomon and in the Smoky Hill River Basin. Heavier damages occurred in the extreme lower Solomon Basin.

Ohio River Basin.--Serious flooding occurred over the upper Allegheny River at Olean, N. Y., and Salamanca, N. Y., on September 28 to October 1. The crest of 17.1 feet at Olean on the 29th was the fourth highest of record. At Salamanca, N. Y., the crest of 1374.0 ft. (above m.s.l.) on the 29th was the third highest of record. Minor flooding was reported at Ridgway, Pa., Johnsonburg, Pa., and Wilcox, Pa., in the headwater of the Clarion River and on French Creek in the vicinity of Mill Village and Cambridge Springs, Pa. This flooding was due to heavy precipitation on the 27th and 28th. The total storm precipitation ranged from 1.5 to 6.5 inches over northwestern Pennsylvania and western New York. Unofficial reports of rainfall in excess of 8 inches was reported above Olean, N. Y.

Arkansas Basin.--Minor flooding occurred in the North Canadian Basin above Eufaula Reservoir at and south of Holdenville, Okla., during the afternoon of the 20th. This brief flooding was due to nearly 4-1/2 inches of rain.

Red Basin.--Heavy rains (3 inches) during the afternoon of the 3d produced brief flooding on Jimmy Creek near Meers, Okla., in the Wichita Mountains.

The Sulphur River at Hagansport, Tex., exceeded flood stage on the 6-11th. It crested on the 7th nearly 6 feet above flood stage. This flooding was due to heavy rain which began on the 5th and continued to the 8th. The heaviest rain (more than 7 inches) occurred on the 6th.

WEST GULF OF MEXICO DRAINAGE

Locally heavy rainfall (3 to 5 inches) over the Labor Day weekend on the Gulf drainage streams caused extensive flooding in many coastal towns in Texas. Falfurrias, Tex., was flooded from a 5-inch downpour in 3-1/2 hours on the 4th. Heavy shower activity extended well into the middle Nueces and lower Frio Basins. The Frio was reported more than a half mile wide at Fowlerton, Texas. Most streets and country roads were flooded in south San Patricio County, including streets in the towns of Ingleside and Aransas Pass. Rainfall totalling 3 inches in one hour was reported at Refugio, Texas.

SEPTEMBER 1967

Heavy rainfall of 9 inches during the early morning hours of the 15th caused considerable flooding on Seco Creek and Sabinal River, tributaries of the upper Frio River in Texas.

Hurricane Beulah Floods.--Heavy rainfall associated with hurricane Beulah on the 19th-23d caused heavy flooding on all streams in southern Texas, from the Guadalupe River to the Rio Grande, with many streams reaching record high levels. Rainfall totals of over 20 inches were reported in many places with unofficial amounts as high as 30 inches.

Hurricane Beulah moved inland east of Brownsville, Tex., near the Mexican border on the morning of the 20th, in a northwesterly course. A peak gust of 109 m.p.h. was reported at Brownsville. Damage in the Brownsville, Port Isabel, and South Padre Island areas ranged from moderate to heavy. High water marks resulting from the storm surge were reported at 9 to 10 feet. The heights of the highest hurricane tides in the Padre Island area were estimated at more than 19 feet. Hurricane Beulah dropped to tropical strength west of Corpus Christi on the 21st. Beulah, accompanied by torrential rains, then drifted slowly southwestward battering itself out against the mountainous terrain of northwest Mexico on the 22d. This was the third most powerful hurricane to hit Texas.

The Navidad River at Ganado, Tex., was in flood from the 21st to the 27th, cresting 10.9 feet above flood stage on the 23d. The Lavaca River at Edna, Tex., was out of its banks from the 21st to the 24th, cresting 5.4 feet above flood stage on the 23d. The San Antonio River crested at a record stage of 53.4 feet at Goliad, Tex., on the 23d, 18.4 feet above flood stage. The previous highest stage of record at this point occurred in October 1913, when it reached a stage of 45.6 feet. Upstream from Goliad at Falls City, Tex., the river crested 12.6 feet above flood stage. The Guadalupe River crested 8.6 feet above flood stage at Gonzales, Tex., on the 23d and 9.4 feet above flood stage at Gonzales, Tex., on the 24th. Major damage occurred in the Goliad and Karnes County area, where the river exceeded a width of 3 miles. The area of major damage in the Guadalupe Basin occurred below the Nixon-Luling-Waelder line. Damage due to flooding of the Lavaca and Navidad Rivers was restricted to the immediate overflow areas of the rivers below Edna and Cuero. The flood damages in the Navidad, Lavaca, San Antonio, and Guadalupe Basins were estimated at almost $5 million. Two lives were lost due to flooding in the San Antonio area.

The Mission River at Refugio, Tex., reached a record crest of 36.4 feet on the 23d. The previous record stage at this point was 33.3 feet in July 1942. The Atascosa River at Whitsett, Tex., crested at a record stage of 41.2 feet on the 23d. The Frio River at Calliham, Tex., crested at a near-record stage of 36.15 feet on the 23d. Flood stage at this point is 12 feet. The highest level ever reached at Calliham was 39.2 feet in July 1932.

The Nueces River reached record heights from Tilden, Tex., to the mouth. The Tilden, Tex., crest on the 24th was 26.6 ft., or 0.1 foot above the previous record stage of 26.46 ft., of October 1946. The Three Rivers crest of October 23 was 49.2 ft., or 3.2 feet above the previous record stage of 46.0 ft., of September 1919 and the Calallen crest of October 10 was 16.4 ft., or 2.8 feet above the record crest of 13.65 feet of July 1942.

The Rio Grande River went into flood in Texas at Rio Grande City on the 22d and remained in flood at this point until the 30th. It crested at a stage of 32.6 ft., or 11.6 ft., above flood stage on the 23d. This was the 4th highest stage of record. At Mercedes, the river reached flood stage on the 24th and remained in flood until October 4. It crested on the 27th at a stage of 22.9 ft., 1.9 feet above flood stage. This flooding was due to torrential rains (10-25 inches) over the lower Rio Grande Valley and over the Rio San Juan Basin in Mexico.

Severe flooding occurred along the San Juan below Marte Gomez. The inflow into Rio Grande just above Rio Grande City from the Rio San Juan was so rapid (32 feet in 48 hours) and prolonged (9 days) that water flowed into the American Floodway System and filled it to more than capacity. Water began entering the Floodway on the 22d and continued until October 2. The Floodway overflowed south of McAllen, Tex., early on the 24th and flooded the McAllen Airport and a large portion of south McAllen with several feet of water. The weir in the Arroyo Colorado, at the confluence of the North Floodway, broke during the night of the 24th and sent a wall of water down the Arroyo to flood a large portion of the southern section of Harlingen, Tex. It is believed that this was the most severe flood ever to occur in the Arroyo Colorado. The hardest hit portions of Harlingen were the Treasure Hills, Laurel Park, and Arroyo Estate sections. The water began rising rapidly during the night of the 24th, cresting on the morning of the 27th and receded below flood stage on the 29th. The crest was 10 feet higher than that of 1958. A preliminary estimate indicated some 1800 residences and other improvements were damaged by the flood, causing evacuation of some 8,000 people, or about 20% of the population of the city. A number of residences, built below the level of the high bank of the Arroyo, were flooded to the roof. Residences at the level of the bank were flooded to a depth of 3 to 4 feet. Water inundated the approaches to the highway bridges across the arroyo and inundated the main highways to the north and west of the city, interrupting or stopping traffic. Streets in the business section of Harlingen were inundated over the curbs due to water from the arroyo backing up in the City's storm drains. About 20,000 acres of agricultural lands were flooded outside of the river and interior floodways.

The flood in the lower Rio Grande in Texas was confined well within the levee system. Above the levee system, west of Mission, Tex., near Pinitas, flooding occurred to varying extent over farmland near the river in the vicinity of Rio Grande City. Some flooding occurred in portions of the east part of Rio Grande City and over U. S. 83 west of the city. Flooding on the Mexican side of the river was extensive from Marte Gomez on the San Juan to above Matamoros. Approximately 50 city blocks of Reynosa, Mexico, were flooded. Most of the villages near the river below Reynosa and to above Matamoras were affected by the flood. On the San Juan, the towns of Cuidad Camargo and San Miguel de Camargo were flooded severely, as well as the villages in between.

Warnings were timely and adequate. Thousands of people were evacuated safely from coastal and low-lying areas. The Weather Bureau was credited with saving many lives and allowing protective measures to be taken for millions of dollars worth of property.

FLOOD STAGE DATA

(All dates in September unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ST. LAWRENCE DRAINAGE	Ft.			Ft.	
Lake Ontario					
Canaseraga Creek: Groveland, N.Y.	11	29	29	#12.65	29
Genesee: Scio, N. Y.	8	28	29	9.0	29
Portageville, N. Y.	17	29	29	22.7	29
ATLANTIC SLOPE DRAINAGE					
Neuse: Goldsboro, N. C.	14	13	13	14.1	13
Lumber: Lumberton, N. C.	8	Aug. 23 10	4 21	11.25 (12.15 (9.9	Aug. 25 11 17
Santee: Jamestown, S. C.	10	Aug. 31	7	15.9	2
Savannah: Clyo, Ga.	11	Aug. 31	13	12.0	7
Satilla: Atkinson, Ga.	13	Aug. 31	3	13.2	1
MISSISSIPPI SYSTEM					
Missouri Basin					
North Fork Solomon: Portis, Kans.	18	18 29	19 29	#19.0 20.1	18 29
South Fork Solomon: Osborne,Kans.	14	28	29	17.6	29
Solomon: Glen Elder Dam, Kans.	24	19	19	24.25	19
Glasco, Kans.	22	(18 (20	18 20	23.1 23.0	18 20
Niles, Kans.	24	(4 (19	5 22	26.0 29.0	5 20
Gypsum Creek: Gypsum, Kans.	15	4	4	18.2	4
Chapman Creek: Chapman(nr), Kans.	19	19 20	19 21	21.8 22.45	19 20-21
Lyon Creek: Woodbine(nr), Kans.	17	19	20	23.5	19
Smoky Hill: Ellsworth, Kans.	20	19	19	21.0	19
Mentor, Kans.	16	(4 (19	4 20	17.8 17.8	4 19
New Cambria, Kans.	25	4 20	5 22	25.7 27.3	4 20
Abilene, Kans.	22	21	22	22.4	21
Enterprise, Kans.	21	20	23	23.3	21
Junction City(nr), Kans.	22	21	21	22.3	21

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio Basin					
Allegheny: Olean, N. Y.	10	28	Oct. 1	17.1	29
Salamanca, N. Y.	1370	28	Oct. 1	1374.0	29
Red Basin					
Sulphur: Hagansport, Texas	38	6	11	44.0	7
WEST GULF OF MEXICO DRAINAGE					
Navidad: Ganado, Tex.	21	21	27	31.9	23
Lavaca: Edna, Tex.	21	21	24	26.4	23
San Antonio: Falls City, Tex.	12	21	25	24.6	22
Goliad, Tex.	35	22	28	53.4	23
Guadalupe: Gonzales, Tex.	20	22	24	28.6	23
Victoria, Tex.	21	21	28	30.4	24
Mission: Refugio, Tex.	20	22	25	36.4	23
Turkey Creek: Crystal City, Tex.	8	5	6	8.6	5
Atascosa: Whitsett, Tex.	20	21	26	41.2	23
Frio: Derby, Tex.	6	17 23	18 24	8.1 9.0	17 23
Tilden, Tex.	12	5 21	7 28	19.3 28.9	5 23
Calliham, Tex.	12	6 21	8 29	17.3 36.15	7 23
Nueces: Cotulla, Tex.	15	25	26	16.6	25
Tilden(nr), Tex.	16	10 19	16 Oct. 8	16.7 26.6	11 24
Three Rivers(nr), Tex.	25	21	Oct. 5	49.2	23
Calallen, Tex.	7	21	Oct. 10	16.4	25
Rio Grande: Rio Grande City,Tex.	21	22	30	32.6	23
Mercedes(nr), Tex.	21	24	Oct. 4	22.9	27

* Provisional
\# Highest stage observed
__ Highest stage of record

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

ALBANY, N. Y. — 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	11.1	9.7	26	1.0
1000	30	161			29	1.6
950	30	594	12.8	7.1	29	2.5
900	30	1,046	11.4	3.4	30	3.3
850	30	1,523	9.7	-.6	30	4.1
800	30	2,025	7.5	-4.5	30	5.2
750	30	2,553	5.0	-8.7	29	5.7
700	30	3,115	2.3	-11.9	29	5.8
650	30	3,707	-.6	-15.2	29	5.7
600	30	4,348	-4.0	-18.7	29	7.3
550	30	5,020	-8.1	-22.1	28	7.4
500	30	5,764	-12.8	-28.1	28	7.9
450	30	6,555	-18.3	-32.3	27	9.2
400	30	7,431	-24.6	-38.0	27	10.0
350	30	8,390	-31.5	-43.3	27	10.6
300	30	9,463	-39.5	-48.6	27	11.7
250	30	10,687	-48.2		26	13.0
200	30	12,131	-55.2		26	14.5
175	30	12,979	-57.2		26	13.5
150	30	13,949	-59.0		26	14.0
125	30	15,090	-60.3		26	11.4
100	30	16,478	-60.4		27	8.9
80	30	17,874	-58.4		27	5.3
70	30	18,714	-57.8		26	3.7
60	30	19,690	-56.5		26	2.6
50	30	20,850	-55.3		27	1.6
40	30	22,280	-53.4		29	1.1
30	29	24,144	-50.9		29	1.6
25	28	25,338	-49.1		36	1.1
20	27	26,809	-47.3		33	1.1
15	25	28,723	-44.7		03	.9
10	18	31,463	-40.9		13	1.9
7	9	33,947	-37.7			
5						

ALBUQUERQUE, N. MEX. — 841 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	14.6	7.1	10	2.2
1000	30	125				
950	30	568				
900	30	1,035				
850	30	1,528				
800	30	2,042	14.0	5.7	15	1.4
750	30	2,583	11.3	2.9	26	1.9
700	30	3,158	7.7	-.2	26	2.5
650	30	3,762	3.5	-3.7	27	2.6
600	30	4,411	-.8	-8.6	28	2.8
550	30	5,092	-5.4	-15.4	27	3.1
500	30	5,842	-9.6	-23.8	27	4.4
450	30	6,647	-14.4	-29.6	28	5.2
400	30	7,533	-20.8	-34.6	28	6.8
350	30	8,506	-28.1	-40.7	28	9.7
300	30	9,594	-36.4	-48.2	28	12.7
250	30	10,834	-45.5		28	17.9
200	30	12,289	-55.0		28	21.7
175	30	13,134	-59.3		28	22.1
150	30	14,089	-63.7		28	19.1
125	30	15,198	-67.3		29	13.0
100	30	16,536	-68.4		30	5.9
80	29	17,884	-65.1		01	2.0
70	27	18,700	-63.2		06	2.7
60	27	19,651	-61.1		07	4.2
50	27	20,788	-59.0		09	4.4
40	27	22,194	-56.5		08	4.3
30	27	24,032	-53.3		09	5.1
25	27	25,209	-51.5		09	5.5
20	27	26,663	-49.4		08	5.0
15	24	28,554	-47.2		08	5.6
10	14	31,271	-42.1		08	8.7
7	6	33,656	-38.4			
5						

* AMARILLO, TEXAS — 894 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	14.4	11.1	19	2.5
1000	30	133				
950	30	574				
900	30	1,040				
850	30	1,520	14.9	8.7	22	5.1
800	30	2,033	13.0	4.8	25	3.7
750	30	2,575	10.0	.8	27	3.1
700	30	3,143	6.4	-3.3	30	2.4
650	30	3,745	2.4	-6.9	31	2.1
600	30	4,390	-1.6	-11.9	31	2.3
550	30	5,072	-5.8	-16.9	30	3.5
500	30	5,820	-10.1	-24.0	30	5.1
450	30	6,622	-15.3	-30.3	30	6.6
400	30	7,505	-21.6	-36.3	29	7.9
350	30	8,475	-29.0	-42.2	29	9.6
300	30	9,559	-37.3	-49.0	29	12.7
250	30	10,795	-46.2		29	16.8
200	30	12,250	-54.5		29	21.3
175	30	13,097	-58.8		29	20.4
150	30	14,055	-62.9		29	17.3
125	30	15,167	-66.8		29	12.5
100	30	16,508	-67.8		30	7.2
80	30	17,857	-65.0		35	2.9
70	29	18,675	-63.1		02	2.6
60	28	19,629	-61.0		05	3.3
50	28	20,767	-58.7		08	3.7
40	27	22,179	-56.0		09	4.0
30	27	24,019	-53.2		08	4.4
25	27	25,197	-51.3		08	4.4
20	26	26,653	-48.8		09	4.3
15	26	28,552	-46.3		08	4.7
10	13	31,219	-43.5		07	5.5
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ANCHORAGE, ALASKA — 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	7.9	4.3	25	.4
1000	30	-9				
950	30	418	8.2	3.1	12	1.6
900	30	860	5.8	.7	11	2.9
850	30	1,325	2.4	-1.3	12	4.5
800	30	1,812	-1.0	-3.9	13	7.1
750	30	2,324	-4.3	-6.9	14	9.0
700	30	2,865	-7.7	-10.6	14	9.6
650	30	3,436	-11.3	-14.8	15	9.6
600	30	4,048	-15.4	-18.8	15	9.3
550	30	4,697	-19.8	-24.0	15	9.5
500	30	5,401	-24.7	-29.8	15	9.5
450	30	6,157	-30.0	-36.1	16	9.1
400	30	6,988	-36.4	-42.2	16	8.8
350	30	7,900	-43.1	-44.3	16	8.4
300	30	8,922	-50.2		17	9.1
250	30	10,100	-53.0		18	9.5
200	30	11,552	-49.4		19	9.4
175	30	12,428	-48.9		20	9.0
150	30	13,440	-48.8		20	9.5
125	30	14,636	-49.1		21	8.4
100	30	16,098	-49.6		20	7.9
80	30	17,559	-49.6		21	7.1
70	30	18,432	-49.8		21	7.0
60	30	19,440	-50.2		21	7.0
50	30	20,629	-50.5		21	6.2
40	30	22,082	-50.8		22	6.0
30	30	23,955	-50.8		23	6.4
25	30	25,142	-50.6		23	6.0
20	27	26,593	-50.3		24	5.7
15	19	28,467	-49.9		25	5.4
10	10	31,099	-48.0			
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* ANNETTE, ALASKA — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	37	11.4	8.7	14	2.5
1000	30	88			15	3.8
950	30	517	9.7	7.0	16	7.3
900	30	964	7.4	3.9	18	8.4
850	30	1,433	4.3	.5	18	8.9
800	30	1,924	1.5	-4.2	19	9.8
750	30	2,441	-1.2	-8.5	20	10.9
700	30	2,990	-4.0	-13.4	21	11.8
650	30	3,571	-6.8	-16.8	21	13.5
600	30	4,194	-10.2	-20.0	21	16.4
550	30	4,856	-14.1	-23.7	22	18.0
500	30	5,579	-18.2	-27.6	22	18.4
450	30	6,356	-23.2	-31.3	22	20.7
400	30	7,213	-29.0	-38.0	22	21.8
350	29	8,156	-36.1	-42.7	22	20.0
300	29	9,209	-43.4	-48.1	23	22.4
250	29	10,417	-49.8		23	22.1
200	29	11,865	-52.5		22	19.0
175	29	12,726	-53.3		22	18.5
150	28	13,713	-54.0		22	16.6
125	27	14,888	-55.1		22	14.5
100	27	16,310	-55.7		22	11.8
80	27	17,734	-54.4		23	10.1
70	27	18,589	-54.2		22	7.8
60	27	19,578	-54.1		22	5.5
50	27	20,748	-53.8		23	4.9
40	27	22,179	-54.0		23	3.7
30	26	24,029	-53.3		23	1.7
25	26	25,204	-52.4		27	1.5
20	26	26,648	-51.6		29	2.3
15	24	28,530	-50.0		33	2.1
10	19	31,187	-46.7		29	3.9
7	13	33,594	-43.3		28	7.7
5	9	35,954	-38.4			

ATHENS, GEORGIA — 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	14.6	12.5	05	1.5
1000	30	159				
950	30	598	16.7	10.7	07	4.6
900	30	1,055	14.2	7.5	07	3.6
850	30	1,537	12.5	3.4	02	1.0
800	30	2,045	10.4	.3	30	1.8
750	30	2,580	8.5	-4.4	29	2.9
700	30	3,148	5.5	-7.7	30	3.2
650	30	3,746	2.6	-12.0	29	4.2
600	30	4,395	-.6	-15.3	27	5.3
550	30	5,078	-4.7	-19.2	27	5.8
500	30	5,829	-9.4	-23.6	27	7.2
450	30	6,630	-14.9	-28.4	27	9.0
400	30	7,516	-21.1	-33.8	26	10.1
350	30	8,488	-28.3	-40.6	26	11.9
300	30	9,575	-36.5	-48.8	26	13.7
250	30	10,813	-45.9		26	15.8
200	30	12,263	-55.9		27	17.7
175	30	13,104	-59.8		27	17.8
150	29	14,055	-63.4		27	16.0
125	29	15,167	-66.3		27	11.1
100	29	16,516	-66.2		27	6.4
80	29	17,877	-63.3		30	2.6
70	29	18,701	-61.6		33	.9
60	29	19,661	-59.4		07	1.1
50	29	20,809	-57.3		08	3.6
40	29	22,227	-54.7		09	4.9
30	29	24,078	-51.8		09	6.0
25	29	25,263	-50.1		08	6.9
20	28	26,727	-48.1		09	6.8
15	27	28,631	-45.3		09	6.2
10	24	31,363	-41.1		08	8.3
7	12	33,822	-37.2			
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* BARROW, ALASKA — 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-3.9	-4.5	08	5.1
1000	30	95	-4.3	-5.2	08	6.0
950	30	498	-4.7	-6.2	09	6.5
900	30	925	-3.6	-8.8	09	6.1
850	30	1,377	-3.5	-9.9	09	5.3
800	30	1,855	-5.5	-12.0	10	4.7
750	30	2,356	-7.9	-14.4	11	3.6
700	29	2,893	-10.8	-19.4	11	3.0
650	29	3,457	-14.1	-22.8	11	2.2
600	29	4,063	-17.7	-25.8	11	1.3
550	29	4,708	-21.7	-30.9	12	1.0
500	29	5,406	-26.4	-35.5	17	.5
450	29	6,152	-31.9	-40.1	13	.3
400	29	6,983	-38.0	-44.4	25	.7
350	29	7,891	-44.4		24	1.8
300	29	8,909	-51.0		24	2.4
250	29	10,084	-54.3		25	2.4
200	28	11,522	-52.3		26	2.1
175	28	12,389	-51.1		24	2.6
150	27	13,392	-50.7		23	3.8
125	26	14,577	-50.4		23	3.8
100	25	16,028	-50.1		23	4.3
80	25	17,485	-50.4		24	4.3
70	25	18,355	-50.7		23	5.0
60	25	19,356	-51.2		24	5.4
50	25	20,540	-51.8		24	6.2
40	25	21,985	-52.4		24	6.2
30	23	23,831	-52.9		24	7.8
25	21	25,000	-52.8		25	8.7
20	19	26,440	-52.3		24	10.8
15	9	28,246	-53.0			
10	7	30,848	-53.0			
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BARTER IS., ALASKA — 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	15	-1.9	-4.1	09	6.0
1000	29	82	-2.2	-3.8	09	6.8
950	29	489	-3.3	-4.3	10	8.5
900	29	919	-1.6	-6.4	10	6.7
850	29	1,375	-1.5	-9.9	11	5.0
800	29	1,856	-3.6	-11.8	11	3.5
750	29	2,362	-6.3	-14.6	12	2.4
700	29	2,901	-9.3	-18.4	14	1.5
650	29	3,470	-12.7	-21.7	18	1.2
600	29	4,078	-16.6	-25.5	20	1.4
550	29	4,720	-20.7	-30.6	21	2.3
500	29	5,426	-25.1	-35.2	22	3.4
450	29	6,173	-30.4	-39.8	22	5.1
400	29	7,010	-36.7	-46.1	22	6.2
350	29	7,922	-43.5	-48.5	22	7.1
300	29	8,942	-50.8		22	8.3
250	29	10,114	-55.4		23	9.3
200	29	11,546	-51.8		24	7.3
175	28	12,414	-50.7		24	6.3
150	28	13,419	-50.0		24	6.9
125	28	14,611	-50.0		24	6.4
100	28	16,070	-50.0		24	6.9
80	27	17,522	-50.2		24	6.8
70	27	18,393	-50.4		24	6.5
60	27	19,396	-50.6		24	7.1
50	27	20,584	-51.0		24	7.3
40	27	22,034	-51.4		25	7.9
30	27	23,900	-51.6		25	9.1
25	27	25,084	-51.3		25	10.0
20	25	26,541	-50.8		25	9.3
15	23	28,416	-50.1		25	10.1
10	16	31,081	-48.4		25	13.2
7	5	33,523	-44.6			
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BETHEL, ALASKA — 993 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	5.1	3.6	01	2.0
1000	30	-20				
950	30	400	6.5	1.6	05	3.8
900	30	843	3.6	-1.0	07	3.5
850	30	1,305	.5	-3.9	07	3.5
800	30	1,790	-2.5	-8.0	09	3.7
750	30	2,297	-5.7	-12.8	09	3.9
700	30	2,837	-9.0	-17.1	09	4.2
650	30	3,406	-12.5	-20.9	09	4.3
600	30	4,015	-16.3	-24.5	10	3.6
550	30	4,658	-20.9	-28.1	11	4.1
500	30	5,362	-25.8	-32.9	11	4.4
450	30	6,108	-31.1	-39.1	11	4.6
400	30	6,943	-37.2	-44.4	11	4.6
350	30	7,854	-43.8		12	4.6
300	30	8,875	-50.2		12	3.5
250	30	10,056	-52.4		10	1.5
200	30	11,511	-48.9		28	.2
175	30	12,390	-48.4		23	1.2
150	30	13,405	-48.4		21	1.3
125	30	14,605	-48.7		24	2.3
100	30	16,071	-48.9		23	2.6
80	30	17,536	-49.2		22	2.9
70	30	18,410	-49.6		22	3.1
60	30	19,418	-49.9		22	3.8
50	30	20,609	-50.4		21	4.4
40	30	22,063	-50.6		23	4.8
30	29	23,937	-50.2		23	5.3
25	28	25,129	-49.7		23	5.9
20	26	26,584	-49.3		23	6.9
15	26	28,472	-48.7		24	6.8
10	20	31,150	-47.5		24	8.8
7	8	33,479	-46.6			
5	5	35,719	-44.4			

BISMARCK, N. DAK. — 955 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	505	9.8	5.9	14	1.5
1000	30	122				
950	30	550			15	2.1
900	30	1,005	13.4	5.5	20	5.1
850	30	1,485	11.5	2.1	23	4.1
800	30	1,990	9.1	-1.5	26	4.0
750	30	2,520	6.2	-5.2	28	4.5
700	30	3,085	3.0	-7.9	28	5.3
650	30	3,680	-.2	-11.3	29	6.0
600	30	4,319	-3.8	-16.4	29	6.6
550	30	4,997	-8.0	-20.7	29	6.4
500	30	5,736	-12.7	-25.9	28	6.6
450	30	6,526	-18.5	-31.2	29	7.2
400	30	7,400	-25.0	-36.2	30	8.4
350	30	8,356	-32.5	-43.2	30	8.7
300	30	9,423	-41.2	-49.8	30	8.7
250	30	10,643	-47.9		30	10.8
200	30	12,092	-54.0		30	11.3
175	30	12,945	-55.9		31	10.7
150	30	13,921	-57.9		31	10.5
125	30	15,063	-60.2		31	9.5
100	30	16,450	-61.1		31	7.5
80	30	17,837	-60.0		31	4.7
70	30	18,672	-58.9		32	3.8
60	30	19,642	-57.9		33	2.9
50	30	20,796	-56.5		35	2.3
40	30	22,214	-55.4		01	2.2
30	30	24,058	-52.8		36	1.9
25	30	25,239	-51.2		34	1.5
20	30	26,695	-49.3		32	1.6
15	29	28,597	-46.7		29	3.3
10	23	31,320	-41.9		28	3.8
7	13	33,786	-37.6			
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BOISE, IDAHO — 916 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	868	15.3	6.3	15	2.5
1000	30	108				
950	30	548				
900	30	1,013	19.3	5.1	15	2.2
850	30	1,504	18.4	2.6	17	1.7
800	30	2,020	15.2	-.2	22	1.8
750	30	2,556	11.5	-2.6	25	2.3
700	30	3,136	7.3	-5.1	26	3.0
650	30	3,739	3.2	-8.5	26	3.2
600	30	4,386	-1.2	-12.5	26	3.2
550	30	5,071	-5.9	-17.4	28	3.4
500	30	5,815	-10.6	-23.2	29	3.4
450	30	6,613	-16.0	-29.5	30	3.4
400	30	7,495	-22.5	-35.6	30	4.0
350	30	8,461	-30.1	-41.9	31	4.1
300	30	9,539	-38.9	-48.8	31	5.2
250	30	10,765	-48.1		32	4.6
200	29	12,204	-56.9		31	5.2
175	29	13,045	-59.1		31	6.1
150	29	14,006	-61.4		30	5.9
125	28	15,131	-63.8		29	5.3
100	28	16,498	-64.1		29	4.7
80	28	17,868	-62.3		30	3.0
70	28	18,694	-61.4		33	2.2
60	28	19,651	-60.2		36	1.3
50	28	20,791	-58.8		01	1.0
40	26	22,194	-57.0		03	1.0
30	26	24,026	-54.3		05	1.6
25	26	25,200	-52.5		04	1.1
20	26	26,649	-50.3		35	1.2
15	26	28,537	-47.9		29	1.8
10	17	31,260	-43.6		32	1.6
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* BOOTHVILLE, LA. — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1	23.2	20.3	05	1.9
1000	30	129	22.7	19.5	07	2.6
950	30	577	19.6	16.8	10	3.2
900	30	1,040	16.8	13.6	14	2.1
850	30	1,526	14.7	8.2	16	2.0
800	30	2,038	12.8	3.0	21	1.4
750	30	2,580	10.2	-.2	25	2.5
700	30	3,150	7.1	-3.7	25	3.3
650	30	3,757	3.9	-8.8	26	3.8
600	30	4,403	-.1	-12.5	26	3.8
550	30	5,093	-4.1	-17.1	26	4.3
500	30	5,841	-8.6	-23.3	26	5.0
450	30	6,648	-13.7	-29.1	26	6.1
400	30	7,536	-19.9	-33.8	26	6.8
350	29	8,511	-27.0	-39.6	27	7.7
300	29	9,603	-35.4	-46.4	27	9.5
250	29	10,848	-44.8		26	12.7
200	29	12,306	-55.2		27	15.4
175	29	13,148	-60.3		28	16.0
150	29	14,098	-65.1		28	14.6
125	28	15,197	-69.4		29	8.7
100	26	16,525	-70.1		30	5.1
80	25	17,863	-66.0		04	3.0
70	25	18,677	-63.8		08	5.1
60	25	19,627	-61.5		09	6.6
50	25	20,764	-58.6		09	7.1
40	25	22,175	-55.7		08	8.3
30	25	24,019	-52.5		09	10.6
25	25	25,201	-50.6		09	11.1
20	25	26,663	-48.0		09	10.3
15	19	28,562	-45.7		09	8.8
10	17	31,294	-41.4		09	8.9
7	16	33,728	-37.9		10	7.5
5	6	36,027	-35.3			

* BROWNSVILLE, TEXAS — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	19	7	23.4	22.1	01	.4
1000	19	116	24.5	22.4	11	1.3
950	19	566	22.1	19.2	13	2.8
900	19	1,036	19.4	14.8	12	3.1
850	19	1,527	16.6	10.9	10	2.6
800	19	2,042	13.6	7.3	09	1.7
750	19	2,579	10.2	3.3	04	.9
700	19	3,157	7.9	-3.4	36	1.1
650	19	3,761	4.8	-8.8	32	.4
600	19	4,415	1.3	-10.8	36	1.2
550	19	5,102	-2.3	-16.0	35	1.8
500	19	5,865	-6.6	-21.4	36	1.9
450	19	6,672	-12.1	-25.9	34	1.9
400	19	7,573	-17.9	-32.4	34	3.0
350	19	8,557	-25.2	-38.9	31	4.2
300	19	9,658	-33.9	-45.8	30	6.1
250	19	10,909	-43.9		30	8.5
200	19	12,370	-55.4		29	8.7
175	19	13,210	-61.5		30	7.9
150	18	14,152	-67.3		31	6.8
125	18	15,236	-72.4		32	4.9
100	17	16,540	-73.5		36	2.8
80	15	17,861	-67.6		07	6.9
70	14	18,668	-65.2		09	9.1
60	14	19,612	-62.9		09	10.2
50	13	20,737	-59.8		09	10.9
40	13	22,141	-56.9		09	13.5
30	13	23,979	-53.2		09	16.0
25	12	25,160	-50.5		09	17.5
20	11	26,629	-48.1		09	15.7
15	11	28,539	-45.3		08	14.0
10	10	31,266	-43.0			
7	7	33,670	-37.1			
5						

BUFFALO, N. Y. — 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	11.8	9.1	20	1.8
1000	30	165				
950	30	599	13.3	6.0	27	2.8
900	30	1,050	10.8	3.4	28	3.5
850	30	1,525	8.9	.1	29	4.3
800	30	2,026	6.9	-4.3	29	4.8
750	30	2,558	4.5	-8.5	28	4.5
700	30	3,114	1.6	-12.0	28	4.6
650	30	3,710	-1.5	-16.9	28	5.5
600	30	4,342	-4.9	-19.9	27	6.0
550	30	5,017	-9.0	-24.0	27	6.4
500	30	5,753	-13.5	-28.5	27	7.3
450	30	6,546	-19.1	-33.9	28	7.7
400	30	7,414	-25.7	-39.4	29	8.1
350	30	8,368	-32.7	-45.7	28	10.2
300	30	9,437	-40.2	-51.6	28	10.9
250	30	10,659	-48.4		26	10.9
200	30	12,100	-56.1		26	12.2
175	30	12,946	-57.2		27	12.1
150	30	13,917	-59.1		26	9.8
125	30	15,055	-60.6		26	9.2
100	30	16,443	-60.5		28	6.8
80	29	17,837	-59.5		29	3.9
70	29	18,673	-58.4		29	2.8
60	29	19,645	-57.1		30	2.3
50	28	20,804	-55.9		30	1.4
40	28	22,230	-54.1		29	1.1
30	28	24,086	-51.4		31	2.0
25	28	25,274	-49.9		30	2.1
20	28	26,740	-47.7		32	1.4
15	25	28,650	-45.0		28	.7
10	15	31,379	-41.1		24	2.1
7	8	33,820	-37.8			
5						

* CANTON IS. PACIFIC AREA — 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	15	4	30.8	22.8	08	5.9
1000	15	94	27.6	19.6	08	6.5
950	15	539	22.2	16.0	08	7.1
900	15	1,014	19.4	11.5	09	8.7
850	15	1,504	17.0	6.5	10	8.6
800	15	2,020	15.7	-1.1	09	7.6
750	15	2,560	13.0	-4.4	09	7.6
700	15	3,142	9.9	-9.5	09	7.5
650	15	3,749	6.7	-14.4	09	8.6
600	15	4,405	2.7	-16.7	08	10.1
550	15	5,100	-1.6	-20.7	08	10.7
500	15	5,858	-5.1	-25.4	09	10.6
450	15	6,676	-9.5	-29.3	09	10.8
400	15	7,579	-15.4	-34.1	10	8.3
350	15	8,574	-22.4	-39.8	09	8.3
300	15	9,687	-31.1	-46.9	07	6.8
250	15	10,951	-41.8		08	6.1
200	15	12,423	-54.0		13	5.5
175	15	13,267	-61.0		15	3.5
150	15	14,208	-68.0		14	2.8
125	15	15,283	-75.3		06	2.1
100	15	16,563	-76.9		09	3.9
80	15	17,871	-70.0		26	5.0
70	15	18,671	-66.7		27	7.9
60	15	19,610	-63.5		27	12.3
50	15	20,735	-61.6		27	14.6
40	15	22,125	-60.0		27	10.2
30	15	23,932	-57.2		09	11.2
25	15	25,091	-54.7		09	25.8
20	15	26,534	-50.2		09	30.3
15	15	28,433	-45.3		09	30.4
10	15	31,174	-39.5		09	32.5
7	10	33,656	-33.1			
5	6	36,046	-30.2			

See reference note at end of table

NOTE: Brownsville, Tex.: No observations 9/21-31 - Hurricane Beulah

Canton Island: closed 9/15/67

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

* CAPE HATTERAS, N. C. — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	19.0	16.0	02	2.9
1000	30	141	19.5	14.5	03	4.5
950	30	577	16.9	10.9	05	3.7
900	30	1,041	14.4	5.9	06	2.0
850	30	1,522	12.6	2.1	08	.4
800	30	2,030	11.0	-3.1	26	.6
750	30	2,564	8.7	-5.3	26	2.2
700	30	3,135	6.0	-8.2	27	3.6
650	30	3,734	2.9	-11.6	27	4.9
600	29	4,384	-.7	-16.6	27	5.6
550	29	5,066	-4.7	-20.2	27	6.6
500	29	5,819	-9.3	-23.7	26	8.3
450	29	6,619	-14.7	-28.2	27	8.8
400	28	7,509	-21.1	-34.4	27	10.9
350	28	8,481	-28.2	-40.3	27	13.7
300	28	9,569	-36.7	-47.9	26	16.3
250	28	10,807	-46.2		26	19.9
200	28	12,257	-55.8		27	21.5
175	28	13,099	-59.8		27	19.2
150	26	14,055	-62.7		27	14.1
125	26	15,172	-64.9		27	10.6
100	27	16,532	-64.4		26	6.0
80	26	17,905	-61.8		29	1.9
70	26	18,734	-60.3		27	.6
60	26	19,697	-58.5		11	1.2
50	26	20,849	-56.4		08	4.2
40	26	22,272	-54.0		08	4.8
30	26	24,132	-50.8		08	6.1
25	25	25,325	-49.2		08	6.6
20	24	26,795	-47.0		08	7.7
15	21	28,707	-44.8		09	6.3
10	18	31,410	-41.6		08	7.0
7	14	33,632	-36.9		09	7.7
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* CARIBOU, MAINE — 994 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	9.7	8.1	31	1.0
1000	30	140				
950	30	570	10.7	5.7	28	2.4
900	30	1,018	8.9	3.1	28	3.8
850	30	1,490	7.2	.1	27	5.1
800	30	1,987	5.3	-4.3	27	5.3
750	30	2,508	3.3	-8.6	27	6.3
700	30	3,070	.7	-11.6	27	7.4
650	30	3,660	-2.5	-14.9	27	8.5
600	30	4,294	-5.9	-17.9	27	8.7
550	30	4,964	-10.0	-21.6	27	9.3
500	30	5,699	-14.7	-27.0	27	10.2
450	30	6,484	-19.9	-32.2	27	10.8
400	30	7,355	-25.7	-38.2	27	11.6
350	30	8,309	-32.5	-44.4	26	12.9
300	30	9,379	-40.1	-49.6	26	13.9
250	30	10,601	-48.3		27	14.1
200	30	12,042	-55.1		26	15.4
175	30	12,894	-57.0		26	14.8
150	30	13,868	-57.7		26	15.3
125	30	15,015	-58.9		26	11.3
100	30	16,413	-59.0		26	9.3
80	30	17,817	-57.7		26	6.3
70	30	18,661	-57.0		25	4.9
60	30	19,639	-56.2		26	4.1
50	30	20,800	-55.0		27	3.5
40	29	22,228	-53.7		28	2.6
30	29	24,084	-51.6		27	2.4
25	29	25,270	-50.1		28	2.3
20	29	26,734	-48.1		28	2.0
15	25	28,640	-45.3		25	3.9
10	23	31,366	-41.1		26	4.9
7	20	33,833	-35.9		26	7.1

CHARLESTON, S. C. — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	13	16.3	14.2	36	2.8
1000	30	144	18.6	15.0	02	4.4
950	30	583	17.6	12.1	05	5.9
900	30	1,047	15.5	9.2	04	3.1
850	30	1,530	13.3	3.8	01	1.2
800	30	2,039	11.4	-.3	31	1.5
750	30	2,576	9.3	-4.4	29	3.3
700	30	3,147	6.7	-6.8	28	4.6
650	30	3,751	3.4	-10.3	28	5.4
600	30	4,398	.2	-14.6	27	6.1
550	30	5,084	-3.6	-20.4	26	7.1
500	30	5,839	-8.0	-25.7	27	8.0
450	30	6,646	-13.7	-29.8	26	9.4
400	30	7,536	-19.9	-35.0	26	10.4
350	30	8,512	-27.1	-41.7	26	12.3
300	30	9,604	-35.7	-49.3	26	13.5
250	30	10,846	-45.4		26	15.9
200	30	12,300	-55.8		27	17.7
175	30	13,140	-60.5		27	17.6
150	30	14,091	-64.5		27	14.3
125	30	15,196	-67.6		27	10.9
100	30	16,540	-66.6		27	5.8
80	30	17,897	-63.7		27	2.5
70	30	18,719	-61.5		05	1.5
60	30	19,677	-59.7		09	3.6
50	30	20,822	-57.6		09	4.9
40	29	22,240	-54.8		09	6.6
30	29	24,091	-52.0		09	6.8
25	29	25,277	-50.1		09	6.7
20	28	26,744	-47.8		09	7.9
15	26	28,658	-45.4		08	7.9
10	24	31,383	-41.2		08	9.6
7	20	33,823	-37.3		09	12.4
5	9	36,202	-32.4			

CHIHUAHUA, MEXICO — 858 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,428	15.3	13.3	28	.1
1000	30	109				
950	30	551				
900	30	1,019				
850	30	1,510	15.8	12.9	19	.1
800	30	2,027	15.2	9.3	13	1.1
750	30	2,564	11.7	6.7	12	2.3
700	30	3,146	8.4	2.8	10	2.3
650	30	3,749	4.7	-1.1	10	2.5
600	30	4,404	.5	-6.8	11	1.0
550	30	5,091	-2.9	-12.9	26	.8
500	30	5,849	-6.5	-20.9	30	2.2
450	30	6,657	-11.6	-26.7	30	3.1
400	30	7,558	-17.5	-33.0	29	5.7
350	30	8,544	-24.4	-39.4	28	7.5
300	30	9,647	-32.9	-46.6	28	9.3
250	30	10,902	-42.7		28	9.8
200	30	12,372	-53.4		28	12.1
175	29	13,222	-59.3		28	12.6
150	29	14,173	-65.4		29	11.9
125	27	15,264	-71.3		29	9.8
100	24	16,570	-72.9		31	4.6
80	20	17,900	-67.9		04	3.1
70	20	18,708	-64.4		07	5.7
60	20	19,655	-61.9		09	8.0
50	20	20,789	-59.3		09	9.3
40	20	22,195	-56.4		09	9.6
30	18	24,029	-53.5		08	10.8
25	18	25,207	-51.4		09	11.2
20	15	26,667	-48.3		08	10.7
15	11	28,575	-46.0			

* COLD BAY, ALASKA — 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	6.6	4.0	29	1.9
1000	30	-34				
950	30	388	5.6	2.6	32	3.0
900	30	828	2.5	.2	34	3.6
850	30	1,289	-.1	-3.2	34	3.1
800	30	1,773	-3.1	-7.4	35	2.5
750	30	2,278	-5.5	-11.4	35	2.5
700	30	2,821	-8.4	-15.9	34	2.2
650	30	3,387	-11.7	-20.2	32	2.2
600	30	4,002	-15.5	-24.7	31	2.2
550	30	4,648	-19.7	-28.6	29	2.9
500	30	5,355	-24.4	-33.4	28	3.7
450	30	6,106	-29.7	-38.7	28	3.8
400	30	6,944	-35.8	-44.6	27	3.4
350	30	7,861	-42.2	-43.6	28	4.1
300	30	8,891	-47.7		28	6.8
250	30	10,088	-49.5		28	8.5
200	30	11,557	-47.7		27	9.9
175	30	12,439	-47.6		27	9.4
150	30	13,457	-48.0		27	9.6
125	30	14,657	-49.0		27	8.4
100	30	16,124	-48.8		26	7.8
80	30	17,587	-49.4		25	6.5
70	30	18,461	-49.5		25	6.3
60	30	19,469	-50.0		25	5.6
50	30	20,659	-50.5		24	5.0
40	30	22,114	-50.4		23	5.4
30	30	23,996	-49.3		23	5.1
25	30	25,192	-48.8		22	4.7
20	30	26,661	-48.2		23	5.5
15	30	28,558	-47.6		25	5.2
10	29	31,253	-45.3		26	6.3
7	29	33,642	-43.2		27	8.2
5	25	35,940	-40.1		27	9.9
4	17	37,513	-37.6		27	11.4

COLUMBIA, MO. — 990 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	238	14.0	11.3	12	1.3
1000	30	154				
950	30	590	16.0	9.4	18	2.5
900	30	1,048	13.5	6.9	23	1.7
850	30	1,527	11.1	2.9	29	2.2
800	30	2,032	9.0	-3.7	31	2.7
750	30	2,564	6.8	-6.3	30	2.8
700	30	3,128	3.8	-8.9	30	3.6
650	30	3,724	.7	-13.6	29	4.3
600	30	4,366	-2.8	-19.0	29	5.1
550	30	5,045	-6.6	-22.5	29	5.5
500	30	5,790	-11.1	-26.3	29	5.9
450	30	6,587	-16.4	-30.6	30	6.2
400	30	7,468	-22.8	-36.2	30	7.4
350	30	8,434	-30.2	-41.2	30	9.5
300	30	9,512	-38.8	-47.5	30	11.0
250	30	10,738	-46.5		29	12.9
200	30	12,176	-56.3		29	14.9
175	30	13,020	-58.6		29	14.4
150	30	13,984	-60.7		29	13.3
125	30	15,111	-63.0		29	9.8
100	30	16,480	-63.9		30	7.1
80	29	17,855	-61.6		32	4.0
70	29	18,685	-60.2		34	2.6
60	28	19,651	-58.7		35	1.5
50	28	20,801	-57.0		05	.7
40	28	22,219	-55.2		06	1.1
30	28	24,067	-52.2		04	1.2
25	27	25,249	-50.4		05	1.4
20	27	26,712	-48.1		07	1.1
15	25	28,609	-45.7		07	2.6
10	9	31,340	-43.2			
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DAYTON, OHIO — 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	297	11.5	9.1	04	.9
1000	30	166				
950	30	599	14.9	8.0	17	.9
900	30	1,055	12.5	4.4	27	1.5
850	30	1,533	9.9	-.9	28	2.6
800	30	2,035	7.3	-4.6	28	2.8
750	30	2,562	5.3	-9.1	28	3.0
700	30	3,125	2.4	-11.4	28	3.1
650	30	3,718	-.3	-14.6	27	3.6
600	30	4,359	-3.5	-18.0	27	4.5
550	30	5,035	-7.7	-21.0	27	5.2
500	30	5,777	-12.4	-25.3	28	5.7
450	30	6,569	-18.0	-30.8	28	6.7
400	30	7,445	-24.3	-36.4	28	8.0
350	30	8,404	-31.5	-43.4	28	9.0
300	30	9,476	-39.7	-49.9	28	10.4
250	30	10,699	-48.5		28	12.5
200	30	12,138	-56.4		28	14.2
175	30	12,983	-57.9		28	13.4
150	30	13,950	-59.9		28	11.6
125	30	15,082	-61.8		28	9.4
100	29	16,461	-61.8		28	7.0
80	29	17,846	-60.5		29	4.0
70	28	18,677	-59.4		29	2.7
60	28	19,644	-58.0		30	2.1
50	28	20,798	-56.4		29	.7
40	28	22,220	-54.5		32	.7
30	27	24,074	-51.5		34	1.4
25	27	25,261	-50.1		03	1.2
20	25	26,728	-47.9		05	.9
15	20	28,631	-45.3		06	.7
10	18	31,363	-42.2		09	3.4
7	7	33,806	-39.5			

DEL RIO, TEXAS — 979 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	314	20.6	17.1	08	2.1
1000	29	125				
950	29	571	20.5	16.4	13	4.1
900	29	1,037	18.4	14.1	14	5.8
850	29	1,526	15.6	11.3	15	5.4
800	28	2,040	13.0	7.7	15	2.9
750	26	2,583	10.4	3.0	26	.5
700	26	3,155	7.6	-2.3	35	2.0
650	26	3,761	4.2	-6.9	35	2.9
600	26	4,411	.6	-11.2	33	3.0
550	26	5,103	-3.4	-14.0	32	2.6
500	26	5,854	-7.8	-20.6	30	3.5
450	26	6,664	-12.8	-26.3	31	4.7
400	26	7,556	-18.7	-32.5	31	7.2
350	26	8,538	-25.6	-39.0	31	9.3
300	26	9,638	-33.9	-46.3	30	11.4
250	25	10,886	-43.9		30	14.5
200	25	12,348	-54.7		30	16.2
175	24	13,193	-60.2		30	16.2
150	24	14,141	-66.0		30	14.2
125	23	15,235	-70.6		31	10.3
100	23	16,551	-71.3		33	5.5
80	22	17,882	-66.9		06	3.7
70	22	18,694	-64.3		08	5.6
60	22	19,641	-62.2		09	7.1
50	22	20,774	-59.4		09	8.3
40	22	22,181	-56.2		09	9.7
30	21	24,024	-52.6		09	11.6
25	21	25,207	-50.6		09	11.7
20	21	26,669	-48.3		09	10.9
15	21	28,574	-45.8		09	10.3
10	15	31,274	-42.5		10	11.9

DENVER, COLO. — 840 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,611	10.0	4.5	19	2.1
1000	30	136				
950	30	572				
900	30	1,032				
850	30	1,516				
800	30	2,025	13.4	2.5	26	2.3
750	30	2,564	11.0	-.8	30	2.9
700	30	3,139	7.3	-4.6	30	4.0
650	30	3,739	3.3	-8.1	30	4.4
600	30	4,388	-1.5	-10.8	30	5.1
550	30	5,065	-6.4	-16.3	30	6.2
500	30	5,814	-11.2	-23.4	29	7.3
450	30	6,608	-16.3	-29.6	30	7.3
400	30	7,492	-22.6	-35.4	29	8.0
350	30	8,457	-30.0	-42.0	29	8.7
300	30	9,536	-38.4	-49.3	29	9.6
250	30	10,765	-47.5		30	11.8
200	30	12,209	-56.1		29	14.7
175	30	13,053	-58.2		29	15.0
150	30	14,018	-60.8		29	12.8
125	30	15,144	-63.7		29	9.6
100	30	16,508	-64.6		31	5.3
80	30	17,872	-63.6		33	3.6
70	30	18,694	-62.2		35	2.7
60	30	19,651	-60.1		03	1.8
50	30	20,793	-58.2		04	2.1
40	30	22,205	-56.0		05	1.7
30	28	24,047	-52.9		07	1.1
25	27	25,225	-50.8		03	.8
20	27	26,685	-48.7		35	.9
15	24	28,586	-46.4		01	.7
10	14	31,248	-43.5		30	1.9
7	5	33,609	-39.9			

DODGE CITY, KANS. — 927 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	791	13.7	9.9	17	1.3
1000	30	140				
950	30	576				
900	30	1,036	15.6	8.8	20	4.6
850	30	1,521	14.5	5.9	23	6.1
800	30	2,033	12.4	2.4	26	4.6
750	30	2,568	9.3	-.1	28	3.3
700	30	3,140	5.7	-4.0	28	4.0
650	30	3,738	1.9	-7.6	28	3.6
600	30	4,383	-2.2	-11.8	28	3.6
550	30	5,062	-6.4	-18.3	29	4.3
500	30	5,808	-11.0	-24.2	29	4.7
450	30	6,605	-16.3	-31.0	28	5.6
400	30	7,485	-22.6	-36.9	28	6.5
350	30	8,451	-30.0	-43.2	28	6.6
300	30	9,530	-38.4	-51.2	29	7.9
250	30	10,757	-47.7		29	10.0
200	30	12,203	-55.5		29	13.8
175	30	13,047	-58.6		29	16.0
150	30	14,008	-61.6		29	15.2
125	30	15,130	-64.6		29	10.9
100	30	16,486	-65.6		30	7.2
80	28	17,849	-63.8		33	4.5
70	28	18,671	-61.9		35	3.1
60	28	19,627	-60.3		02	1.9
50	28	20,769	-58.0		05	1.9
40	26	22,183	-55.7		08	2.1
30	27	24,028	-52.4		07	1.8
25	26	25,207	-50.4		08	2.5
20	26	26,668	-48.6		08	2.6
15	25	28,576	-46.2		06	2.9
10	24	31,292	-42.8		08	4.3
7	15	33,696	-41.0		09	1.6
5	7	36,025	-38.0			

EL PASO, TEXAS — 883 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,193	17.5	11.6	06	.6
1000	30	115				
950	30	561				
900	30	1,031				
850	30	1,523	17.6	10.1	11	2.6
800	30	2,040	14.8	7.5	14	2.8
750	30	2,583	11.8	4.5	16	1.6
700	30	3,159	7.9	.9	19	.5
650	30	3,762	3.8	-2.9	02	.2
600	30	4,413	-.4	-7.6	27	.8
550	30	5,098	-4.3	-14.3	27	2.1
500	30	5,851	-8.3	-20.8	27	3.5
450	30	6,661	-13.3	-26.2	28	5.5
400	30	7,549	-19.6	-32.0	28	7.4
350	30	8,528	-26.6	-37.9	27	10.4
300	30	9,622	-35.0	-46.3	27	13.7
250	30	10,870	-44.2		28	17.6
200	30	12,332	-54.5		28	18.5
175	30	13,176	-59.8		28	19.7
150	29	14,128	-65.4		28	15.6
125	29	15,222	-70.3		29	13.6
100	29	16,541	-71.2		30	6.8
80	29	17,873	-67.5		03	2.0
70	29	18,683	-64.9		07	4.3
60	29	19,627	-62.4		09	5.5
50	29	20,760	-59.8		09	6.0
40	29	22,165	-56.9		09	7.0
30	28	24,001	-54.0		08	7.9
25	28	25,175	-52.1		09	8.3
20	28	26,628	-49.2		09	7.2
15	26	28,524	-46.8		08	7.8
10	24	[illegible]	-43.3		08	9.0
7	15	33,654	-39.1		08	6.3
5	6	35,761	-35.8			

ELY, NEV. — 812 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,908	6.9	1.8	19	2.4
1000	30	152				
950	30	581				
900	30	1,039				
850	30	1,523				
800	30	2,027	11.5	3.8	18	2.4
750	30	2,563	10.7	.3	18	1.0
700	30	3,140	7.1	-3.6	20	1.6
650	30	3,738	3.1	-7.5	21	2.1
600	30	4,390	-1.3	-12.2	22	2.3
550	30	5,069	-5.9	-16.6	22	2.7
500	30	5,821	-10.4	-22.3	21	1.9
450	30	6,621	-15.7	-27.9	20	1.0
400	30	7,504	-22.1	-33.8	15	1.4
350	30	8,473	-29.5	-40.5	11	.9
300	30	9,554	-38.1	-47.3	21	1.2
250	30	10,785	-47.4		24	3.9
200	30	12,233	-55.2		25	8.5
175	30	13,080	-57.9		26	8.5
150	30	14,044	-61.4		27	9.0
125	30	15,165	-64.4		27	7.3
100	30	16,523	-65.3		27	4.0
80	30	17,886	-63.5		32	1.5
70	29	18,707	-62.5		02	1.5
60	29	19,660	-60.7		05	1.7
50	29	20,799	-58.8		05	1.7
40	29	22,206	-57.0		07	1.8
30	28	24,042	-53.7		08	1.9
25	27	25,224	-51.5		10	1.6
20	27	26,677	-49.8		10	1.1
15	27	28,568	-47.5		07	1.3
10	27	31,270	-43.8		08	3.5
7	26	33,681	-39.8		09	3.3
5	18	35,984	-35.7			

EMPALME, MEXICO — 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	25.6	21.2	03	.7
1000	30	95	26.4	21.1	04	.6
950	30	546	25.7	18.2	06	.2
900	30	1,025	23.4	13.8	17	.4
850	30	1,522	20.2	12.3	16	1.1
800	30	2,042	16.6	9.6	14	2.6
750	30	2,585	12.9	5.1	16	3.1
700	30	3,166	9.2	.2	16	3.4
650	30	3,773	5.3	-4.8	17	4.2
600	30	4,425	1.2	-10.6	20	3.8
550	30	5,117	-2.1	-19.9	22	3.0
500	30	5,872	-6.3	-24.6	24	3.1
450	30	6,685	-11.3	-30.6	25	3.8
400	30	7,582	-17.2	-35.3	27	6.4
350	30	8,568	-24.5	-41.3	27	8.0
300	30	9,670	-33.0	-48.6	27	9.3
250	30	10,926	-42.6		27	10.6
200	30	12,394	-53.8		27	11.9
175	29	13,239	-59.9		27	10.3
150	29	14,185	-66.5		27	9.3
125	29	15,270	-72.6		27	7.0
100	29	16,572	-74.0		29	2.9
80	28	17,886	-68.3		08	4.0
70	28	18,694	-65.5		08	6.6
60	27	19,638	-62.4		09	9.1
50	27	20,771	-59.2		09	9.1
40	27	22,175	-56.6		09	9.7
30	27	24,013	-53.2		09	11.3
25	27	25,193	-51.0		09	10.7
20	26	26,647	-49.3		09	10.5
15	20	28,538	-47.3		09	10.9
10	6	31,222	-45.2			

* FAIRBANKS, ALASKA — 984 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	4.9	.7	01	2.1
1000	30	4				
950	30	429	7.4	.0	07	3.9
900	30	869	5.1	-2.4	11	4.2
850	30	1,334	2.7	-4.7	13	3.5
800	30	1,822	-.6	-7.0	15	3.9
750	30	2,332	-4.1	-9.6	16	4.6
700	30	2,876	-7.7	-13.1	16	5.2
650	30	3,449	-11.4	-17.6	17	5.9
600	30	4,059	-15.5	-21.9	17	5.9
550	30	4,709	-19.9	-27.5	18	6.6
500	30	5,411	-24.8	-32.4	18	6.7
450	30	6,166	-30.4	-37.6	18	7.1
400	30	6,997	-36.7	-43.4	18	7.7
350	30	7,909	-43.4	-40.7	18	8.7
300	30	8,930	-50.5		18	9.7
250	30	10,105	-54.5		18	9.2
200	30	11,547	-50.2		19	8.5
175	30	12,420	-49.6		20	8.6
150	30	13,430	-49.4		20	8.5
125	30	14,624	-49.6		20	8.1
100	29	16,084	-49.7		20	8.0
80	29	17,543	-50.0		22	7.6
70	29	18,415	-50.0		22	7.2
60	28	19,422	-50.4		22	7.2
50	28	20,610	-50.7		23	6.3
40	28	22,063	-50.8		23	7.5
30	27	23,934	-50.6		24	8.0
25	27	25,123	-50.3		24	8.1
20	25	26,581	-50.0		25	6.6
15	24	28,467	-48.8		25	7.5
10	14	31,068	-48.2		26	13.1
7	6	33,426	-45.6			

FLINT, MICH. — 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	234	9.1	6.0	22	.9
1000	30	164				
950	30	596	13.0	5.5	27	1.9
900	30	1,047	10.6	3.0	33	2.4
850	30	1,522	7.8	.2	31	2.6
800	30	2,020	5.8	-4.5	30	2.8
750	30	2,547	4.0	-10.3	28	3.3
700	30	3,106	1.7	-13.7	27	4.2
650	30	3,696	-1.5	-16.1	27	5.1
600	30	4,333	-4.9	-20.5	28	5.3
550	30	5,006	-8.9	-23.0	27	5.9
500	30	5,744	-13.6	-27.1	28	6.2
450	30	6,532	-19.0	-31.3	28	7.1
400	30	7,405	-25.0	-37.3	29	7.6
350	30	8,361	-32.0	-42.3	29	8.5
300	30	9,433	-39.8	-48.1	29	9.4
250	30	10,656	-48.3		30	11.3
200	30	12,095	-56.5		29	11.5
175	30	12,941	-57.1		29	11.6
150	30	13,913	-58.3		28	10.5
125	30	15,055	-59.9		29	8.8
100	29	16,445	-60.2		29	5.9
80	29	17,840	-58.9		29	4.3
70	29	18,679	-58.0		29	2.5
60	29	19,651	-57.0		29	1.5
50	29	20,808	-55.6		32	1.4
40	29	22,233	-54.1		32	.5
30	29	24,087	-51.6		30	.9
25	29	25,274	-49.6		29	1.1
20	29	26,741	-47.4		31	1.0
15	26	28,656	-44.8		30	.8
10	20	31,394	-40.8		26	1.7
7	16	33,839	-37.0		23	1.0
5	6	36,172	-34.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

FORT WORTH, TEXAS — 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	18.8	16.4	13	.2
1000	30	145				
950	30	589	19.0	13.4	17	2.7
900	30	1,051	16.8	10.5	18	2.5
850	30	1,537	14.1	8.1	21	1.8
800	30	2,048	11.8	3.9	24	1.0
750	30	2,582	9.2	-.2	30	.8
700	30	3,156	6.0	-3.8	29	.9
650	30	3,754	2.6	-6.5	29	1.3
600	30	4,404	-1.1	-11.9	29	1.9
550	30	5,084	-4.8	-17.5	28	2.5
500	30	5,838	-9.5	-22.2	29	3.2
450	30	6,637	-15.0	-29.0	29	4.3
400	30	7,526	-21.1	-35.1	29	5.7
350	30	8,498	-28.3	-41.3	29	8.0
300	30	9,587	-36.2	-47.9	28	11.2
250	30	10,827	-45.3		29	14.7
200	30	12,285	-54.9		29	18.9
175	30	13,130	-59.5		29	17.8
150	30	14,084	-64.1		29	16.4
125	29	15,187	-68.3		30	12.0
100	29	16,522	-68.6		31	6.9
80	29	17,867	-65.2		01	2.8
70	29	18,684	-62.9		06	3.1
60	28	19,640	-60.2		09	4.1
50	28	20,781	-58.4		09	4.2
40	28	22,193	-55.7		08	6.4
30	28	24,038	-52.7		08	7.9
25	27	25,224	-50.5		09	7.9
20	27	26,685	-48.4		09	7.6
15	26	28,587	-45.9		08	7.2
10	18	31,291	-42.5			
7						
5						

GLASGOW, MONT. — 933 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	696	10.8	5.4	07	2.2
1000	30	106				
950	30	543				
900	30	995	15.3	4.7	17	.5
850	30	1,479	14.5	1.3	30	2.2
800	30	1,989	11.4	-1.2	31	2.8
750	30	2,525	8.3	-3.3	31	4.6
700	30	3,092	4.7	-6.2	31	6.6
650	30	3,690	.8	-9.9	31	7.2
600	30	4,332	-2.9	-16.2	31	8.2
550	30	5,010	-7.2	-21.4	31	8.8
500	30	5,753	-12.1	-26.7	31	8.8
450	30	6,544	-17.5	-32.2	32	9.2
400	30	7,422	-24.1	-37.9	33	10.7
350	30	8,380	-31.6	-43.7	33	10.8
300	30	9,452	-39.8	-49.9	34	12.3
250	30	10,675	-48.3		34	13.1
200	30	12,116	-55.3		33	13.1
175	30	12,964	-57.1		32	12.2
150	30	13,935	-58.8		31	11.5
125	30	15,073	-60.9		30	10.4
100	30	16,456	-61.4		30	7.2
80	30	17,845	-59.9		30	5.3
70	30	18,679	-59.2		31	3.8
60	30	19,646	-58.3		33	2.8
50	30	20,796	-57.2		34	2.3
40	29	22,212	-55.9		01	2.4
30	29	24,051	-53.7		02	2.1
25	29	25,227	-52.1		01	2.1
20	28	26,682	-50.2		36	1.6
15	28	28,571	-47.5		33	2.6
10	25	31,268	-43.8		30	5.0
7	13	33,663	-41.0			
5	6	36,047	-35.4			

• GRAND JUNCTION, COLO. — 854 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,474	14.1	4.2	12	2.8
1000	30	114				
950	30	556				
900	30	1,022				
850	30	1,512	15.0	4.2	12	2.9
800	30	2,027	15.0	1.6	13	2.7
750	30	2,566	11.8	-.5	18	.5
700	30	3,144	7.8	-2.8	27	2.2
650	30	3,746	3.5	-6.0	27	3.0
600	30	4,395	-1.2	-9.8	26	3.7
550	30	5,075	-6.2	-15.2	27	4.2
500	30	5,822	-10.5	-23.8	28	4.6
450	30	6,621	-15.8	-28.6	28	5.4
400	30	7,503	-22.1	-35.9	28	5.7
350	30	8,471	-29.2	-41.1	28	6.6
300	30	9,553	-37.9	-47.5	28	7.5
250	30	10,783	-47.5		28	11.2
200	30	12,227	-55.9		28	14.3
175	30	13,072	-58.6		28	13.9
150	29	14,039	-61.5		28	11.9
125	29	15,159	-64.6		28	8.8
100	29	16,518	-65.3		29	5.7
80	29	17,878	-64.1		33	2.5
70	29	18,697	-62.6		02	1.7
60	29	19,651	-60.8		04	.9
50	29	20,789	-58.8		04	1.7
40	29	22,197	-56.6		05	1.9
30	28	24,033	-53.6		06	1.6
25	28	25,211	-51.4		05	1.2
20	28	26,667	-49.0		07	.8
15	27	28,571	-46.4		07	1.5
10	23	31,287	-42.5		07	3.5
7	17	33,714	-38.3		12	4.6
5						

• GREAT FALLS, MONT. — 888 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,123	11.8	.3	24	3.0
1000	30	[illegible]				
950	30	548				
900	30	1,009				
850	30	1,491	15.7	1.6	26	4.7
800	30	2,002	12.7	-.6	28	4.8
750	30	2,540	9.0	-3.4	29	5.7
700	30	3,139	5.3	-6.5	29	6.4
650	30	3,708	1.6	-9.6	29	7.4
600	30	4,351	-2.2	-14.6	30	7.9
550	30	[illegible]	-6.0	-19.5	30	8.0
500	30	5,779	-10.6	-24.5	30	7.5
450	30	6,576	-16.3	-30.0	31	7.7
400	30	7,458	-23.0	-36.0	31	8.8
350	30	8,422	-30.5	-41.4	31	9.0
300	30	9,499	-38.9	-48.9	31	9.1
250	29	10,720	-48.2		32	9.2
200	29	12,161	-56.4		31	8.1
175	29	13,003	-58.6		30	8.9
150	29	13,969	-60.1		30	10.1
125	29	15,102	-61.7		29	9.8
100	29	16,484	-61.7		28	7.0
80	29	17,869	-60.2		29	5.0
70	29	18,703	-59.2		28	3.0
60	28	19,673	-58.2		32	1.7
50	27	20,822	-57.0		34	2.1
40	27	22,238	-55.8		02	1.6
30	24	24,071	-54.1		04	1.7
25	24	25,246	-52.1		01	3.3
20	22	26,695	-50.1		04	2.7
15	20	28,589	-47.3		04	.5
10	20	31,294	-42.9		29	3.0
7	17	33,733	-38.0		28	5.9
5	7	36,039	-33.2			

GREEN BAY, WIS. — 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	[illegible]	8.8	7.6	28	.7
1000	30	161				
950	30	591	14.9	6.9	27	2.3
900	30	1,044	11.2	4.4	27	2.7
850	30	1,517	7.6	-.3	27	2.7
800	30	2,016	5.7	-5.1	28	2.9
750	30	2,542	3.9	-9.7	29	3.7
700	30	3,101	1.3	-12.5	29	4.0
650	30	3,687	-1.8	-15.5	30	[illegible]
600	30	4,327	-5.5	-19.6	30	6.0
550	30	4,997	-9.2	-23.8	30	6.1
500	30	5,737	-13.5	-29.3	30	7.1
450	30	6,525	-18.9	-32.6	29	8.3
400	30	7,397	-24.9	-38.5	30	8.9
350	30	8,355	-32.0	-44.4	30	9.8
300	30	9,425	-40.4	-50.1	31	11.0
250	30	10,644	-49.2		31	12.4
200	30	12,081	-56.6		31	13.2
175	30	12,926	-57.4		30	12.2
150	30	13,897	-58.7		30	10.7
125	30	15,039	-57.9		30	9.3
100	30	16,432	-60.1		30	6.7
80	30	17,828	-59.1		31	3.9
70	30	18,666	-58.1		31	3.4
60	30	19,639	-57.2		32	2.5
50	30	20,795	-55.9		34	1.6
40	30	22,219	-54.3		34	1.6
30	29	24,068	-52.1		31	1.2
25	29	25,252	-50.5		29	1.7
20	28	26,710	-47.9		28	2.4
15	27	28,613	-45.2		28	3.9
10	20	31,321	-40.9		26	4.8
7	10	33,766	-37.7			
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GREENSBORO, N. C. — 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	273	13.9	13.1	01	1.6
1000	30	165				
950	30	600	15.7	9.0	04	2.8
900	30	1,058	13.0	5.3	05	2.9
850	30	1,536	10.6	.9	03	2.0
800	30	2,041	9.2	-4.5	36	1.4
750	30	2,574	7.4	-8.5	31	1.6
700	30	3,140	5.2	-12.7	28	2.6
650	30	3,742	2.4	-15.6	28	3.4
600	30	4,385	-1.5	-18.6	28	3.8
550	30	5,069	-5.5	-23.1	28	4.9
500	30	5,815	-10.2	-27.5	27	7.0
450	30	6,616	-15.6	-33.5	27	8.1
400	30	7,498	-22.2	-39.2	27	9.4
350	30	8,467	-29.2	-44.4	27	12.1
300	30	9,550	-37.4	-50.4	27	15.3
250	30	10,784	-46.7		27	17.9
200	30	12,232	-56.0		27	20.1
175	30	13,073	-59.8		27	19.5
150	30	14,030	-62.3		27	15.9
125	30	15,148	-64.9		27	11.3
100	30	16,508	-64.6		27	6.5
80	30	17,877	-62.2		26	3.3
70	30	18,705	-60.3		28	1.5
60	29	19,667	-58.6		29	.4
50	28	20,819	-57.0		07	1.0
40	28	22,239	-54.6		09	3.2
30	27	24,094	-51.2		09	3.9
25	27	25,282	-50.0		10	4.2
20	26	26,742	-48.3		09	4.1
15	23	28,627	-46.2		09	3.2
10	11	31,366	-42.6			
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GUAM, MARIANA IS. — 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	25.1	23.9	24	2.0
1000	30	77				
950	30	529	23.5	21.7	24	5.8
900	30	1,000	21.0	18.2	25	7.2
850	30	1,494	18.5	15.0	25	7.3
800	30	2,013	15.9	12.0	25	6.5
750	30	2,557	13.1	8.8	24	5.4
700	30	3,137	10.0	4.6	24	5.1
650	30	3,750	6.4	1.2	24	6.2
600	30	4,403	2.6	-2.4	24	5.8
550	30	5,101	-1.3	-6.0	25	5.0
500	30	5,856	-5.4	-12.1	22	3.4
450	30	6,677	-10.3	-16.4	19	2.8
400	30	7,575	-15.8	-22.1	16	1.4
350	30	8,568	-22.5	-29.2	11	2.1
300	30	9,682	-30.6	-38.7	07	3.9
250	30	10,950	-40.9	-48.8	07	6.7
200	30	12,425	-53.6		07	9.8
175	30	13,269	-61.0		07	12.4
150	30	14,208	-68.9		07	15.3
125	29	15,276	-76.9		08	18.9
100	25	16,540	-79.8		09	19.2
80	18	17,820	-73.9		09	15.4
70	17	18,607	-69.9		10	13.9
60	14	19,533	-65.8		10	11.0
50	14	20,648	-62.7		09	13.2
40	13	22,033	-59.5		09	14.6
30	13	23,852	-55.4		09	21.9
25	12	25,019	-53.8		09	25.1
20	10	26,481	-50.0		09	30.1
15	10	28,375	-47.3		09	32.5
10	10	31,083	-43.1			
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HILO, HAWAII — 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	21.7	18.6	22	2.6
1000	30	138	23.6	19.8	24	2.0
950	30	586	20.3	17.9	07	1.7
900	30	1,051	16.8	15.2	08	3.4
850	30	1,537	13.8	11.8	07	3.8
800	30	2,047	11.4	7.2	07	4.1
750	30	2,589	10.2	-1.9	08	3.8
700	30	3,158	8.4	-10.5	09	4.3
650	30	3,769	6.2	-14.5	10	4.2
600	30	4,421	2.8	-17.9	09	4.4
550	30	5,114	-1.3	-21.5	08	5.1
500	30	5,873	-6.2	-25.7	08	4.2
450	30	6,687	-11.8	-29.5	08	3.7
400	30	7,581	-18.3	-35.6	08	1.3
350	30	8,564	-25.8	-41.0	26	1.7
300	30	9,662	-34.2	-47.4	26	4.5
250	30	10,912	-44.2		26	8.3
200	30	12,371	-55.9		25	13.2
175	29	13,205	-62.2		25	13.0
150	28	14,144	-68.5		25	11.2
125	28	15,226	-72.5		24	6.0
100	28	16,531	-73.4		07	2.6
80	28	17,843	-70.5		09	8.0
70	27	18,641	-67.0		09	9.7
60	27	19,578	-64.2		09	11.8
50	27	20,700	-61.4		09	13.6
40	27	22,095	-57.8		09	16.4
30	27	23,923	-54.1		09	19.3
25	26	25,100	-51.9		09	20.9
20	26	26,554	-49.2		09	22.8
15	24	28,452	-46.5		09	23.8
10	22	31,159	-43.0		09	25.1
7	17	33,563	-41.3		09	28.0
5	7	35,837	-39.8			

HUNTINGTON, W. VA. — 991 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	11.1	10.2	11	.4
1000	30	169				
950	30	605	15.2	8.8	18	1.2
900	30	1,059	12.9	6.0	28	1.1
850	30	1,537	10.4	1.2	30	2.2
800	30	2,040	7.7	-3.3	30	2.4
750	30	2,569	5.7	-8.7	29	2.0
700	30	3,132	3.1	-12.6	27	2.5
650	30	3,729	.4	-16.8	28	3.2
600	30	4,368	-3.0	-19.7	27	4.1
550	30	5,049	-6.8	-23.3	27	5.3
500	30	5,791	-11.5	-28.5	27	6.1
450	30	6,585	-17.1	-32.3	27	7.2
400	30	7,465	-23.5	-37.4	26	9.1
350	30	8,428	-30.7	-44.0	27	10.4
300	30	9,504	-39.0	-50.6	27	12.4
250	30	10,732	-47.8		27	14.6
200	30	12,177	-56.0		27	16.7
175	30	13,022	-58.4		27	15.8
150	30	13,987	-60.5		27	13.5
125	30	15,116	-62.6		27	10.8
100	30	16,490	-62.5		28	6.4
80	30	17,870	-60.8		27	3.5
70	30	18,703	-59.4		29	1.8
60	30	19,672	-58.0		30	.7
50	30	20,825	-56.1		08	.3
40	29	22,250	-53.7		07	.8
30	29	24,110	-50.9		06	2.3
25	29	25,301	-49.4		07	2.3
20	28	26,771	-47.5		07	2.8
15	28	28,682	-44.9		09	3.5
10	21	31,424	-41.8		08	5.6
7	11	33,862	-38.3		08	6.0
5	7	36,154	-36.0			

• INTERNATIONAL FALLS, MINN. — 975 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	360	8.1	3.9	17	1.1
1000	30	151				
950	30	575	11.2	5.3	21	4.4
900	30	1,029	10.1	3.5	24	5.9
850	30	1,502	7.7	-.2	25	4.8
800	30	2,000	5.1	-2.8	24	4.5
750	30	2,522	3.0	-7.9	26	5.3
700	30	3,082	.7	-12.2	26	6.0
650	30	3,664	-2.1	-14.9	27	6.3
600	30	4,306	-5.6	-18.1	27	7.2
550	30	4,974	-9.2	-22.5	28	7.5
500	30	5,716	-13.8	-27.6	28	7.7
450	30	6,496	-19.3	-32.8	29	8.9
400	30	7,375	-25.6	-38.8	29	10.3
350	30	8,330	-32.7	-44.2	28	11.2
300	30	9,399	-40.9	-50.2	28	11.7
250	30	10,617	-49.5		28	12.8
200	30	12,053	-56.3		29	13.2
175	30	12,900	-56.6		29	10.7
150	30	13,876	-57.3		30	10.7
125	28	15,019	-58.8		30	8.9
100	28	16,417	-59.2		30	7.2
80	28	17,817	-58.6		31	5.6
70	28	18,657	-57.5		31	4.1
60	28	19,633	-56.8		33	3.3
50	28	20,790	-56.0		34	3.2
40	28	22,211	-55.0		34	2.0
30	28	24,057	-52.9		32	1.6
25	28	25,237	-51.1		30	1.9
20	28	26,693	-49.4		31	2.5
15	28	28,589	-46.4		30	3.1
10	27	31,322	-40.7		27	5.6
7	24	33,775	-36.9		27	6.5
5	11	36,092	-33.7			

JACKSON, MISS. — 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	94	17.3	16.2	08	1.0
1000	30	143	18.0	16.0	10	1.6
950	30	587	18.2	13.2	13	3.6
900	30	1,047	15.6	10.7	14	2.1
850	30	1,531	13.7	4.7	01	.9
800	30	2,041	11.7	1.2	34	1.5
750	30	2,577	9.2	-2.5	30	1.9
700	30	3,149	6.1	-5.9	29	2.3
650	30	3,752	3.0	-11.4	28	3.7
600	30	4,398	-.5	-15.4	27	4.4
550	30	5,085	-4.5	-21.7	27	4.8
500	30	5,833	-9.3	-25.3	27	5.2
450	30	6,636	-14.6	-29.0	28	6.6
400	30	7,522	-21.2	-34.3	28	7.7
350	30	8,493	-28.7	-41.3	28	9.3
300	30	9,578	-36.9	-49.1	27	12.0
250	30	10,815	-45.9		28	14.8
200	30	12,269	-55.2		28	17.6
175	30	13,112	-59.8		28	17.7
150	30	14,065	-63.9		29	14.5
125	30	15,171	-67.4		29	11.3
100	30	16,509	-67.8		30	6.1
80	30	17,857	-64.6		36	2.5
70	30	18,676	-62.6		06	2.8
60	30	19,631	-60.3		08	4.1
50	30	20,773	-58.0		08	5.5
40	30	22,185	-55.4		08	6.5
30	30	24,032	-52.2		09	7.6
25	30	25,215	-50.3		09	8.1
20	30	26,677	-48.5		09	8.2
15	29	28,578	-46.4		09	7.2
10	29	31,289	-42.9		08	9.6
7	21	33,717	-38.9		08	9.0
5	11	36,060	-34.7			

• JACKSONVILLE, FLA. — 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	19.3	17.9	35	2.8
1000	30	144	21.0	18.0	01	4.0
950	30	588	19.2	15.5	05	5.1
900	30	1,053	16.7	12.6	06	2.9
850	30	1,539	14.6	7.3	01	1.1
800	30	2,050	12.7	2.1	30	1.8
750	30	2,586	10.4	-3.1	30	2.6
700	30	3,162	7.7	-6.5	27	3.8
650	30	3,764	4.4	-10.0	27	4.8
600	30	4,416	.5	-13.3	27	5.3
550	30	5,092	-3.5	-17.2	27	5.8
500	30	5,857	-8.0	-23.0	26	6.0
450	30	6,658	-13.2	-29.1	26	7.0
400	30	7,555	-19.5	-33.8	27	7.5
350	30	8,534	-26.4	-40.3	26	8.9
300	30	9,629	-35.0	-48.3	26	10.0
250	30	10,874	-44.8		26	12.0
200	30	12,329	-55.8		27	15.1
175	30	13,169	-61.1		28	16.2
150	30	14,116	-65.7		28	13.7
125	30	15,212	-69.7		28	9.1
100	30	16,541	-68.8		28	4.5
80	30	17,886	-65.1		04	1.8
70	30	18,704	-62.7		07	3.9
60	30	19,658	-60.3		09	6.4
50	30	20,800	-58.1		09	7.8
40	30	22,213	-55.3		09	8.6
30	30	24,059	-52.5		09	9.1
25	30	25,242	-50.6		09	9.2
20	30	26,702	-48.3		09	10.0
15	25	28,610	-45.6		08	10.0
10	24	31,331	-42.2		09	10.8
7	15	33,754	-38.7		09	10.2
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JOHN F. KENNEDY INT. AP NY — 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	15.6	11.6	33	1.9
1000	30	162	15.6	10.3	35	2.9
950	30	601	14.3	6.8	36	2.2
900	30	1,053	12.2	3.1	34	1.8
850	30	1,531	10.1	-1.8	30	1.9
800	30	2,034	8.5	-6.1	29	2.3
750	30	2,567	6.3	-9.1	29	2.8
700	30	3,129	3.5	-11.9	29	3.5
650	30	3,728	.6	-14.9	28	4.7
600	30	4,365	-3.2	-19.2	27	5.9
550	30	5,044	-7.4	-23.7	27	6.8
500	30	5,786	-12.1	-28.0	27	8.1
450	30	6,585	-17.2	-32.1	26	9.3
400	30	7,460	-23.3	-37.2	26	10.8
350	30	8,425	-30.5	-42.9	26	12.5
300	30	9,503	-38.7	-48.0	25	13.7
250	30	10,732	-47.7		25	15.4
200	30	12,178	-55.9		25	16.9
175	30	13,022	-58.4		26	17.3
150	30	13,988	-59.8		26	14.2
125	30	15,123	-61.3		26	11.6
100	30	16,506	-61.5		26	7.8
80	30	17,893	-59.9		26	4.5
70	30	18,729	-58.7		27	2.7
60	30	19,700	-57.3		25	1.5
50	29	20,859	-55.7		25	.7
40	29	22,285	-53.8		08	.3
30	28	24,142	-50.9		06	1.4
25	27	25,334	-49.1		06	1.3
20	26	26,801	-46.9		06	1.8
15	25	28,718	-43.9		08	2.8
10	9	31,469	-40.5			
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JOHNSTON IS., PACIFIC AREA — 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	26.5	23.3	11	5.0
1000	30	118	25.6	22.8	10	5.3
950	30	568	22.3	20.2	10	5.7
900	30	1,039	19.3	16.1	10	5.6
850	30	1,530	16.5	13.5	10	5.6
800	30	2,045	13.9	10.0	09	4.7
750	30	2,588	11.3	5.6	09	4.2
700	30	3,163	8.9	.2	09	3.8
650	30	3,772	5.9	-5.1	09	3.7
600	30	4,425	2.0	-10.5	09	3.4
550	30	5,113	-2.2	-15.0	10	3.5
500	30	5,874	-6.7	-18.6	11	2.4
450	30	6,686	-12.0	-24.4	11	[illegible]
400	30	7,581	[illegible]	-30.7	12	1.1
350	30	8,565	-25.0	-37.4	29	1.1
300	30	9,667	-33.3	-45.3	29	2.7
250	30	10,921	-43.5		29	3.6
200	30	12,382	-55.6		29	5.1
175	30	13,220	-62.3		29	5.3
150	30	14,156	-68.7		30	4.2
125	30	15,234	-73.4		34	2.7
100	29	16,533	-74.9		08	5.4
80	26	17,838	-71.0		08	9.1
70	25	18,635	-68.0		09	10.6
60	25	19,567	-64.7		09	12.0
50	25	20,688	-62.0		09	13.8
40	25	22,078	-58.9		09	16.5
30	25	23,897	-54.6		09	20.8
25	25	25,071	-52.2		09	23.7
20	25	26,521	-49.8		09	26.5
15	22	28,418	-46.7		09	29.8
10	16	31,130	-42.9		08	32.1
7	5	33,546	-39.7			
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KEY WEST, FLA. — 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	21	3	26.7	21.9	06	1.1
1000	21	125	25.8	21.5	08	1.2
950	21	574	22.5	19.6	12	2.6
900	21	1,046	19.7	15.1	15	2.5
850	21	1,537	16.7	12.1	15	2.9
800	21	2,052	13.7	8.8	16	2.8
750	21	2,589	10.8	4.6	17	2.4
700	21	3,168	7.9	.2	17	2.0
650	21	3,774	4.5	-2.9	18	1.6
600	21	4,424	.6	-6.3	18	.9
550	21	5,112	-3.8	-10.6	29	1.0
500	21	5,866	-8.0	-15.8	35	1.3
450	21	6,673	-12.8	-21.4	03	2.6
400	21	7,566	-19.2	-27.8		
350	21	8,546	-26.3	-34.7		
300	21	9,643	-34.6	-43.3		
250	21	10,891	-44.7			
200	21	12,347	-56.2			
175	20	13,183	-62.1			
150	20	14,124	-67.5			
125	20	15,211	-71.6			
100	19	16,528	-70.7			
80	16	17,884	-66.7			
70	16	18,674	-64.6			
60	16	19,62[illegible]	-62.3			
50	15	20,754	-59.5			
40	14	22,159	-56.1			
30	13	23,497	-52.6			
25	13	25,183	-50.3			
20	11	26,657	-47.8			
15	8	28,603	-45.7			
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

KING SALMON, ALASKA — 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	6.4	3.0	07	1.8
1000	30	-43				
950	30	379	6.7	2.2	07	3.6
900	30	822	3.9	.5	08	4.2
850	30	1,284	.8	-1.4	10	3.5
800	30	1,769	-2.1	-4.3	10	3.5
750	30	2,278	-5.0	-8.7	11	4.5
700	30	2,820	-8.2	-13.0	12	4.9
650	30	3,390	-11.8	-16.9	11	4.4
600	30	4,000	-15.8	-21.2	11	4.6
550	30	4,647	-20.2	-25.8	11	5.1
500	30	5,350	-24.8	-30.9	13	4.4
450	30	6,101	-30.4	-36.7	13	4.5
400	30	6,935	-36.5	-42.3	13	5.5
350	30	7,847	-43.2		13	5.0
300	30	8,869	-49.8		14	3.5
250	30	10,054	-51.6		19	2.6
200	30	11,514	-48.2		22	3.5
175	30	12,395	-47.8		22	5.1
150	30	13,412	-48.1		22	6.1
125	30	14,611	-48.6		23	5.8
100	30	16,078	-48.8		22	5.4
80	30	17,542	-49.1		22	5.4
70	30	18,417	-49.3		22	5.6
60	29	19,423	-49.7		21	5.9
50	29	20,615	-50.1		22	6.3
40	29	22,072	-50.2		22	5.8
30	29	23,951	-49.8		22	5.8
25	28	25,151	-49.5		22	5.0
20	28	26,613	-49.3		22	4.9
15	28	28,501	-48.7		23	5.6
10	26	31,181	-47.0		25	5.9
7	17	33,516	-46.5		25	7.6
5	[illegible]	35,667	-46.3			

* KOROR, CAROLINE IS. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	28.2	24.0	25	3.0
1000	30	93	27.6	23.2	25	3.4
950	30	540	23.4	19.4	25	6.0
900	30	1,017	20.7	14.9	25	7.4
850	30	1,511	18.0	11.0	26	5.8
800	30	2,028	15.2	7.3	26	4.3
750	30	2,570	12.4	3.8	25	3.6
700	30	3,150	9.6	-.6	24	1.8
650	30	3,758	6.2	-4.6	26	1.3
600	30	4,415	2.4	-8.6	24	1.1
550	30	5,109	-1.6	-13.8	13	.9
500	30	5,868	-5.9	-19.0	13	2.4
450	30	6,681	-10.9	-24.5	12	4.0
400	30	7,583	-16.7	-30.6	10	6.2
350	30	8,573	-23.4	-36.5	09	9.0
300	30	9,683	-31.7	-43.9	08	12.1
250	30	10,945	-42.0		07	14.7
200	30	12,415	-54.5		08	20.5
175	30	13,257	-61.5		08	23.3
150	30	14,196	-68.6		08	25.1
125	30	15,269	-75.4		09	23.3
100	30	16,551	-77.1		09	13.1
80	30	17,848	-71.7		08	7.9
70	30	18,643	-67.5		08	6.1
60	30	19,576	-65.1		09	4.5
50	30	20,694	-62.8		08	4.5
40	29	22,079	-60.1		09	8.1
30	29	23,888	-56.6		09	18.6
25	29	25,050	-54.0		09	27.7
20	28	26,493	-50.3		09	34.6
15	23	28,388	-46.1		09	39.5
10	18	31,120	-40.4		09	45.9
7	7	33,554	-36.1			

KOTZEBUE, ALASKA — 1003 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	4.7	.8	04	3.1
1000	30	24			04	2.6
950	30	442	4.8	-2.6	07	3.3
900	30	883	2.3	-4.3	09	2.2
850	30	1,343	.0	-6.1	08	2.1
800	30	1,826	-2.8	-9.3	08	2.4
750	30	2,336	-5.7	-13.3	10	2.8
700	30	2,873	-9.1	-17.9	09	2.9
650	30	3,444	-12.7	-22.0	10	3.1
600	30	4,048	-16.9	-26.0	09	3.6
550	30	4,698	-21.2	-30.8	09	3.7
500	30	5,394	-25.8	-36.1	09	3.9
450	30	6,149	-31.1	-41.5	11	3.4
400	30	6,975	-36.9	-47.2	13	3.6
350	30	7,887	-43.2		15	5.9
300	30	8,909	-50.2		14	6.2
250	30	10,083	-55.2		12	5.3
200	30	11,521	-50.8		14	3.3
175	30	12,392	-50.1		13	2.5
150	30	13,401	-49.6		16	2.5
125	30	14,594	-49.6		19	2.3
100	30	16,055	-49.5		21	2.8
80	30	17,516	-49.7		21	2.9
70	30	18,388	-50.1		22	3.5
60	30	19,394	-50.7		22	4.2
50	29	20,579	-51.4		23	4.2
40	29	22,026	-51.9		24	5.5
30	29	23,891	-51.4		24	6.9
25	26	25,083	-50.7		24	7.1
20	26	26,537	-49.8		24	8.5
15	25	28,423	-48.9		24	9.2
10	13	31,087	-47.1			

KWAJALEIN, MARSHALL IS. — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	27.3	23.8	11	1.1
1000	30	98	26.7	23.2	12	1.5
950	30	546	23.4	20.9	11	2.0
900	30	1,025	20.6	17.1	10	1.7
850	30	1,514	18.0	13.2	11	1.7
800	30	2,035	15.3	9.5	10	2.0
750	30	2,578	12.6	5.7	09	2.7
700	30	3,155	9.4	2.6	10	3.4
650	30	3,762	5.7	-.9	10	4.4
600	30	4,413	1.8	-3.8	09	5.2
550	30	5,109	-1.8	-7.4	09	5.7
500	30	5,869	-6.2	-12.7	10	6.2
450	30	6,686	-10.8	-19.6	10	6.5
400	30	7,584	-16.0	-25.6	09	8.0
350	30	8,562	-22.9	-33.1	09	8.1
300	30	9,689	-31.2	-41.4	08	9.5
250	30	10,952	-41.8		07	11.1
200	30	12,422	-54.4		06	13.5
175	30	13,275	-61.6		05	13.8
150	29	14,200	-69.3		05	13.3
125	28	15,272	-76.5		06	10.9
100	23	16,542	-78.7		07	8.8
80	22	17,833	-72.7		09	8.7
70	22	18,623	-69.4		09	7.1
60	21	19,549	-66.5		09	6.0
50	21	20,665	-63.5		08	6.8
40	21	22,042	-60.4		09	10.8
30	21	23,853	-57.4		09	18.4
25	21	25,006	-55.8		09	25.1
20	20	26,433	-52.5		09	31.7
15	20	28,312	-47.6		09	38.6
10	17	31,026	-42.4		09	40.5
7	11	33,442	-37.1			

LAKE CHARLES, LA. — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	20.2	18.8	05	1.9
1000	30	136	21.0	17.8	07	3.3
950	30	582	19.2	14.7	11	3.5
900	30	1,044	16.7	11.1	12	2.2
850	30	1,530	14.8	6.4	12	.6
800	30	2,042	12.4	2.9	14	.4
750	30	2,579	9.8	-.7	23	.2
700	30	3,151	6.8	-5.0	24	1.2
650	30	3,756	4.1	-11.9	26	.9
600	30	4,404	.2	-15.1	28	1.8
550	30	5,089	-3.8	-19.7	27	2.0
500	30	5,842	-8.5	-23.9	26	2.9
450	30	6,652	-13.7	-28.7	27	4.8
400	30	7,539	-19.8	-35.6	27	5.9
350	30	8,515	-27.1	-41.1	28	7.7
300	30	9,607	-35.3	-47.8	28	10.3
250	30	10,851	-44.7		28	13.2
200	30	12,310	-55.1		28	16.5
175	30	13,152	-59.7		28	16.8
150	30	14,104	-64.8		29	13.9
125	30	15,204	-68.7		29	10.4
100	30	16,533	-70.1		30	5.2
80	30	17,873	-65.6		04	2.8
70	30	18,688	-63.2		08	4.7
60	30	19,642	-60.4		09	6.5
50	30	20,782	-58.5		08	7.2
40	30	22,193	-55.7		09	8.3
30	30	24,037	-52.2		09	9.6
25	29	25,221	-49.6		09	9.6
20	29	26,687	-47.7		09	9.5
15	26	28,584	-46.0		09	8.6
10	21	31,308	-42.2		09	11.1
7	14	33,725	-38.9		09	11.6
5	5	36,091	-35.4			

LANDER, WYO. — 832 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,696	10.9	2.8	25	2.1
1000	30	127				
950	30	568				
900	30	1,025				
850	30	1,512				
800	30	2,021	12.8	.9	30	1.3
750	30	2,560	10.0	-2.2	32	2.4
700	30	3,131	6.1	-5.0	30	3.7
650	30	3,730	1.9	-8.2	29	4.8
600	30	4,375	-2.4	-12.5	29	6.9
550	30	5,051	-6.9	-19.1	29	6.4
500	30	5,798	-11.9	-26.4	30	6.7
450	30	6,590	-17.3	-32.0	30	7.0
400	30	7,471	-23.7	-38.5	31	7.6
350	30	8,431	-31.3	-44.4	31	8.4
300	30	9,503	-39.9	-49.8	32	9.6
250	30	10,725	-48.2		31	9.8
200	30	12,170	-55.5		29	7.9
175	30	13,016	-57.9		29	9.2
150	30	13,983	-60.2		28	9.1
125	30	15,112	-63.0		29	7.1
100	30	16,481	-63.5		29	4.8
80	30	17,852	-62.7		32	2.9
70	30	18,676	-61.9		31	1.6
60	29	19,630	-60.4		36	1.4
50	29	20,771	-58.8		03	1.7
40	29	22,177	-56.9		03	1.8
30	29	24,011	-54.0		04	2.1
25	29	25,186	-52.1		05	1.1
20	29	26,637	-49.9		03	.7
15	29	28,531	-46.9		30	1.4
10	26	31,230	-41.8		26	2.3
7	10	33,677	-37.3			
5						
4						

* LIHUE KAUAI, HAWAII — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	24.1	21.6	06	3.6
1000	30	142	24.1	21.0	06	4.6
950	30	590	20.9	18.8	07	6.5
900	30	1,057	17.5	15.0	08	7.5
850	30	1,545	14.6	11.2	09	7.7
800	30	2,056	12.1	7.7	09	7.6
750	30	2,595	10.6	-2.5	08	7.7
700	30	3,170	9.1	-9.4	09	6.7
650	30	3,778	6.5	-15.4	08	5.6
600	30	4,433	2.7	-18.9	09	4.9
550	30	5,125	-1.5	-22.4	10	3.6
500	30	5,884	-6.6	-26.4	11	3.2
450	30	6,693	-12.3	-30.2	12	3.3
400	30	7,588	-19.2	-34.4	14	2.4
350	30	8,567	-26.9	-38.2	22	1.9
300	30	9,660	-35.3	-46.5	24	4.5
250	30	10,904	-45.4		25	8.1
200	30	12,355	-56.4		25	10.7
175	30	13,192	-62.0		25	10.3
150	30	14,134	-66.8		26	5.9
125	30	15,225	-70.7		17	.2
100	29	16,543	-72.6		06	3.3
80	28	17,859	-69.9		08	7.2
70	28	18,658	-66.9		08	9.4
60	27	19,592	-64.4		09	11.5
50	27	20,712	-61.7		09	13.2
40	27	22,104	-58.1		09	15.2
30	26	23,931	-53.9		09	16.9
25	26	25,106	-51.8		09	18.0
20	26	26,558	-49.7		09	18.9
15	25	28,452	-47.2		09	19.3
10	22	31,157	-43.8		09	17.1
7	20	33,559	-40.5		09	18.5
5	16	35,871	-36.9		09	17.8
4	5	37,410	-34.8			

LITTLE ROCK, ARK. — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	16.4	14.4	01	.9
1000	30	148	17.0	14.5	05	1.3
950	30	588	17.5	12.3	13	1.5
900	30	1,049	14.9	10.9	14	1.2
850	30	1,532	12.7	7.0	30	.3
800	30	2,040	10.6	2.3	31	1.2
750	30	2,570	8.4	-1.1	29	1.7
700	30	3,145	5.7	-5.7	28	1.9
650	30	3,745	2.4	-9.4	28	2.5
600	30	4,392	-1.2	-12.7	28	3.7
550	30	5,073	-5.2	-17.5	27	4.8
500	30	5,824	-9.9	-21.4	28	5.2
450	30	6,626	-15.3	-27.6	29	5.8
400	30	7,510	-22.0	-33.9	29	6.7
350	30	8,478	-29.2	-41.3	30	8.1
300	30	9,561	-37.6	-47.7	30	10.6
250	30	10,794	-46.7		29	13.0
200	30	12,245	-55.1		28	16.3
175	30	13,091	-58.7		28	16.6
150	30	14,050	-62.6		29	14.8
125	30	15,164	-65.8		29	11.1
100	29	16,514	-66.4		30	6.6
80	29	17,873	-64.1		32	3.1
70	29	18,694	-62.0		02	1.9
60	29	19,652	-59.9		06	2.0
50	29	20,796	-57.8		08	2.7
40	29	22,212	-55.2		08	3.4
30	29	24,061	-52.4		09	4.3
25	29	25,244	-50.8		08	5.0
20	29	26,704	-48.8		09	5.3
15	28	28,610	-46.2		09	5.9
10	24	31,334	-42.4		09	8.8
7	7	33,740	-39.9			

MCGRATH, ALASKA — 986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	103	4.6	.8	32	1.1
1000	30	-10				
950	30	413	7.0	1.7	05	2.3
900	30	854	4.7	-.4	09	3.7
850	30	1,318	2.0	-2.8	10	3.8
800	30	1,805	-1.0	-5.6	12	4.3
750	30	2,318	-4.3	-9.0	12	3.8
700	30	2,857	-7.9	-12.7	12	4.5
650	30	3,429	-11.6	-17.5	13	4.9
600	30	4,039	-15.6	-21.9	13	6.3
550	30	4,684	-20.3	-25.9	13	5.8
500	30	5,388	-25.0	-30.9	14	7.0
450	30	6,141	-30.5	-36.9	14	6.3
400	30	6,972	-36.7	-42.5	15	6.8
350	30	7,883	-43.6		15	7.2
300	30	8,904	-50.2		15	7.0
250	30	10,082	-53.5		16	6.4
200	30	11,531	-49.5		17	5.4
175	30	12,407	-48.6		17	5.1
150	30	13,421	-48.6		18	5.1
125	30	14,619	-48.7		19	4.9
100	30	16,085	-48.8		20	5.2
80	30	17,550	-49.0		21	4.8
70	30	18,426	-49.4		21	5.0
60	30	19,435	-49.6		21	5.4
50	30	20,627	-50.3		22	5.4
40	30	22,081	-50.8		22	6.1
30	29	23,950	-50.6		23	7.0
25	29	25,139	-50.4		23	7.3
20	29	26,595	-49.8		24	7.5
15	26	28,476	-49.1		24	6.9
10	22	31,145	-47.9		25	6.9
7	7	33,557	-45.2			

* MAJURO, MARSHALL IS. — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	3	29.3	24.5	11	1.9
1000	29	101	27.5	21.0	12	2.3
950	29	549	23.3	17.8	13	3.4
900	29	1,025	20.3	13.4	12	3.8
850	29	1,517	17.8	9.8	11	3.7
800	29	2,035	15.5	5.6	10	3.3
750	29	2,580	12.8	1.7	10	3.6
700	29	3,157	9.6	-2.7	10	4.4
650	29	3,768	6.0	-5.2	10	5.6
600	29	4,422	2.3	-8.9	10	6.6
550	29	5,113	-1.4	-12.8	10	7.4
500	29	5,875	-5.5	-17.5	10	7.0
450	28	6,693	-10.1	-24.8	09	8.2
400	28	7,597	-15.2	-30.6	09	8.9
350	28	8,593	-21.8	-37.2	08	9.6
300	28	9,710	-30.2	-45.2	07	11.2
250	28	10,981	-40.6	-53.8	06	12.0
200	28	12,462	-53.0		05	14.0
175	28	13,309	-59.9		05	13.5
150	28	14,256	-67.3		05	11.6
125	28	15,336	-74.1		06	8.6
100	27	16,622	-76.7		08	7.3
80	25	17,924	-71.7		08	5.2
70	24	18,719	-67.4		08	4.6
60	23	19,660	-64.0		09	3.0
50	21	20,783	-61.9		11	1.5
40	18	22,176	-59.6		08	6.2
30	17	23,989	-55.7		09	16.3
25	13	25,162	-52.3		09	26.7
20	10	26,613	-48.9			

* MARCUS IS., N. PACIFIC — 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	9	28.8	25.2	11	3.1
1000	29	65	27.6	23.8	11	3.1
950	29	515	23.0	18.8	11	4.8
900	29	988	20.6	14.9	12	5.1
850	29	1,482	18.4	10.8	12	5.1
800	29	2,001	16.1	6.5	12	4.7
750	29	2,546	13.5	2.2	12	4.9
700	29	3,127	10.5	-1.4	12	5.5
650	29	3,739	7.1	-6.3	12	5.9
600	29	4,396	3.5	-11.8	12	6.0
550	29	5,092	-.4	-16.6	13	5.7
500	29	5,854	-4.8	-21.7	13	4.9
450	29	6,673	-9.6	-27.1	13	4.6
400	29	7,578	-15.4	-32.6	12	3.5
350	29	8,572	-22.2	-39.3	12	2.7
300	29	9,687	-30.4	-46.0	14	1.9
250	29	10,958	-39.9	-52.2	09	.8
200	29	12,444	-51.5		10	1.9
175	29	13,298	-58.0		07	4.1
150	29	14,253	-65.1		06	5.9
125	29	15,345	-72.0		07	8.6
100	29	16,642	-75.9		08	12.8
80	29	17,938	-73.0		09	13.4
70	28	18,726	-69.5		09	13.3
60	28	19,656	-64.5		09	13.6
50	28	20,780	-60.8		09	13.1
40	22	22,169	-56.6		09	13.7
30	17	24,016	-52.3		09	15.8
25	14	25,202	-49.9		09	16.6
20	13	26,673	-46.8		09	18.3
15	7	28,607	-43.1			
10						
7						
5						
4						

* MEDFORD, OREG. — 969 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	12.5	7.8	30	.3
1000	30	128				
950	30	567	15.9	7.6	29	.6
900	30	1,023	16.2	5.4	21	.4
850	30	1,509	15.1	2.1	15	1.7
800	30	2,021	13.3	-2.1	18	2.4
750	30	2,559	10.5	-5.8	22	3.5
700	30	3,132	7.2	-10.3	22	4.6
650	30	3,733	3.6	-14.3	22	4.4
600	30	4,384	-.3	-17.4	24	3.9
550	30	5,066	-4.3	-23.6	24	3.9
500	30	5,820	-9.3	-27.7	24	3.7
450	30	6,618	-15.0	-33.2	25	3.9
400	30	7,506	-21.5	-38.6	26	3.8
350	30	8,477	-29.0	-44.4	27	2.3
300	30	9,560	-37.7	-50.8	29	2.3
250	30	10,792	-47.3		31	3.3
200	30	12,237	-56.2		30	3.6
175	30	13,078	-59.4		29	5.2
150	30	14,039	-61.5		28	5.5
125	29	15,163	-64.0		28	4.7
100	29	16,528	-64.2		28	4.2
80	29	17,898	-62.5		27	2.2
70	29	18,724	-61.1		26	.8
60	28	19,684	-59.5		29	.2
50	28	20,828	-58.3		05	.8
40	28	22,237	-56.7		06	2.0
30	28	24,072	-54.1		04	1.6
25	28	25,246	-52.3		04	1.8
20	28	26,698	-49.8		03	.9
15	27	28,595	-47.1		34	.7
10	24	31,310	-43.6		28	1.9
7	22	33,727	-38.9		28	1.8
5	14	36,027	-34.7		27	4.8
4	6	37,545	-31.5			

MERIDA, MEXICO — 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	22.8	22.4	09	2.3
1000	30	115	24.0	23.1	11	4.4
950	30	565	23.1	20.2	12	6.5
900	30	1,037	20.7	16.1	12	6.2
850	30	1,531	18.4	11.6	11	5.2
800	30	2,049	15.5	7.2	11	4.7
750	30	2,593	12.3	3.2	11	4.6
700	30	3,170	9.1	-.8	11	4.2
650	30	3,779	5.4	-4.3	11	3.9
600	30	4,431	1.7	-9.1	10	4.0
550	30	5,118	-2.2	-12.4	10	3.7
500	30	5,879	-6.6	-18.1	09	3.1
450	30	6,691	-11.1	-24.8	07	1.7
400	29	7,591	-16.9	-29.4	01	1.8
350	29	8,580	-23.7	-35.6	34	2.9
300	29	9,688	-31.9	-44.2	31	4.1
250	29	10,950	-42.1		30	5.9
200	29	12,419	-54.2		30	7.6
175	28	13,261	-61.0		31	7.5
150	26	14,203	-67.8		33	6.8
125	28	15,280	-74.3		35	5.7
100	26	16,577	-73.8		03	6.5
80	25	17,902	-67.8		07	7.6
70	25	18,707	-65.8		08	9.0
60	25	19,652	-62.7		08	10.8
50	25	20,784	-59.6		08	11.8
40	24	22,193	-55.7		08	14.5
30	24	24,041	-52.1		08	17.6
25	24	25,227	-49.5		08	20.1
20	22	26,689	-47.0		08	21.6
15	22	28,603	-44.2		08	22.1
10	10	31,337	-41.8			
7	5	33,764	-38.3			

* MIAMI, FLA. — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	24.4	22.1	34	1.3
1000	30	123	25.0	21.8	02	.8
950	30	577	22.5	19.2	09	.7
900	30	1,044	19.9	15.3	17	.7
850	30	1,536	17.0	11.9	20	.8
800	30	2,052	14.1	8.3	22	1.4
750	29	2,593	11.2	3.3	24	1.5
700	29	3,168	8.1	-1.2	26	1.6
650	29	3,775	4.5	-5.4	27	1.5
600	29	4,425	.9	-11.3	30	1.5
550	29	5,111	-3.3	-14.8	31	1.7
500	29	5,868	-7.6	-19.9	30	2.5
450	29	6,677	-12.5	-26.2	30	2.5
400	29	7,572	-18.6	-31.4	29	3.5
350	29	8,554	-25.8	-38.1	29	3.5
300	29	9,653	-34.2	-46.4	28	4.3
250	29	10,902	-44.4		27	5.8
200	29	12,359	-56.0		30	8.6
175	28	13,194	-62.3		31	10.5
150	27	14,134	-68.2		31	8.9
125	27	15,214	-72.7		32	6.6
100	27	16,525	-71.4		35	2.3
80	27	17,856	-67.2		08	4.4
70	27	18,665	-64.9		08	7.1
60	27	19,610	-62.2		09	9.8
50	25	20,744	-59.5		09	10.5
40	24	22,154	-56.2		10	12.1
30	24	23,995	-53.1		09	13.4
25	22	25,177	-50.3		09	14.1
20	22	26,639	-48.7		09	14.2
15	20	28,537	-45.7		08	13.9
10	16	31,272	-42.5		09	12.6
7	11	33,687	-38.5			

* MIDLAND, TEXAS — 917 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	874	16.8	14.0	12	1.2
1000	30	128				
950	30	569				
900	30	1,035	17.4	13.3	15	2.7
850	30	1,524	16.0	10.2	17	3.9
800	30	2,038	13.7	6.7	16	1.9
750	30	2,576	10.7	3.9	12	.5
700	30	3,152	7.1	1.4	03	1.2
650	30	3,753	3.3	-2.9	01	1.5
600	30	4,404	-.2	-10.2	34	2.3
550	30	5,089	-4.0	-15.4	31	2.9
500	30	5,843	-8.1	-23.0	30	4.5
450	30	6,647	-13.2	-29.0	30	6.5
400	30	7,541	-19.5	-33.6	29	8.3
350	30	8,519	-26.4	-39.0	29	11.2
300	30	9,615	-34.7	-45.6	29	14.2
250	30	10,863	-44.3		29	18.7
200	30	12,323	-54.8		29	19.2
175	30	13,166	-60.1		29	20.2
150	30	14,116	-65.3		29	16.9
125	30	15,212	-70.1		29	12.9
100	30	16,535	-70.6		31	5.5
80	30	17,871	-66.6		03	2.3
70	30	18,682	-64.3		07	3.9
60	30	19,631	-61.7		09	5.1
50	29	20,767	-59.2		09	6.5
40	29	22,172	-56.6		09	7.3
30	28	24,010	-53.1		09	8.1
25	27	25,191	-50.9		09	8.3
20	27	26,653	-48.4		09	8.1
15	25	28,552	-46.3		08	7.4
10	22	31,275	-42.2		09	9.4
7	18	33,709	-38.4		10	8.8

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

* MONTGOMERY, ALA. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	17.2	15.3	06	1.6
1000	30	150	18.0	15.2	07	2.8
950	30	594	18.1	13.0	10	4.8
900	30	1,054	15.7	11.4	12	2.8
850	30	1,538	13.3	7.5	16	1.3
800	30	2,048	11.7	1.6	26	1.4
750	30	2,586	9.4	-2.0	27	2.2
700	30	3,156	6.5	-5.5	27	2.7
650	30	3,758	3.4	-9.2	26	3.8
600	30	4,407	-.3	-12.4	26	4.5
550	30	5,093	-4.4	-17.2	27	4.9
500	30	5,843	-9.1	-24.0	26	5.9
450	30	6,645	-14.2	-29.9	26	7.4
400	30	7,535	-20.5	-34.4	26	8.9
350	30	8,509	-27.8	-40.1	26	10.1
300	30	9,598	-36.2	-48.2	26	12.2
250	30	10,839	-45.5		26	14.9
200	30	12,295	-55.0		27	17.3
175	29	13,136	-59.5		27	18.7
150	29	14,090	-63.8		27	14.8
125	29	15,198	-67.5		28	10.5
100	29	16,538	-67.7		28	6.3
80	29	17,890	-64.2		34	1.6
70	29	18,710	-62.1		05	2.2
60	29	19,670	-60.0		08	3.6
50	28	20,816	-57.8		08	5.1
40	28	22,233	-54.9		09	6.7
30	26	24,088	-51.9		08	7.2
25	24	25,279	-49.8		09	7.8
20	24	26,746	-47.7		09	7.6
15	23	28,654	-45.4		09	6.6
10	13	31,378	-40.8		08	7.3
7						

* NANTUCKET, MASS. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	14	14.8	13.6	01	.7
1000	30	163	15.5	10.0	32	.8
950	30	595	14.2	6.6	31	1.7
900	30	1,053	12.1	2.5	30	1.9
850	30	1,531	10.1	-1.1	28	3.2
800	30	2,033	7.9	-5.3	28	4.2
750	30	2,561	5.5	-8.7	27	5.2
700	30	3,125	2.9	-12.3	27	5.8
650	30	3,716	-.4	-15.6	27	7.0
600	30	4,358	-3.6	-18.8	27	8.1
550	30	5,032	-7.5	-22.0	27	7.9
500	30	5,777	-12.2	-26.8	26	8.6
450	30	6,567	-17.7	-31.3	26	8.9
400	30	7,446	-24.0	-36.9	25	10.7
350	30	8,407	-31.1	-43.9	25	12.5
300	30	9,482	-39.2	-49.2	25	14.1
250	30	10,708	-48.4		25	15.5
200	30	12,151	-56.0		25	16.3
175	30	12,994	-58.5		26	16.1
150	30	13,960	-60.3		26	13.4
125	30	15,092	-62.2		26	10.6
100	30	16,471	-61.8		26	7.5
80	29	17,854	-60.2		26	3.8
70	29	18,688	-58.9		25	2.4
60	29	19,658	-57.7		25	2.4
50	29	20,813	-56.1		28	1.2
40	27	22,239	-54.0		32	.8
30	26	24,096	-51.2		04	1.2
25	25	25,282	-49.8		08	1.4
20	24	26,752	-47.4		07	1.1
15	22	28,659	-45.0		06	1.2
10	18	31,391	-40.6		10	2.4
7	13	33,861	-37.0			

* NASHVILLE, TENN. 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	14.4	13.3	08	.8
1000	30	162			06	.9
950	30	599	16.8	10.5	16	2.7
900	30	1,058	14.1	8.4	20	1.9
850	30	1,539	11.4	4.5	27	1.2
800	30	2,044	9.1	-1.3	29	1.7
750	30	2,577	6.6	-4.6	29	2.7
700	30	3,141	4.2	-8.4	29	3.9
650	30	3,740	1.3	-12.8	28	4.3
600	30	4,381	-2.3	-17.3	27	5.3
550	30	5,061	-6.1	-21.4	28	5.9
500	30	5,808	-10.8	-25.7	27	7.4
450	30	6,602	-16.5	-31.6	27	8.2
400	30	7,485	-22.7	-36.9	27	8.7
350	30	8,451	-29.9	-42.5	27	9.9
300	30	9,530	-38.2	-48.9	27	11.7
250	30	10,760	-47.2		27	14.7
200	29	12,209	-55.4		27	17.2
175	29	13,053	-58.7		27	17.1
150	29	14,015	-61.5		28	14.6
125	29	15,136	-64.6		28	10.7
100	29	16,497	-64.3		28	6.1
80	28	17,864	-62.2		29	2.9
70	28	18,692	-60.5		33	1.6
60	28	19,656	-58.4		01	.8
50	28	20,806	-56.9		09	2.5
40	27	22,223	-54.8		08	2.6
30	27	24,077	-51.4		07	3.9
25	27	25,263	-50.0		08	3.7
20	26	26,730	-47.5		08	4.6
15	26	28,642	-45.2		09	5.1
10	25	31,365	-41.9		08	7.0
7	22	33,806	-36.6		08	5.7

NOME, ALASKA 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	4.6	-2.1	03	2.7
1000	30	5			04	2.2
950	30	428	6.0	-1.5	06	4.5
900	30	867	2.8	-2.8	07	3.5
850	30	1,328	.0	-5.7	08	3.6
800	30	1,811	-3.0	-9.7	07	3.8
750	30	2,318	-5.8	-15.1	07	4.1
700	30	2,858	-8.8	-20.6	07	4.1
650	30	3,424	-12.4	-24.0	07	4.4
600	30	4,036	-16.4	-28.2	07	4.1
550	30	4,680	-20.6	-33.4	07	3.6
500	30	5,384	-25.4	-37.0	07	4.2
450	30	6,133	-30.8	-42.4	07	4.0
400	29	6,968	-36.7	-46.8	08	3.8
350	28	7,874	-43.3	-48.7	08	3.7
300	28	8,897	-49.9		09	5.2
250	28	10,076	-54.1		08	4.8
200	28	11,520	-50.1		08	2.9
175	28	12,394	-49.4		08	2.4
150	28	13,405	-49.0		12	1.8
125	28	14,601	-49.2		20	1.4
100	28	16,066	-49.1		20	1.3
80	28	17,530	-49.2		21	2.3
70	28	18,404	-49.6		22	2.6
60	28	19,414	-50.0		22	4.0
50	28	20,604	-50.5		23	4.6
40	28	22,057	-51.0		23	5.0
30	26	23,915	-50.8		23	5.8
25	26	25,104	-50.2		24	7.2
20	26	26,563	-49.7		24	7.2
15	24	28,446	-49.0		24	8.5
10	12	31,134	-47.1			
7						

* NORTH PLATTE, NEBR. 919 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	848	10.1	6.5	10	.5
1000	30	141				
950	30	575				
900	30	1,027	12.6	6.8	19	1.7
850	30	1,508	13.0	4.0	23	3.9
800	30	2,016	11.0	1.4	27	3.5
750	30	2,552	8.6	-1.9	29	5.5
700	30	3,121	5.4	-5.9	29	5.4
650	30	3,719	1.8	-9.7	29	5.6
600	30	4,364	-2.4	-12.7	28	7.2
550	30	5,045	-6.3	-18.4	28	7.5
500	30	5,789	-11.3	-23.9	28	7.4
450	30	6,584	-16.7	-29.8	27	7.7
400	30	7,465	-23.1	-36.8	28	8.1
350	30	8,428	-30.5	-43.6	28	8.8
300	30	9,504	-39.2	-49.8	29	9.5
250	30	10,727	-48.7		29	10.2
200	29	12,165	-56.5		28	10.7
175	29	13,009	-57.9		29	11.3
150	29	13,976	-60.3		29	11.4
125	29	15,105	-62.6		30	8.8
100	29	16,476	-63.6		31	6.2
80	29	17,850	-62.1		33	3.9
70	29	18,678	-60.5		34	2.7
60	29	19,641	-59.4		35	2.1
50	29	20,788	-57.5		02	2.3
40	29	22,204	-55.2		04	1.7
30	29	24,051	-52.6		36	.6
25	28	25,232	-50.5		32	.7
20	26	26,692	-48.5		31	.9
15	23	28,585	-46.2		33	1.1
10	19	31,310	-41.6		09	.8
7	16	33,722	-38.1		06	1.5

* OAKLAND, CALIF. 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	15.7	13.9	32	.8
1000	30	111	15.4	13.1	30	.9
950	30	551	17.8	7.3	28	2.2
900	30	1,013	20.2	2.4	30	3.1
850	30	1,504	18.5	-.9	28	2.2
800	30	2,020	15.3	-3.1	24	2.3
750	30	2,559	11.5	-5.3	22	1.7
700	30	3,136	7.6	-7.7	19	1.3
650	30	3,737	3.5	-11.4	16	.8
600	30	4,387	-.7	-15.2	03	1.1
550	30	5,069	-4.8	-19.9	02	1.5
500	30	5,819	-9.8	-24.9	02	2.5
450	30	6,619	-15.6	-30.3	35	2.8
400	30	7,502	-22.3	-36.5	34	2.7
350	30	8,469	-29.7	-43.5	35	2.9
300	30	9,549	-38.0	-51.0	36	4.2
250	30	10,781	-46.6		35	4.4
200	30	12,234	-54.3		30	5.5
175	30	13,083	-57.9		29	5.6
150	30	14,047	-61.5		28	7.6
125	30	15,165	-65.4		28	5.9
100	28	16,518	-65.8		27	2.7
80	27	17,879	-64.2		26	.9
70	26	18,697	-62.6		10	1.0
60	25	19,650	-60.9		09	2.0
50	25	20,789	-58.9		08	2.7
40	25	22,198	-56.9		08	2.7
30	24	24,036	-53.5		08	3.2
25	24	25,214	-51.8		09	2.8
20	24	26,667	-49.7		09	2.7
15	24	28,561	-47.3		08	3.2
10	23	31,259	-43.9		08	4.6
7	21	33,664	-39.8		10	5.9
5	16	35,979	-35.6		10	5.8

OMAHA, NEBR. 971 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	403	12.3	9.8	15	1.8
1000	30	152				
950	30	583	14.6	8.5	17	4.4
900	30	1,042	13.6	5.4	22	4.8
850	30	1,522	10.8	2.3	25	3.8
800	30	2,026	8.8	-1.3	27	3.5
750	30	2,553	6.5	-4.4	27	3.4
700	30	3,123	3.9	-8.5	27	3.8
650	30	3,717	.5	-11.5	28	4.1
600	30	4,361	-3.0	-16.3	28	4.9
550	30	5,037	-7.2	-19.9	27	6.5
500	30	5,783	-11.5	-26.0	28	6.4
450	30	6,575	-16.8	-31.3	28	7.0
400	30	7,458	-23.4	-35.5	28	7.9
350	30	8,420	-30.8	-42.1	28	8.4
300	30	9,495	-39.4	-48.6	28	8.8
250	30	10,717	-48.8		28	9.9
200	30	12,152	-57.2		28	12.5
175	30	12,993	-58.3		29	13.2
150	30	13,960	-60.0		30	11.7
125	30	15,090	-62.7		30	9.7
100	29	16,462	-62.8		32	7.0
80	29	17,841	-61.4		33	4.4
70	29	18,670	-60.4		34	3.4
60	29	19,633	-59.1		35	2.8
50	29	20,781	-57.1		01	1.9
40	29	22,198	-55.5		05	1.3
30	29	24,041	-52.8		04	.8
25	28	25,222	-51.0		01	1.0
20	28	26,681	-48.8		34	1.4
15	27	28,590	-46.1		32	1.3
10	25	31,305	-42.3		35	1.1
7	15	33,762	-40.0		03	4.0
5	9	36,079	-37.4			

+ PAGO PAGO, AMERICAN SAMOA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	29.1	22.8	09	5.3
1000	30	123	26.7	19.6	09	6.2
950	30	579	22.2	15.2	06	7.0
900	30	1,042	18.8	12.0	08	7.3
850	30	1,531	16.3	7.0	08	7.1
800	30	2,045	14.6	1.1	08	5.9
750	30	2,590	12.2	-4.2	08	4.1
700	30	3,164	9.4	-9.3	08	3.6
650	30	3,775	5.9	-13.0	08	4.1
600	30	4,425	2.3	-17.4	07	3.3
550	30	5,116	-1.6	-21.8	05	3.0
500	30	5,875	-6.1	-25.3	03	2.4
450	30	6,688	-11.3	-29.6	02	1.9
400	30	7,586	-17.1	-34.7	25	2.1
350	30	8,573	-23.8	-41.0	25	4.9
300	30	9,678	-32.4	-48.5	24	6.8
250	30	10,934	-42.8		24	9.6
200	30	12,397	-54.9		23	13.0
175	30	13,237	-61.3		23	13.6
150	30	14,177	-67.9		23	12.6
125	30	15,255	-73.9		25	9.1
100	30	16,544	-77.0		27	6.2
80	29	17,846	-72.1		27	4.9
70	29	18,635	-67.6		27	3.6
60	29	19,574	-63.6		27	1.2
50	29	20,703	-59.9		09	2.3
40	29	22,111	-55.9		08	6.9
30	27	23,951	-53.4		09	11.9
25	22	25,120	-51.7		09	14.5
20	19	26,582	-48.7		09	16.4
15	7	28,513	-45.3			

* PEORIA, ILL. 996 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	200	12.4	9.3	09	.9
1000	30	162				
950	30	596	14.6	8.8	15	1.1
900	30	1,051	12.0	6.1	25	1.1
850	30	1,529	9.6	1.3	26	1.8
800	30	2,031	7.6	-5.0	29	1.6
750	30	2,560	5.5	-8.5	31	2.6
700	30	3,123	3.0	-11.9	31	3.8
650	30	3,717	-.3	-15.0	30	4.0
600	30	4,357	-3.6	-19.3	30	4.8
550	30	5,033	-7.4	-22.3	29	5.0
500	30	5,777	-11.8	-27.3	28	5.3
450	30	6,570	-17.5	-32.4	29	5.4
400	30	7,447	-23.9	-38.7	30	6.7
350	30	8,407	-31.2	-44.7	30	8.3
300	30	9,482	-39.5	-51.8	30	9.4
250	30	10,705	-48.6		30	11.0
200	30	12,144	-56.6		30	13.5
175	30	12,987	-58.0		30	13.3
150	30	13,954	-60.2		29	11.2
125	30	15,087	-61.9		29	9.3
100	30	16,464	-62.2		30	6.2
80	30	17,846	-60.9		30	3.8
70	30	18,679	-59.3		33	2.6
60	30	19,647	-57.9		35	1.5
50	29	20,805	-56.2		01	1.2
40	28	22,231	-54.6		04	.6
30	28	24,085	-51.7		02	.8
25	28	25,273	-49.7		35	.8
20	28	26,739	-47.9		09	.5
15	27	28,652	-45.1		06	1.9
10	25	31,397	-41.1		10	2.9
7	20	33,820	-37.7		07	1.6
5	10	36,144	-33.1			

* PITTSBURGH, PA. 978 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	359	10.7	8.8	30	.2
1000	30	166				
950	30	602	13.6	7.3	23	.5
900	30	1,053	11.9	3.0	28	2.2
850	30	1,530	9.9	-1.4	30	2.4
800	30	2,032	7.4	-4.1	29	2.7
750	30	2,560	5.1	-9.0	28	3.3
700	30	3,121	2.3	-13.1	27	3.0
650	30	3,716	-.7	-15.6	26	3.1
600	30	4,352	-3.9	-21.7	27	4.6
550	30	5,029	-7.8	-25.5	27	5.4
500	30	5,769	-12.6	-30.1	27	6.7
450	30	6,559	-18.2	-34.3	27	7.8
400	30	7,434	-24.5	-40.1	27	8.1
350	30	8,393	-31.5	-45.7	27	9.9
300	30	9,466	-39.5	-52.4	26	10.7
250	30	10,691	-48.0		27	11.9
200	30	12,132	-56.1		27	14.3
175	30	12,477	-57.7		27	13.9
150	30	13,946	-59.4		27	12.2
125	30	15,082	-61.4		27	10.3
100	30	16,464	-61.3		28	6.9
80	30	17,854	-59.7		27	3.3
70	30	18,690	-58.5		27	2.2
60	30	19,661	-57.0		27	1.2
50	29	20,822	-55.5		32	.8
40	29	22,249	-54.0		29	.6
30	28	24,108	-51.1		33	.3
25	28	25,298	-49.4		03	.5
20	28	26,764	-47.6		07	.9
15	27	28,686	-44.3		08	1.4
10	26	31,421	-40.7		14	.7
7	19	33,840	-36.7		13	.5
5	9	36,203	-33.5			

+ PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	29.0	23.9	21	.9
1000	30	87	28.4	23.1	21	1.2
950	30	529	24.1	18.1	20	1.9
900	30	1,013	20.9	14.9	19	2.8
850	30	1,507	18.5	10.8	19	2.5
800	30	2,025	15.7	6.8	18	1.8
750	30	2,568	12.8	3.0	12	1.7
700	30	3,148	9.7	-1.1	11	2.7
650	30	3,757	6.3	-4.7	10	3.7
600	30	4,413	2.5	-8.8	11	4.2
550	30	5,106	-1.2	-13.7	11	4.4
500	30	5,867	-5.3	-18.9	11	5.6
450	30	6,687	-9.9	-23.5	10	6.4
400	30	7,589	-15.5	-29.1	09	7.6
350	30	8,584	-22.2	-36.3	09	9.3
300	30	9,699	-30.4	-44.3	08	11.8
250	30	10,969	-40.6	-54.3	07	14.7
200	30	12,449	-53.1		06	17.7
175	30	13,297	-60.2		06	20.0
150	30	14,242	-67.4		06	21.2
125	30	15,320	-74.8		07	18.2
100	30	16,604	-76.5		08	10.6
80	30	17,906	-70.7		08	6.1
70	30	18,703	-67.0		09	5.3
60	30	19,640	-63.9		10	3.5
50	30	20,763	-61.8		09	3.7
40	30	22,149	-59.6		09	7.5
30	28	23,963	-55.2		09	16.9
25	27	25,130	-53.4		09	25.7
20	26	26,577	-50.3		09	31.8
15	17	28,476	-45.8		09	37.2
10	9	31,188	-41.9			
7	5	33,604	-39.1			
5						

PORTLAND, MAINE 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	20	12.0	8.3	27	1.4
1000	30	152	13.7	8.6	30	1.7
950	30	585	13.5	7.3	31	3.3
900	30	1,040	11.2	4.1	30	3.9
850	30	1,516	9.1	-.7	30	4.2
800	30	2,017	7.1	-4.5	28	4.9
750	30	2,542	4.9	-9.3	28	5.3
700	30	3,106	1.9	-13.7	27	6.3
650	30	3,695	-1.3	-16.4	28	7.5
600	30	4,335	-4.6	-20.5	27	7.6
550	30	5,005	-8.6	-23.4	27	7.8
500	30	5,748	-13.1	-28.9	27	8.9
450	30	6,536	-18.4	-33.8	26	9.9
400	30	7,412	-24.7	-37.7	26	9.5
350	30	8,371	-31.6	-42.9	26	10.3
300	30	9,445	-39.4	-47.9	26	11.1
250	30	10,670	-48.0		25	12.9
200	30	12,113	-56.2		25	15.4
175	30	12,957	-57.9		26	14.0
150	30	13,926	-58.8		26	13.2
125	30	15,066	-60.6		25	11.0
100	30	16,454	-60.6		26	7.9
80	29	17,845	-59.3		26	4.7
70	29	18,682	-58.3		26	3.6
60	29	19,655	-56.9		26	2.7
50	29	20,812	-56.1		27	1.8
40	29	22,236	-54.2		28	1.3
30	29	24,092	-51.4		27	.9
25	28	25,282	-49.8		25	.9
20	28	26,748	-47.7		27	1.0
15	26	28,656	-45.3		20	.9
10	18	31,404	-40.5		26	.6
7	9	33,841	-37.0			

* QUILLAYUTE, WASH. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	58	11.4	10.9	11	.9
1000	30	127	13.1	10.8	11	1.1
950	30	560	13.7	6.5	15	1.3
900	30	1,016	12.5	2.5	19	1.8
850	30	1,493	10.6	-1.5	21	2.6
800	30	1,997	8.8	-5.4	23	4.5
750	30	2,526	6.7	-10.7	23	5.8
700	30	3,092	4.0	-15.3	23	7.4
650	30	3,689	.8	-17.1	24	8.3
600	30	4,330	-2.9	-19.5	24	9.3
550	30	5,010	-6.9	-22.4	24	10.5
500	30	5,751	-11.3	-27.5	24	12.4
450	30	6,546	-16.7	-31.6	24	13.8
400	30	7,427	-22.9	-36.9	24	14.9
350	30	8,390	-30.4	-42.2	24	15.7
300	30	9,466	-39.1	-49.8	24	16.4
250	30	10,691	-48.2		23	17.5
200	30	12,130	-56.4		24	16.9
175	30	12,972	-58.8		24	15.9
150	30	13,936	-60.4		24	15.0
125	30	15,067	-61.8		24	12.6
100	29	16,443	-61.7		24	9.4
80	28	17,835	-59.8		24	6.8
70	28	18,671	-58.6		25	5.0
60	28	19,642	-57.2		25	3.4
50	28	20,795	-56.9		27	1.7
40	27	22,216	-56.0		35	.6
30	27	24,053	-54.1		04	1.6
25	27	25,226	-52.8		04	2.0
20	25	26,670	-51.1		03	2.2
15	24	28,550	-48.5		01	1.6
10	22	31,234	-44.4		31	2.9
7	22	33,640	-40.9		28	6.2
5	11	35,910	-36.8			

RAPID CITY, S. DAK. 905 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	12.3	4.2	27	1.0
1000	30	117				
950	30	554				
900	30	1,012			27	.8
850	30	1,493	14.4	2.1	27	4.6
800	30	2,003	11.5	-.9	27	4.7
750	30	2,533	8.4	-3.7	29	5.5
700	30	3,107	4.9	-6.2	30	6.5
650	30	3,700	1.0	-8.8	30	7.3
600	30	4,347	-3.1	-12.4	30	7.2
550	30	5,021	-7.7	-16.4	30	7.7
500	30	5,766	-12.5	-25.5	30	7.9
450	30	6,554	-17.9	-32.5	30	9.5
400	30	7,434	-24.1	-38.8	31	10.0
350	30	8,393	-31.7	-44.5	31	10.5
300	30	9,464	-40.2	-51.4	31	10.8
250	30	10,685	-48.9		30	10.9
200	30	12,129	-54.8		29	11.0
175	30	12,980	-56.7		30	10.6
150	30	13,952	-58.6		30	9.9
125	30	15,091	-61.2		30	7.7
100	30	16,469	-62.8		31	7.0
80	30	17,845	-62.2		32	4.5
70	30	18,674	-60.4		33	3.1
60	29	19,638	-59.0		35	2.6
50	29	20,786	-57.4		35	1.7
40	27	22,203	-55.7		36	1.8
30	27	24,047	-52.7		02	1.5
25	27	25,226	-51.2		02	.7
20	26	26,688	-49.3		31	1.7
15	25	28,575	-46.6		29	2.5
10	13	31,276	-42.2			

ST CLOUD, MINN. 981 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	316	9.6	7.5	15	1.2
1000	30	152				
950	30	582	13.2	7.0	21	3.7
900	30	1,036	11.6	3.6	23	4.7
850	30	1,512	9.1	.3	24	4.5
800	30	2,012	6.8	-4.4	25	4.3
750	30	2,540	4.8	-8.1	25	4.4
700	30	3,101	2.2	-10.9	26	5.4
650	30	3,694	-.9	-13.8	26	5.6
600	30	4,333	-4.0	-18.3	28	6.1
550	30	5,006	-7.9	-22.3	28	6.8
500	30	5,749	-12.7	-27.2	28	7.9
450	30	6,535	-18.0	-32.1	29	8.7
400	30	7,417	-24.3	-37.3	29	9.3
350	30	8,375	-31.8	-43.5	29	10.2
300	30	9,445	-40.4	-49.0	29	11.4
250	30	10,664	-49.4		29	12.6
200	30	12,097	-56.9		29	12.0
175	30	12,942	-57.4		30	10.7
150	30	13,913	-58.5		30	9.4
125	30	15,055	-59.9		31	7.9
100	30	16,445	-61.0		31	6.0
80	30	17,835	-59.5		32	4.2
70	30	18,671	-58.4		33	3.2
60	30	19,642	-57.3		34	2.5
50	30	20,797	-56.2		36	2.4
40	30	22,208	-54.9		35	2.0
30	30	24,066	-52.1		34	1.3
25	30	25,247	-51.0		32	.9
20	30	26,700	-48.7		29	2.5
15	30	28,616	-46.1		28	3.5
10	27	31,328	-41.1		28	5.4
7	19	33,752	-38.1		26	6.9
5	11	36,093	-35.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

ST PAUL IS., ALASKA — 998 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	6.3	4.3	35	3.2
1000	30	-7			35	5.0
950	30	414	4.5	2.5	36	5.6
900	30	853	1.6	-.3	36	5.2
850	30	1,312	-1.0	-5.7	35	4.8
800	30	1,794	-3.4	-9.5	35	4.1
750	30	2,302	-6.0	-14.2	35	3.9
700	30	2,841	-8.9	-18.2	36	4.3
650	30	3,412	-12.4	-20.1	35	4.7
600	30	4,020	-16.4	-24.6	35	4.7
550	30	4,667	-20.8	-30.3	35	4.9
500	30	5,369	-25.6	-34.9	35	5.5
450	30	6,123	-30.6	-40.1	34	6.1
400	30	6,955	-36.2	-45.5	34	6.4
350	30	7,870	-42.6	-48.0	34	7.1
300	30	8,698	-48.7		35	7.7
250	30	10,089	-50.4		33	7.6
200	30	11,552	-48.8		31	7.8
175	30	12,430	-48.7		31	8.0
150	30	13,443	-48.9		30	7.6
125	30	14,641	-49.3		30	7.0
100	30	16,104	-49.5		29	5.8
80	30	17,565	-49.8		28	5.3
70	30	18,437	-50.1		28	4.5
60	30	19,442	-50.4		27	4.3
50	30	20,630	-51.0		26	3.8
40	30	22,081	-50.9		25	3.7
30	29	23,950	-49.9		24	4.7
25	29	25,143	-49.1		24	4.7
20	28	26,602	-48.7		25	5.2
15	25	28,495	-47.6		24	6.6
10	16	31,216	-43.9			
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SALEM, OREG. — 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	11.4	7.9	19	.6
1000	30	127	13.2	8.7	33	.1
950	30	563	15.4	7.2	34	.7
900	30	1,019	14.7	4.7	22	1.2
850	30	1,502	13.5	.4	21	2.2
800	30	2,010	11.4	-3.6	22	3.3
750	30	2,546	9.0	-7.3	23	4.9
700	30	3,116	6.2	-8.9	23	5.3
650	30	3,714	2.6	-13.1	23	6.1
600	30	4,362	-.8	-16.6	23	7.2
550	30	5,045	-4.9	-20.5	23	7.1
500	30	5,794	-9.8	-25.3	24	7.2
450	30	6,595	-15.4	-30.5	24	7.6
400	30	7,477	-22.0	-36.3	25	7.8
350	30	8,445	-29.5	-43.0	25	8.3
300	30	9,524	-38.4	-48.7	25	8.8
250	30	10,752	-47.6		27	8.5
200	30	12,194	-56.9		27	8.2
175	30	13,033	-59.7		26	9.4
150	30	13,993	-61.4		27	10.2
125	30	15,117	-63.3		26	8.4
100	30	16,486	-63.6		26	6.5
80	30	17,860	-61.8		25	4.5
70	30	18,689	-60.1		26	2.8
60	30	19,652	-59.2		27	1.6
50	30	20,796	-58.4		01	.6
40	30	22,205	-56.7		05	2.5
30	29	24,036	-54.5		06	2.8
25	29	25,208	-52.9		04	2.3
20	29	26,654	-50.5		04	2.4
15	28	28,544	-47.5		02	1.2
10	23	31,250	-43.2		28	1.2
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SALT LAKE CITY, UTAH — 873 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,288	13.6	5.6	16	3.1
1000	30	123				
950	30	564				
900	30	1,026				
850	30	1,512	17.2	4.5	16	4.5
800	30	2,027	14.9	1.6	17	3.0
750	30	2,573	11.3	-1.0	21	1.4
700	30	3,143	7.2	-3.6	26	1.2
650	30	3,750	2.9	-7.4	27	2.2
600	30	4,391	-1.6	-12.1	26	3.2
550	30	5,077	-6.3	-17.3	25	3.4
500	30	5,817	-11.1	-23.8	26	3.0
450	30	6,621	-16.4	-29.1	28	3.2
400	30	7,494	-22.8	-35.0	30	3.1
350	30	8,459	-30.4	-41.2	31	3.6
300	30	9,536	-38.7	-48.5	31	3.8
250	30	10,763	-48.0		29	5.3
200	30	12,207	-55.4		28	8.2
175	30	13,053	-58.2		29	8.7
150	30	14,017	-61.0		28	8.5
125	30	15,140	-64.2		28	7.2
100	29	16,500	-64.8		29	4.5
80	29	17,865	-63.4		30	2.4
70	29	18,688	-62.1		34	1.6
60	29	19,644	-60.6		03	1.4
50	28	20,783	-59.1		05	1.5
40	28	22,189	-56.8		05	2.0
30	28	24,024	-53.8		06	1.2
25	27	25,196	-52.2		08	.6
20	27	26,647	-50.0		32	.5
15	26	28,533	-47.9		30	1.1
10	22	31,228	-43.7		08	1.2
7	12	33,639	-40.1			
5	8	35,935	-35.7			

SAN DIEGO, CALIF. — 997 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	19.3	16.6	31	.2
1000	30	96				
950	30	538	17.5	14.2	13	.4
900	30	1,001	18.1	6.0	35	.4
850	30	1,491	18.1	2.5	14	.1
800	30	2,008	15.0	.5	14	1.7
750	30	2,550	11.5	-2.5	14	2.7
700	30	3,124	7.5	-5.8	16	3.4
650	30	3,731	3.7	-9.8	17	3.3
600	30	4,378	.1	-17.0	19	3.8
550	30	5,063	-3.9	-21.1	21	3.8
500	30	5,817	-8.6	-25.7	24	4.8
450	30	6,623	-13.9	-30.7	23	7.3
400	29	7,514	-20.1	-37.5	24	9.4
350	29	8,490	-27.2	-43.1	24	12.3
300	29	9,583	-34.7	-49.3	25	16.0
250	29	10,834	-43.2		25	19.1
200	29	12,306	-52.9		25	19.6
175	29	13,158	-57.9		25	19.1
150	29	14,118	-63.2		25	14.6
125	29	15,224	-68.1		25	10.7
100	29	16,557	-69.3		26	3.1
80	29	17,895	-66.6		08	2.1
70	29	18,707	-63.9		08	3.6
60	29	19,655	-61.9		09	5.4
50	29	20,790	-59.1		09	5.7
40	29	22,196	-56.7		08	5.6
30	28	24,032	-53.3		09	6.4
25	27	25,209	-51.8		10	6.6
20	27	26,662	-49.6		09	6.3
15	26	28,555	-47.1		08	6.0
10	20	31,256	-43.3		08	8.8
7	9	33,638	-41.1			
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* SAN JUAN, P. R. — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	25.7	21.3	12	1.4
1000	30	131	25.3	20.7	10	4.3
950	30	580	22.4	18.2	10	7.1
900	30	1,051	19.6	14.3	10	7.4
850	30	1,542	16.8	10.1	10	7.1
800	30	2,057	14.3	6.0	09	6.6
750	30	2,597	11.7	1.1	10	5.4
700	30	3,175	8.7	-4.5	10	4.7
650	30	3,779	5.1	-9.1	10	4.4
600	30	4,434	1.4	-14.8	10	4.1
550	30	5,123	-2.8	-19.8	12	3.1
500	30	5,878	-7.6	-24.3	11	2.9
450	30	6,684	-12.8	-28.7	12	2.5
400	30	7,580	-18.8	-33.7	20	1.1
350	30	8,561	-25.9	-40.1	26	1.7
300	30	9,658	-34.4	-48.5	29	1.7
250	30	10,906	-44.4		29	2.5
200	30	12,363	-56.2		28	4.6
175	30	13,199	-62.5		29	5.9
150	30	14,137	-68.0		29	5.9
125	30	15,224	-70.3		28	4.1
100	30	16,543	-72.1		06	.4
80	30	17,861	-70.0		08	4.9
70	30	18,661	-66.7		08	8.0
60	30	19,599	-63.8		08	10.5
50	30	20,725	-60.7		09	13.1
40	29	22,124	-57.5		09	15.6
30	29	23,958	-53.5		09	19.2
25	28	25,139	-50.8		09	20.7
20	28	26,601	-48.1		09	23.3
15	26	28,512	-44.7		09	25.1
10	23	31,251	-40.8		09	26.2
7	19	33,691	-36.7		09	23.2
5	7	35,997	-33.4			

SAN NICOLAS, CALIF. — 991 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	174	16.5	15.2	30	1.9
1000	30	97				
950	30	537	18.4	9.4	34	1.3
900	30	1,002	19.9	3.7	01	1.4
850	30	1,493	18.3	.3	01	.9
800	30	2,009	14.9	-1.1	07	.6
750	30	2,551	11.2	-2.9	09	.8
700	30	3,123	7.4	-7.3	12	.7
650	30	3,728	3.4	-10.1	16	.8
600	30	4,373	-.6	-14.4	22	.6
550	30	5,063	-4.5	-19.2	25	1.3
500	30	5,807	-9.2	-26.6	26	2.9
450	30	6,613	-14.8	-30.8	26	4.5
400	30	7,493	-21.3	-37.6	26	6.0
350	30	8,464	-28.5	-43.2	25	9.1
300	30	9,552	-35.8	-50.3	26	12.2
250	30	10,797	-44.0	-57.8	26	15.4
200	30	12,264	-53.1	-65.7	25	17.8
175	30	13,115	-58.1	-70.2	25	16.8
150	30	14,075	-62.9	-74.2	25	14.5
125	30	15,185	-67.3		25	10.5
100	29	16,524	-68.8		28	2.8
80	29	17,868	-65.9		07	2.4
70	29	18,683	-63.9		08	4.0
60	29	19,633	-61.5		09	5.5
50	29	20,770	-59.1		09	5.4
40	29	22,177	-56.6		09	6.2
30	29	24,016	-53.4		09	7.1
25	29	25,193	-52.0		09	6.7
20	29	26,646	-50.0		09	6.8
15	29	28,537	-47.6		08	6.0
10	28	31,234	-44.6		08	6.0
7	25	33,630	-41.5		09	9.3
5	19	35,947	-37.3		10	9.4
4	10	37,449	-35.8			
3	6	39,490	-33.8			

* SAULT STE MARIE, MICH. — 993 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	8.5	6.9	04	1.3
1000	30	162				
950	30	589	11.1	6.1	28	1.9
900	30	1,041	9.2	2.7	29	3.4
850	30	1,513	7.1	-.6	30	3.8
800	30	2,011	5.2	-4.3	29	3.7
750	30	2,535	2.7	-6.6	29	4.8
700	30	3,092	.6	-12.6	29	5.3
650	30	3,682	-2.2	-15.6	29	6.7
600	30	4,317	-5.5	-19.9	28	6.9
550	30	4,990	-9.6	-24.2	28	7.1
500	30	5,724	-14.3	-29.0	28	8.0
450	30	6,512	-19.5	-33.3	28	9.0
400	30	7,381	-25.6	-37.6	28	9.1
350	30	8,336	-32.6	-42.5	29	10.1
300	30	9,404	-40.6	-48.2	29	10.5
250	30	10,623	-49.1		29	11.2
200	30	12,060	-55.9		30	11.2
175	30	12,907	-56.8		30	10.9
150	30	13,882	-57.5		30	9.2
125	30	15,029	-58.9		30	8.4
100	30	16,428	-59.0		30	5.9
80	30	17,831	-57.7		30	4.7
70	30	18,674	-56.8		31	3.3
60	30	19,652	-56.2		31	2.8
50	30	20,813	-55.3		31	1.9
40	29	22,240	-54.0		31	1.8
30	29	24,095	-51.8		28	2.3
25	28	25,276	-50.3		29	2.6
20	26	26,736	-48.0		29	3.0
15	26	28,645	-44.9		28	3.5
10	22	31,383	-40.4		26	4.3
7	17	33,878	-35.8		27	4.0
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SHEMYA, ALASKA — 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	38	7.1	5.5	30	3.4
1000	30	83			30	4.0
950	30	501	4.4	1.0	30	6.9
900	30	942	2.0	-2.5	31	6.7
850	30	1,402	-.3	-6.7	31	7.4
800	30	1,885	-2.5	-11.3	31	7.2
750	30	2,396	-4.9	-15.6	31	7.7
700	30	2,936	-7.7	-18.9	30	8.7
650	30	3,505	-10.8	-21.8	30	9.6
600	30	4,121	-14.3	-26.2	30	10.6
550	30	4,771	-18.4	-30.0	30	11.6
500	30	5,482	-22.8	-34.4	30	13.7
450	30	6,243	-27.6	-39.1	30	13.7
400	30	7,087	-32.8	-42.7	30	17.3
350	30	8,016	-38.8	-42.9	30	19.9
300	30	9,060	-45.1	-41.4	30	20.6
250	30	10,264	-49.9		30	23.7
200	30	11,720	-50.8		29	23.8
175	30	12,588	-51.6		29	23.8
150	30	13,587	-52.0		29	20.8
125	30	14,765	-52.9		29	17.6
100	30	16,203	-53.2		29	15.4
80	30	17,638	-53.6		29	10.9
70	30	18,495	-53.6		29	9.8
60	30	19,487	-53.5		28	7.8
50	30	20,659	-53.3		28	5.9
40	30	22,097	-52.9		29	4.9
30	30	23,956	-51.9		28	4.2
25	30	25,140	-51.0		27	3.6
20	29	26,596	-49.6		27	4.7
15	29	28,488	-47.9		26	4.0
10	26	31,170	-45.1		27	8.8
7	13	33,552	-42.2		27	12.1
5	8	35,867	-40.0			
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* SHREVEPORT, LA. — 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	18.1	16.1	09	1.1
1000	30	139	18.8	15.9	10	1.7
950	30	587	18.5	13.6	14	2.8
900	30	1,044	16.1	11.2	15	1.7
850	30	1,529	13.7	7.3	07	.1
800	30	2,039	11.5	3.4	34	1.1
750	30	2,578	8.9	-.6	31	1.5
700	30	3,146	6.0	-4.3	30	1.8
650	30	3,750	2.6	-8.9	29	2.3
600	30	4,394	-.9	-13.4	27	2.3
550	30	5,084	-4.9	-18.2	26	3.5
500	30	5,828	-9.6	-22.6	27	4.0
450	30	6,632	-14.8	-28.5	28	5.1
400	30	7,518	-21.1	-35.0	28	6.3
350	30	8,489	-28.6	-41.6	28	8.1
300	30	9,574	-36.9	-49.5	28	11.0
250	30	10,811	-46.0		28	15.3
200	30	12,265	-55.1		28	17.8
175	30	13,108	-59.7		28	16.8
150	30	14,062	-64.1		29	15.0
125	30	15,166	-67.9		30	11.4
100	29	16,502	-68.4		31	6.2
80	29	17,852	-64.7		01	2.4
70	29	18,671	-62.6		05	2.5
60	29	19,626	-60.1		08	3.6
50	29	20,769	-58.0		08	4.4
40	29	22,181	-55.9		09	6.3
30	29	24,026	-52.6		09	7.8
25	29	25,208	-50.8		09	8.2
20	29	26,667	-48.4		08	7.9
15	29	28,568	-46.2		08	8.2
10	26	31,282	-42.5		08	9.3
7	21	33,708	-38.8		09	7.6
5	8	36,044	-35.5			
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SPOKANE, WASH. — 932 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	717	12.5	3.7	17	1.9
1000	30	114				
950	30	546				
900	30	1,008	17.4	2.9	20	2.1
850	30	1,495	15.6	.0	23	2.7
800	30	2,006	12.2	-1.9	24	3.5
750	30	2,537	9.2	-5.7	24	4.8
700	30	3,111	5.7	-9.3	25	6.4
650	30	3,707	2.0	-11.6	25	7.0
600	30	4,354	-2.3	-15.0	26	8.1
550	30	5,032	-6.6	-20.6	26	8.2
500	30	5,779	-11.2	-25.9	26	8.7
450	30	6,572	-16.7	-30.0	26	10.4
400	30	7,454	-22.7	-35.2	27	11.2
350	30	8,419	-30.0	-42.0	27	12.1
300	30	9,497	-38.6	-48.6	27	11.0
250	30	10,725	-47.8		27	12.1
200	30	12,168	-56.1		28	11.7
175	30	13,010	-59.1		27	11.6
150	30	13,973	-60.6		28	11.0
125	30	15,102	-62.4		27	9.3
100	30	16,479	-62.0		27	6.7
80	30	17,864	-60.4		26	5.3
70	30	18,698	-59.2		27	4.2
60	30	19,665	-58.3		29	1.9
50	30	20,816	-57.0		34	.9
40	30	22,232	-56.1		02	1.4
30	30	24,069	-53.9		04	2.1
25	30	25,244	-52.2		03	2.0
20	30	26,694	-50.5		01	1.9
15	30	28,581	-48.1		01	1.0
10	24	31,287	-43.7		29	2.4
7	14	33,717	-39.2			
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SWAN ISLAND, W. I. — 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.6	23.9	12	3.8
1000	30	102	25.9	23.4	12	4.0
950	30	557	22.8	20.6	12	5.2
900	30	1,024	20.2	16.4	12	6.3
850	30	1,517	17.5	12.0	12	6.2
800	30	2,033	14.6	7.2	12	5.4
750	30	2,579	11.7	3.9	13	5.8
700	30	3,152	8.5	-.8	13	5.8
650	30	3,762	5.2	-5.8	12	5.3
600	30	4,412	1.3	-9.7	12	4.6
550	30	5,105	-2.5	-15.0	11	4.8
500	30	5,859	-6.9	-20.7	10	4.3
450	29	6,678	-11.8	-24.9	10	3.1
400	29	7,570	-17.4	-31.4	08	3.4
350	29	8,557	-24.2	-37.0	05	3.6
300	29	9,663	-32.5	-44.2	02	3.7
250	29	10,921	-42.7		02	5.9
200	28	12,386	-55.1		01	6.4
175	28	13,225	-62.0		01	7.5
150	28	14,162	-69.0		01	8.3
125	28	15,236	-74.7		02	7.3
100	27	16,529	-74.5		05	5.6
80	27	17,841	-70.5		09	6.6
70	27	18,637	-67.6		09	7.8
60	26	19,571	-64.9		08	10.4
50	25	20,692	-61.0		09	13.0
40	24	22,090	-57.5		09	16.2
30	24	23,922	-53.4		09	20.0
25	24	25,100	-50.8		09	22.0
20	24	26,562	-48.0		09	24.7
15	21	28,474	-45.3		09	28.4
10	17	31,208	-41.1		09	29.7
7	8	33,641	-39.4			

TAMPA, FLA. — 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	22.4	20.9	04	2.2
1000	30	131	22.8	20.1	07	3.0
950	30	581	21.2	17.4	08	3.3
900	30	1,047	18.9	14.1	05	.9
850	30	1,538	16.2	11.1	29	1.2
800	30	2,052	13.5	6.7	29	2.1
750	30	2,592	11.1	2.6	28	2.5
700	30	3,169	8.2	-2.4	28	3.1
650	30	3,776	4.8	-7.1	27	3.5
600	30	4,427	1.1	-12.1	28	3.9
550	30	5,118	-2.6	-17.4	27	3.6
500	30	5,874	-7.1	-22.1	27	3.7
450	30	6,683	-12.5	-27.3	27	5.2
400	30	7,577	-18.6	-32.4	27	4.9
350	30	8,559	-25.5	-39.0	26	5.4
300	29	9,658	-34.0	-46.8	26	8.3
250	29	10,909	-43.8		27	9.2
200	29	12,370	-55.1		28	11.5
175	29	13,212	-60.7		28	12.5
150	29	14,158	-66.3		29	11.3
125	28	15,247	-70.7		29	7.9
100	28	16,568	-70.1		30	3.8
80	28	17,906	-66.3		05	2.8
70	28	18,718	-64.0		08	5.5
60	28	19,670	-61.4		09	8.5
50	28	20,810	-58.0		09	9.4
40	28	22,225	-55.3		09	10.2
30	28	24,073	-52.3		09	11.2
25	28	25,257	-50.4		09	11.6
20	28	26,721	-47.9		09	12.2
15	27	28,628	-45.0		08	11.3
10	18	31,354	-40.9		09	10.4
7						

TOPEKA, KANS. — 987 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	269	12.7	10.7	12	.7
1000	30	155				
950	30	592	16.2	9.8	17	3.7
900	30	1,050	14.7	7.2	21	3.3
850	30	1,532	12.2	4.0	24	2.5
800	30	2,038	9.7	.3	28	2.2
750	30	2,570	7.2	-3.4	29	3.0
700	30	3,137	4.0	-5.7	30	3.2
650	30	3,731	.9	-9.8	30	3.6
600	29	4,378	-2.3	-15.1	29	4.4
550	29	5,058	-6.1	-18.8	28	4.6
500	29	5,804	-10.6	-24.8	28	6.1
450	29	6,603	-16.2	-30.1	28	6.8
400	29	7,483	-22.7	-35.2	28	7.6
350	29	8,450	-30.1	-41.7	28	8.9
300	29	9,529	-38.5	-47.9	28	10.0
250	29	10,759	-48.0		27	12.4
200	29	12,202	-56.3		28	14.1
175	29	13,045	-58.9		29	13.7
150	29	14,008	-60.8		29	13.4
125	29	15,136	-63.3		30	11.2
100	29	16,503	-64.1		30	6.6
80	29	17,875	-62.2		32	4.2
70	29	18,703	-60.5		34	2.6
60	29	19,667	-59.0		01	1.7
50	29	20,815	-57.2		04	.6
40	29	22,234	-55.0		04	.9
30	27	24,087	-52.0		05	1.5
25	27	25,273	-50.1		04	1.5
20	25	26,730	-48.0		32	.2
15	23	28,633	-45.4		04	1.6
10	13	31,371	-41.3			
7						

+ TRUK, CAROLINE IS. — 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.4	24.4	25	2.1
1000	30	95	27.4	22.6	25	2.2
950	30	548	23.4	18.3	24	3.7
900	30	1,021	20.7	14.4	25	4.0
850	30	1,514	18.0	10.8	25	3.8
800	30	2,032	15.3	7.4	22	2.0
750	30	2,577	12.5	3.0	21	1.9
700	30	3,154	9.4	-.8	21	1.5
650	30	3,766	6.0	-3.9	15	1.4
600	30	4,418	2.0	-7.5	11	2.6
550	30	5,112	-1.6	-12.6	11	3.6
500	30	5,871	-5.9	-17.8	11	4.8
450	30	6,690	-10.5	-23.8	10	6.3
400	30	7,589	-16.0	-29.7	10	7.2
350	30	8,583	-22.6	-36.8	10	9.3
300	30	9,697	-30.8	-44.4	09	12.0
250	30	10,965	-41.0		07	14.3
200	30	12,442	-53.6		07	19.0
175	30	13,288	-60.8		07	21.1
150	30	14,229	-68.4		07	22.7
125	30	15,305	-75.1		08	19.7
100	30	16,587	-76.9		08	12.5
80	30	17,888	-71.0		09	7.4
70	30	18,685	-67.1		09	6.1
60	30	19,623	-63.7		10	4.6
50	30	20,747	-61.9		09	4.2
40	30	22,133	-59.4		09	8.9
30	26	23,949	-55.5		09	18.7
25	24	25,116	-53.7		10	26.5
20	21	26,558	-50.1		09	33.0
15	17	28,450	-45.6		09	38.7
10	8	31,208	-39.4			
7	6	33,670	-35.3			

* TUCSON, ARIZ. — 923 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	21.6	13.4	13	4.0
1000	30	83				
950	30	533				
900	30	1,007	23.1	11.5	13	4.5
850	30	1,504	20.6	9.0	13	3.6
800	30	2,025	17.0	6.8	14	2.6
750	30	2,569	12.8	4.2	16	3.1
700	30	3,148	8.6	1.1	18	3.8
650	30	3,751	4.1	-2.4	18	4.8
600	30	4,403	-.2	-8.3	20	5.5
550	30	5,089	-4.0	-15.5	21	4.8
500	30	5,842	-8.2	-21.7	22	4.9
450	30	6,648	-13.1	-28.3	24	6.3
400	30	7,540	-19.7	-33.5	25	8.1
350	30	8,518	-26.7	-39.8	26	10.7
300	30	9,613	-34.7	-46.8	26	14.8
250	29	10,865	-43.8		26	17.9
200	29	12,330	-54.0		26	19.1
175	29	13,177	-59.5		26	19.1
150	29	14,128	-65.1		27	16.8
125	29	15,225	-69.9		27	11.7
100	28	16,545	-71.0		29	4.4
80	27	17,876	-66.5		05	2.7
70	27	18,689	-63.9		08	4.3
60	26	19,638	-61.6		09	5.7
50	26	20,775	-59.2		09	6.3
40	25	22,182	-56.5		09	7.1
30	24	24,021	-53.5		09	7.3
25	23	25,198	-51.3		09	7.3
20	22	26,650	-49.4		08	6.6
15	22	28,546	-47.0		09	7.5
10	20	31,257	-42.8		07	8.4
7	18	33,688	-38.6		10	10.7

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1967

* VANDENBERG AFB, CALIF. 1001 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	100	14.3	13.5	03	.2
1000	28	106			36	.3
950	28	547	17.5	9.5	01	2.9
900	28	1,008	20.4	3.5	03	3.2
850	28	1,500	18.0	1.2	05	3.0
800	28	2,016	14.5	-.6	06	2.3
750	28	2,551	10.9	-4.4	09	1.6
700	28	3,130	7.0	-8.3	08	1.2
650	28	3,733	3.1	-11.9	08	.9
600	28	4,380	-.8	-16.2	08	1.6
550	28	5,061	-4.8	-21.2	04	.9
500	28	5,814	-9.3	-26.1	33	1.6
450	28	6,616	-15.0	-31.2	34	1.9
400	28	7,501	-21.3	-37.7	33	2.5
350	28	8,472	-28.6	-43.3	31	3.3
300	28	9,558	-36.8	-50.8	29	5.1
250	28	10,798	-45.1		28	8.4
200	28	12,260	-53.9		26	12.2
175	28	13,109	-58.1		26	13.3
150	28	14,069	-62.7		25	12.1
125	28	15,181	-66.6		26	8.7
100	28	16,525	-67.9		26	3.5
80	28	17,872	-65.4		06	1.2
70	28	18,688	-63.4		08	2.7
60	28	19,638	-61.5		09	4.2
50	28	20,774	-59.1		09	4.4
40	28	22,181	-56.7		08	5.8
30	25	24,019	-54.0		10	5.7
25	25	25,194	-51.7		09	6.3
20	25	26,647	-49.7		09	5.5
15	25	28,538	-47.6		08	6.1
10	21	31,241	-43.4		09	7.5
7	16	33,668	-40.0		10	8.4
5						

VICTORIA, TEXAS 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	21.6	20.1	04	2.3
1000	30	123	22.1	19.7	07	2.6
950	30	568	20.4	16.7	12	4.3
900	30	1,035	17.6	13.1	11	4.2
850	30	1,523	14.9	10.1	11	3.5
800	30	2,034	12.5	4.4	11	2.8
750	30	2,571	10.0	-1.1	10	2.0
700	30	3,145	7.0	-4.3	11	2.1
650	30	3,746	3.9	-8.2	10	2.0
600	30	4,399	.4	-12.5	13	1.2
550	30	5,086	-3.2	-16.6	20	1.1
500	30	5,841	-7.8	-20.0	28	2.4
450	29	6,652	-13.1	-26.3	28	4.5
400	29	7,543	-19.0	-32.6	29	6.4
350	29	8,523	-26.1	-38.8	29	8.2
300	29	9,620	-34.5	-46.5	29	10.3
250	29	10,869	-44.1		29	12.2
200	29	12,331	-54.8		29	14.9
175	29	13,174	-60.8		30	14.6
150	29	14,119	-66.4		30	13.7
125	28	15,205	-70.9		31	9.8
100	28	16,521	-71.6		33	4.4
80	28	17,850	-67.7		04	4.0
70	28	18,658	-65.0		08	5.9
60	28	19,603	-62.2		09	6.5
50	28	20,737	-59.5		09	7.2
40	27	22,142	-56.4		09	9.7
30	26	23,984	-53.0		09	11.4
25	26	25,169	-50.9		09	11.5
20	26	26,625	-48.5		09	10.0
15	26	28,526	-46.3		09	9.8
10	20	31,227	-43.6		08	10.1
7	10	33,628	-41.5			
5						

* WAKE IS., PACIFIC AREA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	24	5	26.7	24.6	17	3.1
1000	24	89	26.1	24.1	16	3.1
950	24	538	23.0	21.4	18	4.1
900	24	1,014	20.5	17.5	18	4.6
850	24	1,507	18.0	14.1	19	4.4
800	24	2,025	15.3	11.0	19	4.2
750	24	2,568	12.5	8.2	19	4.1
700	24	3,148	9.7	4.2	20	3.7
650	24	3,757	6.3	.7	21	3.7
600	24	4,415	2.7	-3.8	20	2.8
550	24	5,112	-1.0	-7.6	18	2.2
500	24	5,872	-5.0	-12.5	15	1.4
450	24	6,694	-9.8	-17.7	10	1.6
400	24	7,594	-15.4	-24.5	13	1.4
350	24	8,589	-22.3	-31.8	11	2.2
300	24	9,704	-30.4	-39.5	09	.6
250	24	10,973	-40.7	-47.1	29	.9
200	23	12,453	-53.2		34	3.0
175	22	13,298	-60.4		34	5.3
150	22	14,242	-67.8		36	6.5
125	21	15,318	-75.1		05	8.1
100	14	16,600	-77.9		07	11.8
80	9	17,880	-72.5			
70	[illegible]	18,678	-69.0			
60	8	19,605	-65.9			
50	8	20,721	-62.2			
40	8	22,111	-58.2			
30	8	23,939	-54.0			
25	8	25,114	-52.2			
20	5	26,564	-48.9			
15	5	28,467	-45.4			
10						
7						
5						

* WALLOPS IS., VA. NASA 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	14.6	13.4	01	1.4
1000	30	161	17.2	11.9	02	3.1
950	30	594	15.1	9.1	03	3.3
900	30	1,055	12.5	5.3	03	2.5
850	30	1,534	11.0	1.2	36	1.5
800	30	2,039	8.9	-2.2	30	1.7
750	30	2,568	6.6	-6.4	28	2.3
700	30	3,135	4.3	-10.8	29	3.0
650	30	3,728	1.3	-14.1	27	4.3
600	30	4,376	-2.0	-18.8	28	5.9
550	29	5,051	-6.0	-21.5	27	7.2
500	29	5,801	-11.0	-26.0	26	8.3
450	29	6,596	-16.7	-30.5	27	9.5
400	29	7,478	-22.6	-37.3	26	10.4
350	29	8,444	-29.9	-42.6	26	12.1
300	29	9,523	-38.2	-48.7	26	13.0
250	29	10,754	-47.2		26	16.2
200	29	12,200	-56.0		26	17.9
175	29	13,043	-59.5		26	16.5
150	29	14,002	-61.9		27	14.5
125	29	15,124	-63.9		27	10.9
100	29	16,490	-63.9		26	6.6
80	29	17,864	-61.6		27	3.3
70	29	18,694	-59.8		27	1.9
60	29	19,661	-58.0		25	1.1
50	28	20,812	-56.4		24	.3
40	28	22,234	-54.5		08	1.5
30	27	24,083	-51.7		08	2.3
25	27	25,270	-49.9		08	3.1
20	25	26,733	-47.5		06	3.7
15	24	28,638	-45.2		08	4.2
10	19	31,351	-42.0		09	3.7
7	8	33,760	-38.9			
5						

WASHINGTON DULLES INT. AP 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	85	11.7	10.7	33	.5
1000	29	165	13.9	10.8	33	1.2
950	29	604	15.0	8.0	36	2.1
900	29	1,056	12.4	4.8	36	1.7
850	29	1,534	10.4	-.6	35	2.2
800	29	2,038	6.6	-5.2	33	1.5
750	29	2,573	6.3	-8.6	30	2.0
700	29	3,133	3.8	-11.5	28	2.5
650	29	3,734	.9	-14.0	27	3.4
600	29	4,371	-2.5	-18.1	26	5.0
550	29	5,055	-6.3	-21.7	27	6.7
500	29	5,796	-11.1	-28.1	27	6.4
450	29	6,596	-16.9	-32.6	27	9.3
400	29	7,470	-23.4	-38.0	27	10.9
350	29	8,433	-30.6	-43.8	26	12.7
300	29	9,511	-38.6	-50.3	25	13.9
250	29	10,739	-47.7		26	14.7
200	28	12,179	-56.4		26	17.2
175	28	13,022	-58.8		26	16.7
150	28	13,985	-61.0		26	14.0
125	28	15,113	-62.4		26	11.2
100	28	16,487	-63.1		26	7.4
80	28	17,867	-60.7		27	4.3
70	28	18,699	-59.6		28	2.1
60	28	19,667	-58.0		27	.9
50	28	20,820	-56.3		33	.4
40	25	22,251	-53.9		06	.9
30	23	24,105	-51.0		04	1.0
25	21	25,293	-49.6		04	.9
20	19	26,756	-47.1		04	.4
15	18	28,671	-45.3		08	.7
10	14	31,380	-43.2		10	1.8
7	9	33,802	-38.8			
5	7	36,107	-36.1			

WINNEMUCCA, NEV. 870 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,310	10.4	1.2	12	1.3
1000	30	123				
950	30	562				
900	30	1,024				
850	30	1,503	16.1	2.5	12	1.4
800	30	2,018	14.9	-.4	17	.3
750	30	2,555	11.5	-2.8	21	1.0
700	30	3,132	7.4	-6.1	21	1.3
650	30	3,731	3.1	-8.3	21	1.5
600	30	4,381	-1.2	-12.1	19	2.0
550	30	5,065	-5.6	-17.4	18	1.6
500	30	5,811	-10.0	-23.3	13	1.5
450	30	6,609	-15.5	-29.2	13	.8
400	30	7,494	-22.1	-34.5	10	.7
350	30	8,462	-29.5	-41.2	07	1.1
300	30	9,543	-38.2	-49.1	05	2.2
250	30	10,771	-47.8		03	1.7
200	30	12,213	-55.7		33	1.7
175	29	13,055	-58.3		27	3.5
150	29	14,018	-60.9		26	5.5
125	29	15,141	-64.0		27	5.5
100	29	16,503	-65.0		27	4.1
80	29	17,870	-63.0		28	2.4
70	28	18,693	-61.9		30	1.3
60	27	19,648	-60.6		03	1.6
50	27	20,787	-59.1		05	1.7
40	24	22,201	-56.8		06	2.4
30	22	24,033	-53.8		06	1.8
25	20	25,215	-51.5		06	1.1
20	20	26,670	-49.5		27	.6
15	18	28,563	-46.8		30	.4
10	5	31,297	-43.7			
7						

WINSLOW, ARIZ. 852 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	1,492	14.4	6.3	20	.9
1000	29	116				
950	29	563				
900	29	1,024				
850	29	1,515			20	1.2
800	29	2,030	15.6	5.2	22	1.7
750	29	2,574	12.7	2.4	19	2.3
700	29	3,152	8.7	-.4	19	2.2
650	29	3,756	3.8	-2.7	19	2.6
600	29	4,406	-1.1	-8.2	19	3.7
550	29	5,089	-5.4	-15.7	21	3.6
500	29	5,837	-9.9	-20.9	23	3.7
450	29	6,639	-14.6	-27.8	23	4.3
400	29	7,526	-20.9	-33.6	24	5.9
350	29	8,499	-28.1	-39.8	25	7.0
300	29	9,586	-36.5	-47.1	25	10.0
250	29	10,825	-45.4		26	14.2
200	29	12,283	-54.4		27	18.2
175	29	13,130	-58.8		27	18.0
150	29	14,087	-63.4		27	15.6
125	29	15,195	-67.7		28	10.1
100	29	16,531	-69.1		29	5.4
80	29	17,673	-66.3		01	1.5
70	29	18,685	-64.3		06	2.5
60	29	19,631	-62.0		07	3.1
50	29	20,765	-59.5		09	3.8
40	29	22,170	-56.8		09	4.2
30	28	24,005	-53.8		09	5.0
25	28	25,181	-52.0		09	5.2
20	28	26,634	-49.7		09	4.6
15	26	28,524	-47.8		08	5.6
10	20	31,228	-44.3		07	5.8
7	5	33,643	-40.0			

YAKUTAT, ALASKA 1003 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	12	7.2	6.4	09	2.8
1000	30	37			11	3.9
950	30	460	8.2	5.4	14	6.5
900	30	906	5.5	2.4	15	7.0
850	30	1,372	2.6	-.6	16	7.1
800	30	1,860	-.4	-3.7	16	7.7
750	30	2,373	-3.6	-7.3	16	7.7
700	30	2,916	-6.9	-10.8	17	7.7
650	30	3,487	-10.4	-15.1	18	8.4
600	30	4,104	-14.2	-20.4	18	8.0
550	30	4,755	-18.5	-24.0	19	8.1
500	30	5,463	-23.4	-30.3	20	9.3
450	30	6,222	-28.8	-35.4	20	10.5
400	30	7,060	-34.4	-41.1	21	11.0
350	30	7,982	-40.7	-41.6	21	11.7
300	30	9,016	-47.2		21	14.4
250	30	10,211	-50.6		22	14.5
200	30	11,666	-49.5		23	14.1
175	29	12,539	-49.4		23	13.1
150	29	13,548	-49.8		23	13.4
125	28	14,732	-50.5		22	12.5
100	27	16,184	-50.5		22	11.5
80	27	17,637	-50.7		23	10.0
70	27	18,507	-50.6		23	8.8
60	27	19,511	-50.9		23	8.3
50	27	20,696	-51.1		23	7.2
40	27	22,146	-51.5		24	5.8
30	24	24,009	-51.4		23	3.8
25	23	25,196	-51.4		24	3.9
20	22	26,650	-51.0		26	3.8
15	21	28,523	-50.0		27	3.3
10	15	31,195	-47.5		27	4.5
7	5	33,541	-46.0			

+ YAP, CAROLINE IS. 1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	17	28.3	24.8	25	2.9
1000	30	84	27.5	23.6	25	4.1
950	30	530	23.9	19.2	26	8.7
900	30	1,009	21.0	14.9	26	8.6
850	30	1,503	18.3	11.7	26	7.1
800	30	2,021	15.5	8.2	26	6.0
750	30	2,564	12.6	4.1	25	5.3
700	30	3,144	9.6	.2	25	3.9
650	30	3,754	6.2	-2.9	25	3.8
600	30	4,410	2.8	-8.0	23	2.7
550	29	5,104	-1.2	-13.9	18	1.5
500	29	5,865	-5.5	-19.7	16	2.7
450	29	6,680	-10.3	-24.0	12	2.5
400	28	7,584	-16.2	-29.8	11	5.3
350	28	8,577	-22.9	-36.4	09	7.4
300	28	9,688	-31.1	-43.6	08	9.5
250	28	10,955	-41.4		07	14.2
200	28	12,429	-54.0		07	19.9
175	28	13,273	-61.1		08	22.9
150	28	14,214	-68.7		08	23.6
125	27	15,286	-75.4		09	22.2
100	27	16,567	-77.3		08	17.0
80	27	17,866	-71.1		09	11.4
70	27	18,662	-67.5		08	10.0
60	27	19,595	-65.0		08	9.1
50	27	20,713	-62.6		09	9.8
40	27	22,098	-59.5		09	15.2
30	26	23,919	-54.9		09	22.5
25	25	25,085	-52.8		09	29.6
20	23	26,535	-49.5		09	37.1
15	20	28,430	-45.9		09	42.4
10	19	31,160	-40.4		09	44.7
7	12	33,592	-37.0			

YUCCA FLAT, NEV. 881 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,196	14.7	5.1	31	.8
1000	30	108				
950	30	547				
900	30	1,015				
850	30	1,504	18.7	6.7	36	.9
800	30	2,022	15.5	4.3	12	1.3
750	30	2,560	11.7	2.2	16	2.7
700	30	3,140	7.2	-1.1	15	3.4
650	30	3,739	2.5	-4.7	15	4.1
600	30	4,388	-1.9	-10.3	16	4.5
550	30	5,067	-5.9	-16.3	17	4.3
500	30	5,817	-10.3	-21.6	17	4.0
450	30	6,615	-15.5	-27.6	19	4.0
400	30	7,501	-22.0	-33.0	21	4.3
350	30	8,469	-29.4	-39.2	22	4.6
300	30	9,550	-37.6	-46.8	23	5.5
250	30	10,787	-45.5		24	8.8
200	30	12,247	-53.5		25	12.3
175	30	13,098	-57.6		26	11.8
150	30	14,063	-61.3		26	11.0
125	30	15,184	-64.8		26	10.0
100	28	16,540	-66.1		28	4.7
80	27	17,899	-63.9		02	1.1
70	27	18,721	-61.9		07	2.3
60	27	19,678	-59.9		10	2.2
50	27	20,821	-58.0		06	2.4
40	27	22,233	-56.0		07	3.5
30	25	24,074	-53.3		08	3.9
25	25	25,254	-51.4		10	3.7
20	25	26,708	-49.8		08	3.5
15	24	28,597	-47.7		07	3.1
10	13	31,285	-44.4			
7						

YUMA, ARIZ. 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	20	131	24.3	14.8	03	.7
1000	20	74				
950	20	524	25.2	9.2	16	.6
900	20	999	22.6	6.4	18	1.6
850	20	1,494	19.2	3.7	17	3.0
800	20	2,012	15.6	1.0	17	3.4
750	20	2,553	11.3	-1.4	17	5.0
700	20	3,128	7.0	-5.9	17	6.2
650	20	3,724	3.1	-12.2	18	6.9
600	20	4,377	-1.1	-14.7	18	6.5
550	20	5,058	-5.0	-21.1	20	6.1
500	20	5,808	-9.6	-28.1	22	5.9
450	20	6,606	-14.9	-32.8	23	7.1
400	20	7,496	-21.3	-37.9	25	9.3
350	20	8,467	-28.5	-44.4	25	12.6
300	19	9,555	-36.2	-51.0	25	17.6
250	19	10,797	-45.1		26	20.7
200	19	12,257	-54.5		26	22.6
175	19	13,101	-59.7		27	20.6
150	18	14,045	-64.1		27	17.6
125	12	15,149	-68.3			
100	6	16,455	-68.8			
80	5	17,776	-66.4			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. SEPTEMBER 1967

BLUE HILL OBS., MASS.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Sep. 2	----	----	1.11	1.25	1.40	1.21	1.01	0.89	0.79
4-----	0.82	0.89	1.00	1.18	1.34	.96	.77	.65	.53
5-----	.65	.75	.87	1.06	1.23	1.01	.79	.62	.58
6-----	.62	.69	.78	.94	----	----	----	----	----
7-----	.87	.96	1.08	1.23	1.35	1.08	.84	.72	.60
8-----	.48	.60	.71	.91	1.18	.99	.76	.62	.53
11----	.91	.99	1.10	1.24	1.44	1.28	1.13	1.04	.91
12----	.89	.94	1.06	1.24	1.41	1.24	1.10	.99	.91
13----	.83	.91	1.03	1.21	1.36	1.22	1.07	.94	.71
14----	.79	.87	.98	1.12	1.29	1.13	.98	.84	.75
17----	----	.84	.94	1.10	1.27	1.01	.89	.75	.58
18----	.55	.75	----	----	----	----	----	----	----
19----	.64	.74	.87	1.03	----	----	----	----	----
25----	.79	.89	1.04	1.18	1.33	1.18	1.01	.89	.79
26----	.82	.93	1.05	1.18	1.29	1.08	.89	.78	.70
27----	----	----	----	1.05	1.21	.93	.78	.65	.55
Averages	0.74	0.84	0.97	1.13	1.32	1.11	0.92	0.80	0.69

OMAHA, NEBR.

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Sep. 4	----	----	----	HI0.64	HM1.26	----	----	----	----
5-----	----	----	HM0.44	HM .64	----	----	----	HI0.56	HI0.35
6-----	----	----	HI .45	HI .64	HI .93	----	----	----	----
7-----	----	----	HI .36	HI .56	----	----	----	----	----
8-----	HI0.40	HI0.54	HI .64	HI .81	----	----	----	----	----
9-----	HS .76	HS .85	HS .98	HS1.18	HS1.31	HS1.15	HS1.00	HS .82	HS .77
13----	----	----	----	----	----	----	HS1.00	HS .90	HS .78
15----	HS .79	HS .90	HS1.04	HS1.16	HS1.31	----	----	----	----
21----	HS .80	HS .92	HS1 02	HS1.20	HS1.30	HI .70	HI .50	HI .37	HI .27
22----	HS .82	HS .92	HS1.04	HS1.20	HS1.30	HS1.18	HS .99	HS .86	HS .79
24----	----	----	----	HS1.16	HS1.28	HS1.04	HS .94	HS .84	HS .72
25----	HM .62	HM .73	HM .88	HM1.09	HS1.25	----	----	----	----
27----	.80	.91	----	----	----	----	----	----	----
28----	HS .88	HS .97	HS1.06	HS1.23	HS1.36	HS1.21	HS1.08	HS .93	HS .84
29----	HS .84	HS .94	HS1 07	HS1.20	HS1.27	HS1.21	HS1.03	HS .92	HS .84
30----	HS .83	HS .90	HS1.04	HS1.18	HS1.24	HS1.19	HS1.03	HS .90	HS .80
Averages	0.75	0.86	0.84	0.99	1.26	1.10	0.95	0.88	0 77

MAUNA LOA OBS., HAWAII

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Sep. 1	1.14	1.23	1.32	1.43	1.58	1.42	1.30	1.20	1.12
2-----	1.13	1.22	1 32	1.44	----	----	----	----	----
5-----	1.02	1.12	1.22	1.35	----	----	----	----	----
6-----	1.02	1.12	1.22	1.33	----	----	----	----	----
7-----	1.07	1.12	1.23	1.35	----	----	----	----	----
17----	1.08	1.16	1.27	1.38	----	----	----	----	----
19----	1.05	1.18	1.28	1.42	1.55	----	----	----	----
21----	1 06	1.18	1.28	1.42	----	----	----	----	----
23----	1.13	1.22	1.32	1.46	----	----	----	----	----
24----	1.15	1.22	1.32	----	----	----	----	----	----
26----	1.16	1.24	1.33	1.45	1.56	1.40	1.28	1.18	1.11
27----	1.16	1.25	1.33	1.45	----	----	----	----	----
30----	1.13	1.22	1.32	1.43	1.54	1.44	1.33	----	----
Averages	1.10	1.19	1.29	1.40	1.55	1.42	1.30	1.19	1.12

MADISON, WIS.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Sep. 5	----	----	HI0.66	HI0.86	----	----	----	----	----
6-----	M 0.41	M 0.52	M .63	M .85	----	----	----	----	----
7-----	----	----	----	----	----	S 0.77	M 0.56	M 0.40	M 0.33
22----	S .87	S .97	S 1.09	----	----	1.21	----	----	----
25----	S .76	S .87	S 1.00	S 1.15	S 1.27	----	----	----	----
30----	----	----	----	----	S 1.27	S 1.14	S .96	S .81	S ,70
Averages	0.68	0.79	0.85	0.95	1.27	1.04	0.76	0.61	0.52

TUCSON, ARIZ.

Date	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Sep. 4	----	0.04	0.07	0.20	1.00	0.78	0.59	0.43	0.36
5-----	----	----	----	----	----	.47	----	----	----
6-----	----	----	----	----	.23	----	----	----	----
7-----	----	----	----	1.05	1.30	1.10	----	.76	.63
8-----	0.78	.88	.97	1.13	1.23	----	----	----	----
9-----	.76	.83	----	----	1.30	----	----	----	----
10----	.79	----	.97	1.10	1.25	----	----	----	----
11----	.78	.84	.98	1.11	1.28	----	.90	----	.66
12----	.68	.76	.81	1.07	----	1.12	----	----	----
13----	.76	.84	.98	1.13	----	----	----	----	----
14----	----	.87	.98	1.13	1.31	1.14	1.00	.88	.78
15----	.76	.84	.98	1.13	1.31	1.11	.92	.80	.71
16----	----	----	----	----	1.28	1.12	.93	----	.70
17----	----	.87	.99	1.10	1.33	1.15	.99	.90	.74
18----	.80	.90	1.02	1.17	1.33	1.18	----	----	.74
19----	.88	.98	1.08	1.22	1.37	----	----	----	----
20----	.69	.78	.90	1.10	1.29	1.00	.77	----	----
21----	.44	.50	.64	.90	1.32	1.16	.99	.85	.71
22----	.22	.29	.39	.59	1.29	1.01	.80	----	----
23-24-	Pyrheliometer inoperative								
26----	.87	.97	1.09	1.21	1.36	1.18	1.00	----	----
27----	.85	.94	1.03	1.19	----	----	----	----	----
28----	.83	.94	1.04	1.20	1.34	1.15	.99	.88	.77
29----	.86	.92	1.04	1.20	1.34	1.17	1.00	.89	.78
30----	.82	.91	1.03	1.19	1.32	----	----	----	----
Averages	0.74	0.78	0.89	1.06	1.24	1.06	0.91	0.80	0.69

ALBUQUERQUE, N. MEX.

	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19

No observations due to lightning - struck instruments 7-14-67. Replacement equipment not yet received.

GUAM, M. I.

	78.7°	75.7°	70.7°	60.0°	*	60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92

No observations due to cloudiness - also inoperative Sep. 12-29.

S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon

HS Slight haze
HM Moderate haze
HI Intense haze

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. SEPTEMBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	341	647	670	615	553	612	620	448	591	236	607	605	569	646	555	459	538	480	487	562	569	594	544	534	347	628	467	567	570	561		541
AMES IOWA	576	485	501	536	517	496	464	335	540	536	462	216	41	262	438	450	148	119	192	120	497	484	435	485	447	96	304	476	456	442		385
ANNETTE ALASKA	145	70	233	383	210	241	124	52	250	196	334	27	211	208	378	334	122	181	213	242	273	20	50	181	69	45	131	186	177	109		180
APALACHICOLA FLORIDA	554	408	120	361	264	183	61	243	400	599	589	305	589	599	599	629	638	590	630	652	542	476	---	540	522	---	218	542	592	579		465
ARGONNE NAT. LAB.	443	480	551	476	458	522	522	448	547	579	559	517	325	273	318	332	349	347	162	387	382	490	362	510	490	278	176	237	199	456		406
ASTORIA OREGON	259	433	533	524	440	492	518	528	316	224	466	490	516	506	433	165	297	435	408	409	188	452	455	438	148	431	404	187	192	222		384
ATLANTA GEORGIA	266	462	118	501	432	373	425	197	438	388	141	483	519	503	539	535	527	456	473	---	339	509	529	565	487	409	158	101	498	517		410
BARROW ALASKA	210	242	170	162	216	181	141	96	166	151	169	115	101	94	127	195	139	147	106	127	230	221	146	163	126	101	59	69	52	114		145
BETHEL ALASKA	133	180	444	412	269	417	106	255	276	275	273	157	255	339	253	124	219	174	214	200	180	300	304	290	271	200	111	208	228	231		243
BISMARCK N.DAK.	568	556	526	539	559	558	543	553	482	442	472	---	267	164	202	386	256	238	285	436	480	458	476	463	313	407	460	446	429	417		427
BLUE HILL MASS.	330	518	287	527	526	412	545	505	409	95	561	550	524	514	192	315	467	396	425	374	348	325	445	288	363	445	407	304	53	285		391
BOISE IDAHO	524	544	514	300	302	507	509	270	498	435	216	512	525	502	488	479	475	480	392	449	445	438	445	387	439	435	430	421	316	222		430
BOSTON MASSACHUSETTS	335	522	207	532	503	365	518	470	367	100	548	529	499	483	202	363	422	383	374	400	317	338	418	277	369	428	411	277	50	258		375
BROWNSVILLE TEXAS	586	311	274	329	---	---	615	607	648	538	633	507	613	589	557	277	454	523	101	---	---	---	---	---	---	---	---	---	---	---		---
BURLINGTON VERMONT	439	418	295	390	---	---	---	451	233	180	517	502	460	492	467	463	406	359	358	429	195	64	136	129	251	352	379	185	97	127		325
CANTON ISLAND P.I.	646	664	650	609	664	660	605	646	684	575	669	691	698	701	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---
CAPE HATTERAS N.C.	142	530	497	280	456	495	489	439	385	121	223	501	417	545	482	66	288	193	506	469	---	---	505	545	533	540	445	111	135	491		387
CARIBOU MAINE	416	207	167	148	285	424	316	280	267	106	434	419	393	391	396	361	364	303	380	384	280	23	31	35	108	216	315	47	37	46		253
CHARLESTON S.C.	365	619	429	244	464	577	454	387	234	257	252	586	458	573	603	572	306	343	466	536	452	411	575	571	508	338	130	400	586	572		442
CLEVELAND OHIO	595	582	553	563	535	554	520	391	41	247	591	514	539	509	508	507	272	393	309	292	107	148	483	265	500	430	78	28	110	113		376
COLUMBIA MISSOURI	551	262	406	---	477	524	447	461	585	578	559	472	240	---	287	191	230	404	333	325	544	537	503	531	483	375	247	271	512	497		423
DAVIS CALIFORNIA	608	499	577	517	577	555	588	569	546	559	554	568	558	563	520	524	302	526	531	487	507	479	354	490	480	482	477	462	474	483		514
DODGE CITY KANSAS	302	612	378	91	163	207	496	604	576	529	564	580	580	542	551	568	421	539	513	500	555	556	538	524	474	134	566	536	529	518		475
E. LANSING MICHIGAN	567	549	---	492	469	535	510	485	397	---	554	526	---	511	434	375	289	435	252	303	201	506	395	456	480	404	77	203	95	100		393
EL CENTRO CALIF. NPF	313	313	313	456	466	456	526	525	384	504	521	520	529	529	523	504	611	611	611	504	514	510	430	430	463	456	468	436	361	344		471
EL PASO TEXAS	176	561	676	489	537	670	671	650	663	658	600	635	640	438*	661	647	620	590	630	627	542	531	583	412	511	585	589	612	606	595		580*
ELY NEVADA	492	564	490	392	341	559	162	439	599	522	455	641	643	625	619	559	522	427	598	586	524	242	488	358	312	555	535	538	401	475		489
EPPLEY NEWPORT R.I.	---	541	490	466	520	493	541	489	442	72	546	532	513	519	240	292	464	374	380	455	265	388	441	305	437	450	392	248	64	298		402
FAIRBANKS ALASKA	126	138	178	241	132	211	94	336	294	---	---	---	220	223	292	227	131	59	292	304	236	280	275	169	187	114	110	225	204	221		204
FLAMING GORGE UTAH	648	624	658	651	650	516	618	225	422	373	316	550	587	619	602	---	218	106	565	572	582	337	536	549	433	310	542	543	539	259		488
FORT WORTH TEXAS	589	251	539	213	196	115	270*	398	561	631	478	593	375	111	139	246	320	253	311	248	244	526	553	544	563	461	471	591	571	572		398*
FRESNO CALIFORNIA	559	266	576	427	585	576	560	581	575	473	557	565	576	547	541	532	457	223	531	533	450	518	494	514	497	480	470	283	490	482		497
GAINESVILLE FLORIDA	518	432	445	621	562	478	273	436	540	601	582	225	201	---	---	---	---	---	---	---	---	---	---	---	---	560	406	440	585	615		---
GLASGOW MONTANA	564	339	539	543	536	504	486	526	393	480	386	82	166	99	192	170	330	260	419	392	450	399	413	448	276	458	430	426	413	346		382
GRAND JUNCTION COLO.	609	615	613	617	605	---	542	286	561	508	285	574	608	587	593	564	469	313	471	550	546	502	521	505	321	486	517	519	509	367		509
GREAT FALLS MONTANA	532	529	576	547	524	---	714	526	433	390	184	273	65	493	502	497	467	---	446	444	474	420	474	475	343	463	462	456	443	244		443
GREENSBORO N.C.	378	579	547	346	---	491	513	511	95	424	428	513	240	534	500	496	336	444	355	289	329	504	520	466	510	455	187	145	391	493		415
INDIANAPOLIS INDIANA	615	585	513	367	522	509	491	261	198	594	569	458	307	429	503	360	367	185	388	404	260	544	539	489	503	479	67	237	154	452		412
ITHACA NEW YORK	496	491	405	477	380	394	431	397	175	176	473	464	395	239	600	613	150	363	463	406	226	67	278	104	368	405	384	150	76	189		34
LAKE CHARLES LA.	540	463	537	334	94	188	448	587	514	532	468	475	421	453	346	531	559	386	211	218	211	170	507	540	524	428	245	567	547	529		419
LAKELAND FLORIDA	578	410	429	495	494	446	324	527	516	479	537	291	217	427	418	572	427	494	590	507	492	301	543	572	473	414	401	209	310	368		442
LANDER WYOMING	---	---	610	626	643	611	484	415	459	518	500	445	351	513	580	299	303	309	609	552	554	524	537	506	389	171	536	534	519	344		480
LARAMIE WYOMING	573	520	556	514	573	510	467	348	281	263	417	452	472	258	462	331	307	65	397	432	474	474	459	383	337	121	466	449	443	354		405
LAS VEGAS NEVADA	472	412	384	433	570	423	504	587	592	271	598	583	603	612	588	589	537	186	493	565	546	514	544	485	440	527	520	483	403	489		498
LITTLE ROCK ARKANSAS	552	520	398	161	399	397	---	---	528	352	486	350	361	256	147	371	406	413	471	388	471	---	564	503	354	433	200	---	559	---		402
LOS ANGELES, CALIF.	397	507	499	487	492	633	560	625	531	454	613	566	403	522	430	472	536	112	262	349	477	558	449	211	341	291	380	299	218	165		428
LOS ANGELES CALIF.U.	322	353	475	426	457	557	559	586	497	406	549	540	477	518	487	425	482	101	305	350	684	318	423	118	214	314	424	366	162	193		403
MADISON WISCONSIN	493	511	501	491	519	515	481	423	543	528	519	493	172	110	40	204	403	339	276	232	419	484	338	461	438	68	---	273	312	436		380
MANHATTAN KANSAS	172	382	41	400	413	384	452	436	511	452	449	332	174	259	480	427	279	385	326	44	467	461	412	450	427	35	382	460	440	430		359
MATANUSKA ALASKA	72	188	82	55	53	128	263	274	341	387	273	153	102	298	110	121	166	172	89	96	326	261	220	78	97	96	176	243	259	---		179
MEDFORD OREGON	572	597	362	556	561	553	537	548	556	313	479	555	562	556	554	508	251	---	480	478	469	379	507	482	470	470	462	437	323	242		477
MIAMI FLORIDA	552	372	510	470	529	476	626	617	577	541	525	419	403	293	501	467	543	371	400	369	595	362	561	428	277	319	141	320	247	296		437
MIDLAND TEXAS	257	159	461	492	314	366	496	480	546	549	548	438	489	355	247	377	377	455	329	383	448	335	424	414	483	382	387	503	516	534		418
NASHVILLE TENNESSEE	596	523	452	354	500	529	521	135	290	226	461	213	277	478	434	524	516	465	423	447	276	488	563	502	539	457	164	48	287	524		407
NEW YORK N.Y. U.	529	615	574	530	566	516	541	435	360	273	589	563	486	529	367	72	456	378	441	376	170	319	297	194	517	445	338	106	91	424		403

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

SEPTEMBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
	Day of month																															
NORTH OMAHA NEBRASKA	500	384	168	521	559	531	502	419	584	559	451	176	319	356	525	391	464	317	264	222	535	519	477	506	476	149	471	508	492	484		428
OAK RIDGE TENNESSEE	406	530	389	455	563	543	566	177	389	455	304	170	292	426	544	520	527	504	433	452	233	522	566	441	539	428	78	76	209	520		409
OKLAHOMA CITY OKLA.	534	98	407	73	110	287	382	508	468	592	498	504	238	328	292	235	382	377	481	335	505	623	546	550	583	244	---	---	---	---		392
PAGE ARIZONA	431	459	598	558	559	441	402	470	541	473	550	583	610	597	533	439	499	191	264	560	553	386	332	253	327	522	530	522	516	332		468
PALMER AALS ALASKA	66	145	47	33	43	115	253	351	330	351	226	111	77	247	102	84	133	128	64	91	277	204	177	46	49	54	137	209	204	209		152
PHOENIX ARIZONA	409	308	476	556	460	484	586	582	549	561	554	572	568	590	597	553	573	480	451	556	543	530	526	459	548	509	528	528	525	499		522
PORTLAND MAINE	425	423	243	570	460	383	538	491	383	154	563	539	514	499	373	474	446	422	452	246	326	223	263	167	268	429	428	313	56	181		375
PROSSER WASHINGTON	460	565	561	505	121	532	516	522	508	257	412	534	538	508	501	463	476	446	421	460	437	457	459	460	422	432	435	425	279	290		447
RAPID CITY S.DAK.	385	472	492	509	517	515	424	---	324	512	485	249	97	237	116	220	153	112	188	477	488	476	484	466	356	315	477	461	453	435		376
RENO NEVADA	526	511	360	214	407	449	520	509	464	533	504	518	537	528	502	485	173	283	468	475	459	434	372	432	403	455	441	428	333	437		439
RICHLAND 25 NW WASH.	457	506	524	493	101	496	477	470	465	260	327	487	485	468	454	433	446	416	379	430	421	439	443	428	400	413	402	388	253	260		414
RIVERSIDE CALIFORNIA	228	278	198	397	395	379	454	441	442	305	537	451	371	483	483	468	433	106	207	393	435	366	456	252	307	310	340	301	269	250		358
RUSTON LOUISIANA	555	549	385	237	70	106	135	270	382	496	312	473	454	344	306	474	491	498	228	332	266	435	501	479	447	460	69	532	504	472		375
SAINT CLOUD MINN.	569	564	543	525	517	497	485	535	545	300	386	277	134	410	240	380	429	229	300	354	425	472	454	458	402	138	225	437	425	413		402
SAN ANTONIO TEXAS	309	155	311	398	363	526	603	549	551	563	558	558	551	456	---	---	---	---	---	45	84	297	392	408	405	410	386	595	563	565		424
SANTA MARIA CALIF.	440	490	572	600	593	573	608	499	563	376	568	557	391	390	387	425	468	521	486	478	282	507	478	151	325	427	378	248	97	399		443
SAULT STE MARIE MICH	573	535	556	538	504	508	475	303	429	528	519	522	437	392	450	366	428	415	379	118	245	489	122	307	432	71	368	420	61	165		389
SEATTLE TACOMA WASH.	194	527	544	514	529	470	451	459	168	201	263	503	485	491	466	464	415	429	421	340	380	438	442	418	415	400	408	370	113	154		396
SPOKANE WASHINGTON	479	529	537	502	280	521	502	440	483	259	214	513	498	---	467	475	468	---	416	432	425	452	445	428	400	412	404	397	285	243		425
STATE COLLEGE PENN.	594	622	563	572	563	529	505	481	244	292	597	564	478	514	559	420	401	436	433	313	207	375	475	253	514	473	382	76	104	263		427
STERLING VIRGINA	641	643	622	521	574	595	532	462	166	198	527	604	500	556	550	152	256	479	490	369	210	353	507	296	541	518	423	150	450	504		446
STILLWATER OKLAHOMA	476	105	219	110	212	272	447	455	448	518	394	419	319	266	377	219	407	394	460	288	482	517	494	481	466	245	383	499	485	478		378
SWAN ISLAND W.I.	459	629	637	573	637	560	605	577	577	474	656	616	559	---	---	---	---	---	---	620	583	582	581	348	201	264	554	575	592	565		543
TAMPA FLORIDA	529	461	378	435	418	448	358	611	593	612	509	374	494	475	482	530	595	535	606	482	540	398	585	594	502	289	381	365	301	379		475
TUCSON ARIZONA	343	297	396	584	455	544	552	557	456	473	492	554	572	553	565	515	562	527	526	526	549	528	529	344	395	506	471	524	459*	514*		496*
WAKE ISLAND,PACIFIC	---	---	279	352	502	444	296	361	217	349	495	242	120	528*	---	---	---	---	---	---	---	457	582	577	600	543	535*	246	265	431		401*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

SEPTEMBER 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Langleys. . .	38	86	27	19	25	72	120	226	215	213	127	42	13	81	3	39

Date.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	71	27	5	-5	58	66	72	-15	22	10	49	47	72	75		63

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code $\lambda s \Omega \Omega \Omega$ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

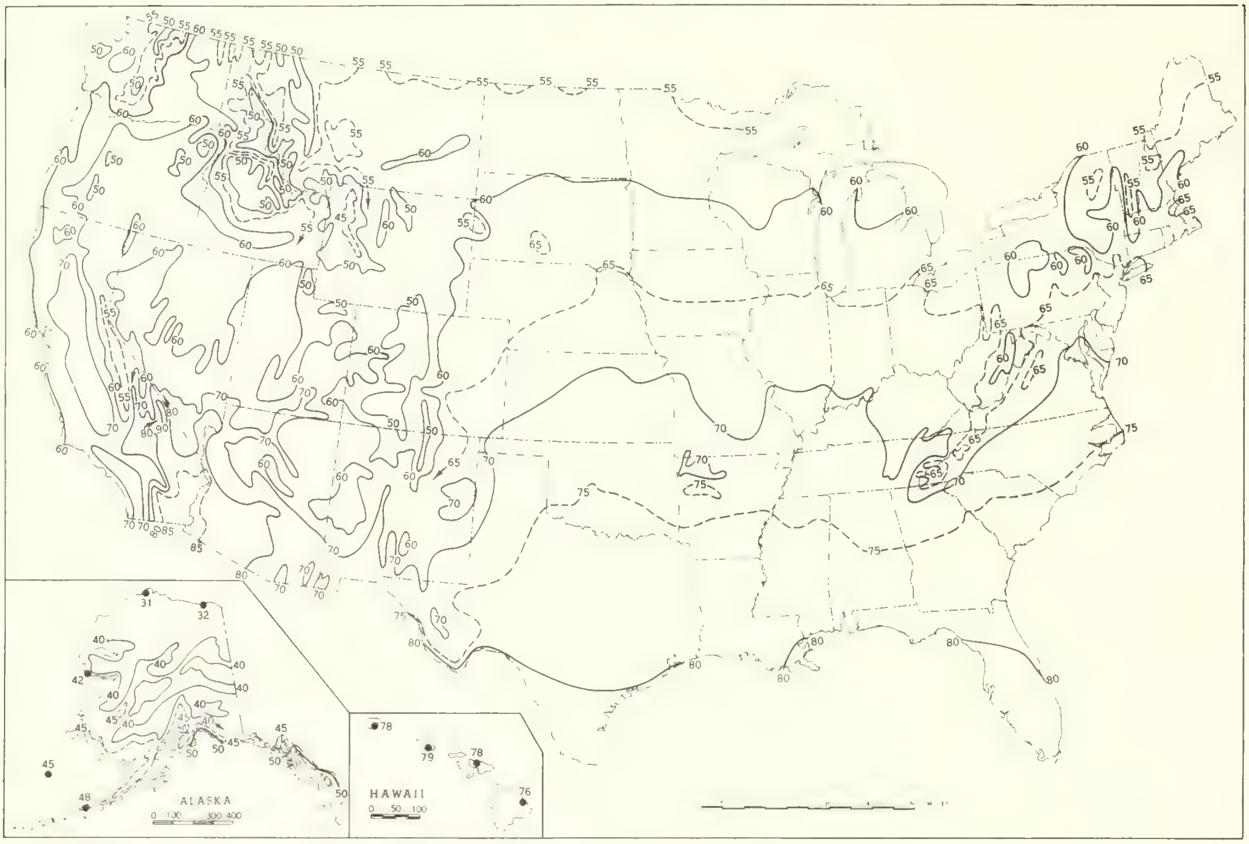
Units Milli-atmo-cms.

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Albuquerque, N. Mex.	05270	-----	-----	-----	00274	00266	00269	00269	-----	-----	00272	00277	00272	00301	00290	-----
Bedford, Mass.	00314	-----	-----	-----	00314	00306	00314	00311	-----	-----	00323	00304	00296	00302	00296	-----
Bismarck, N. Dak.	00293	00296	00282	00267	00276	00266	00270	00285	00283	00283	00298	02345	06333	04346	06330	06279
Boulder, Colo.	00314	-----	-----	-----	00304	00306	00295	00301	-----	-----	00319	00320	00303	00333	-----	-----
Caribou, Maine	00319	05338	05379	-----	06312	06356	05325	00300	05316	-----	00313	00291	00295	00303	00293	00284
Fairbanks, Alaska	-----	-----	-----	-----	-----	04332	05320	05322	00321	04331	06331	04326	05338	04345	00341	04302
Green Bay, Wis.	00338	00336	00347	00344	00318	00316	00307	00309	00335	00320	00327	00323	05320	04312	05348	05318
Huancayo, Peru	00264	00272	00272	-----	-----	-----	-----	00269	-----	00268	00271	00275	00270	00274	00279	00275
Mauna Loa, Hawaii	00279	00283	-----	00288	-----	-----	00277	00276	05263	-----	00271	-----	00293	06271	05286	00272
Nashville, Tenn.	00330	00325	00326	04318	00317	00304	00306	05355	00320	00316	00315	04317	04309	00307	00296	00318
Tallahassee, Fla.	00300	04330	05317	05312	00294	05303	05317	05313	00290	36297	00296	06298	00290	00302	00316	00298

Station	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex.	-----	02264	00254	00259	00255	00255	-----	-----	00280	00298	00308	00269	00269	-----		274
Bedford, Mass.	-----	00293	00295	00297	06312	00304	-----	-----	06360	00304	00301	00293	-----	-----		307
Bismarck, N. Dak.	00296	06302	06291	00264	00245	00256	00282	00261	00269	00305	00276	00268	00274	00276		287
Boulder, Colo.	-----	05312	02306	00307	00271	00278	-----	-----	00295	-----	-----	00288	-----	-----		303
Caribou, Maine	00293	05294	00288	00309	05305	-----	-----	-----	-----	00312	00307	05330	-----	-----		312
Fairbanks, Alaska	04294	05346	03356	00353	05351	00355	00349	03335	05342	34344	34365	35358	33311	00311		335
Green Bay, Wis.	00301	00306	00307	06294	00304	00292	00328	00320	00301	05320	00362	00355	05341	05323		322
Huancayo, Peru	00274	00241	00277	00274	00274	00277	06272	00277	00290	00273	00278	00274	00275	00261		272
Mauna Loa, Hawaii	-----	00273	00279	-----	00291	00314	00275	-----	00277	00275	00283	-----	00275	00276		280
Nashville, Tenn.	00322	00298	00303	00306	05298	00301	00305	00320	00303	00324	04310	-----	05365	00319		316
Tallahassee, Fla.	00294	00289	00289	00291	00291	00290	00286	00284	00298	00296	05286	06308	00297	00294		299

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded $\Omega \Omega \Omega$) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), September.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), September 1967.

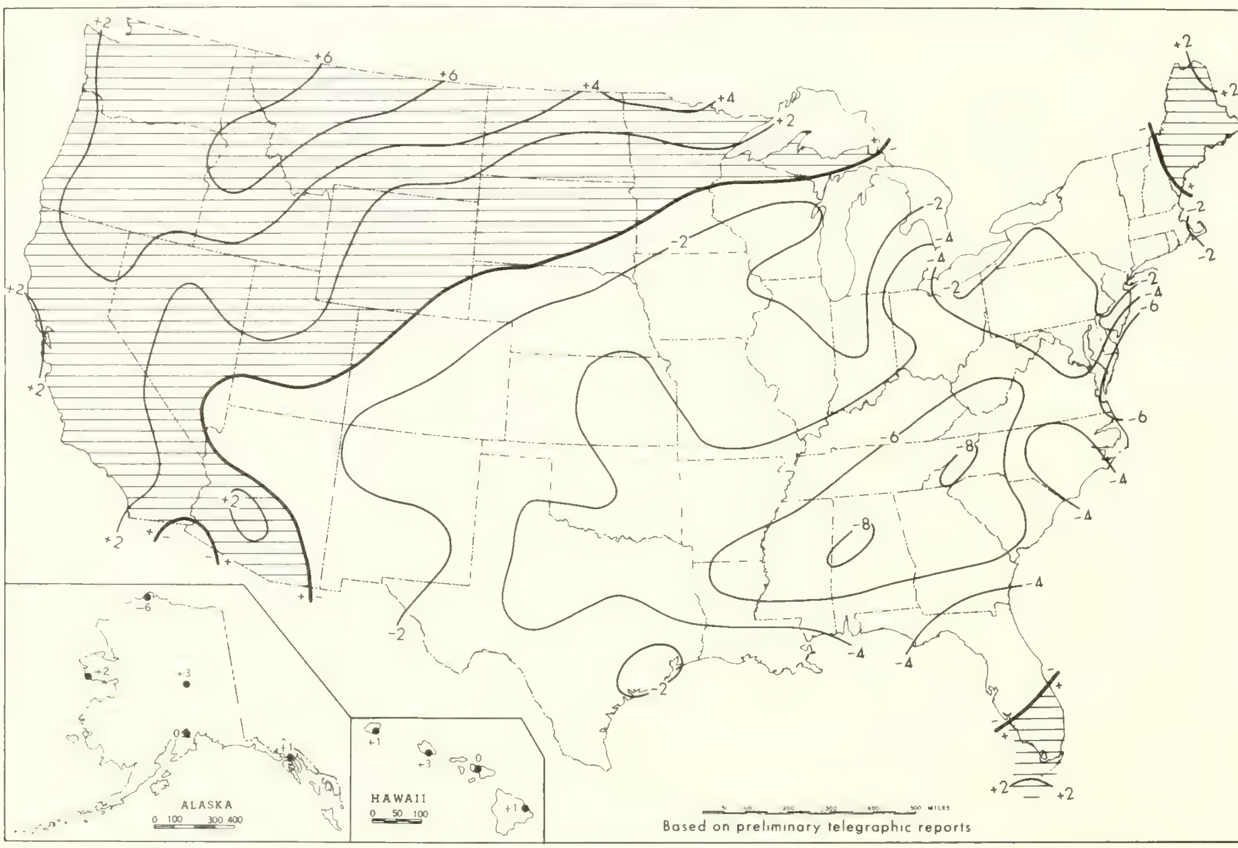


Chart II. Total Precipitation (Inches), September 1967.

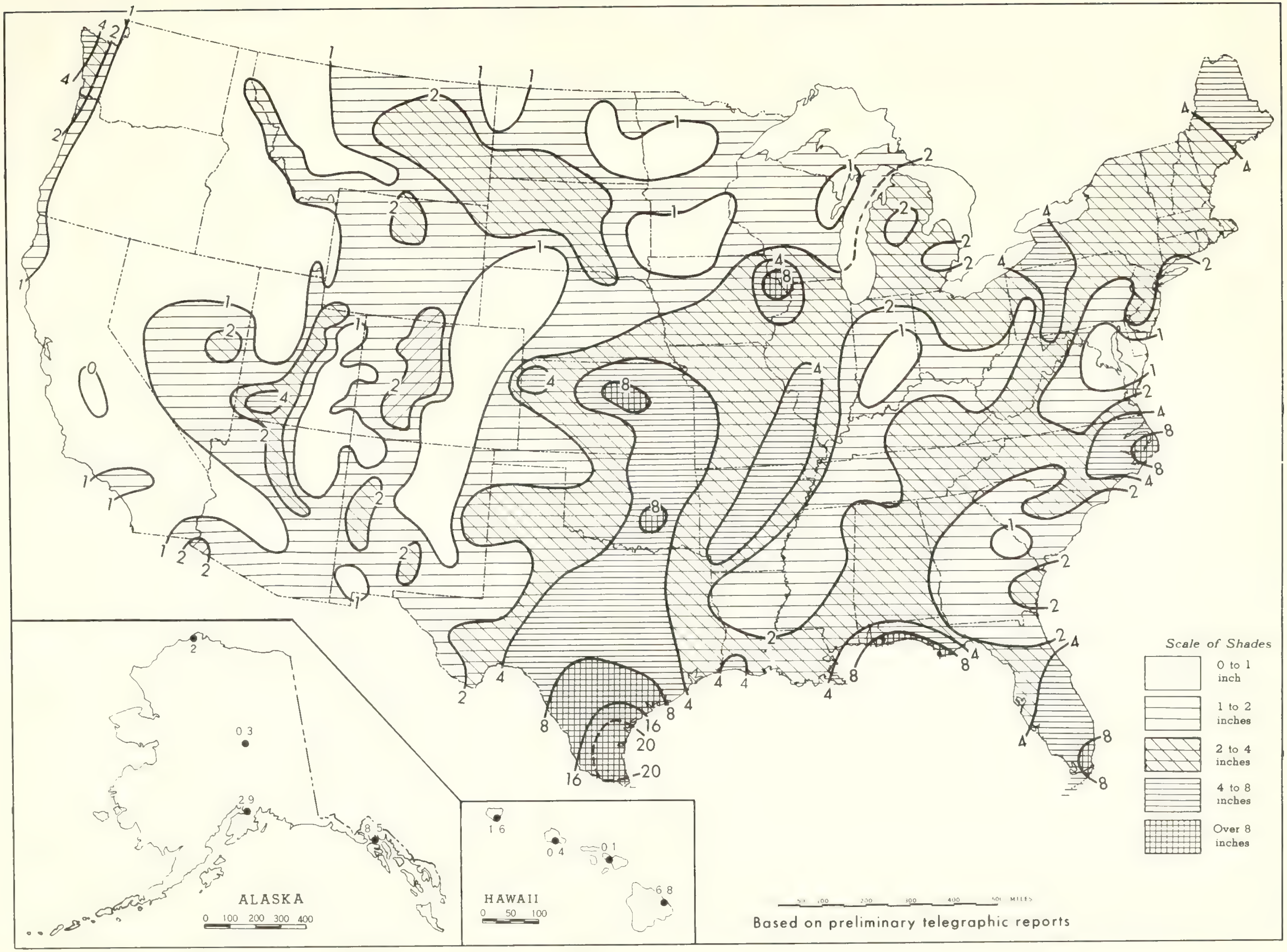


Chart III. Percentage of Normal Precipitation, September 1967.

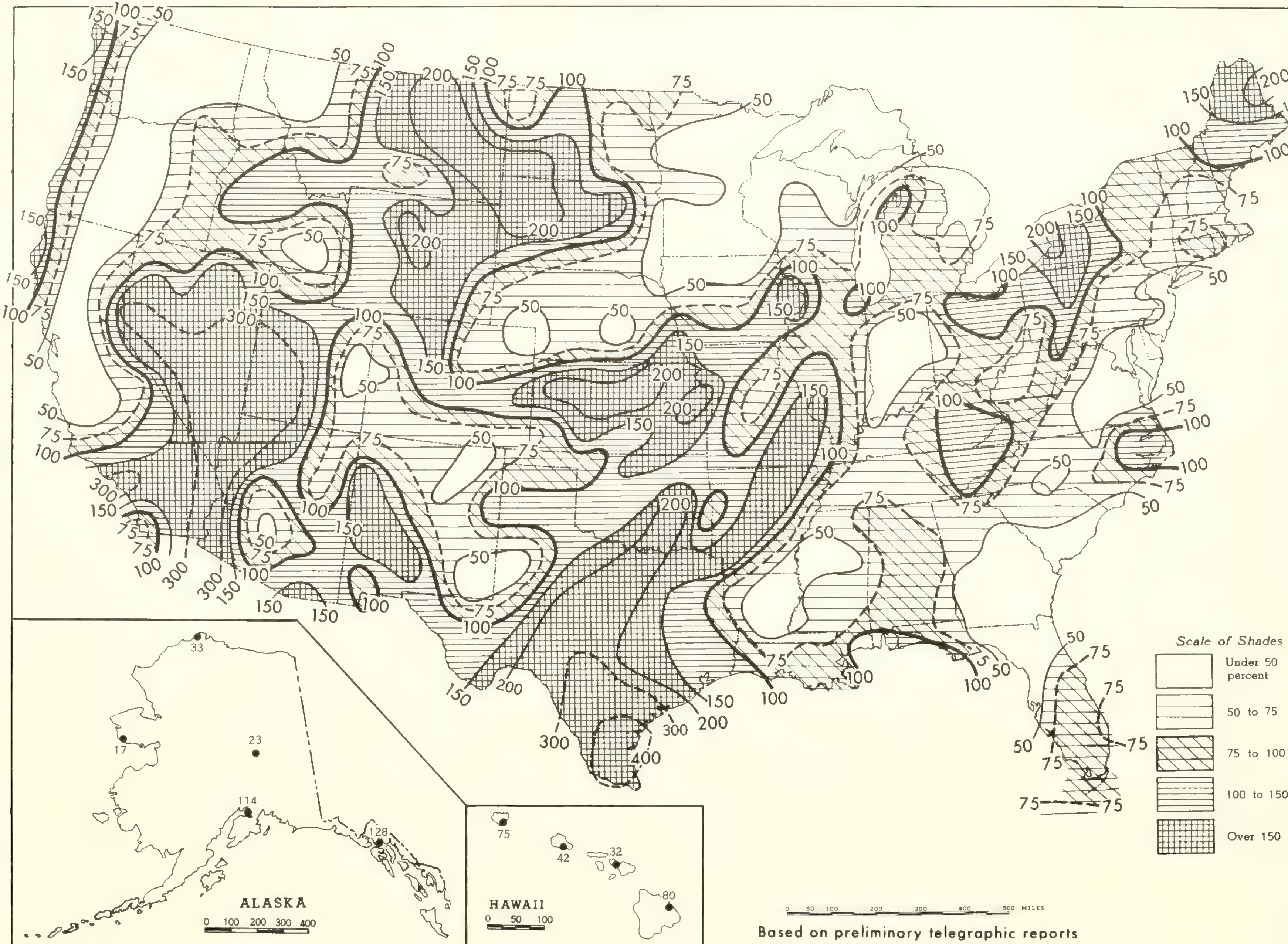
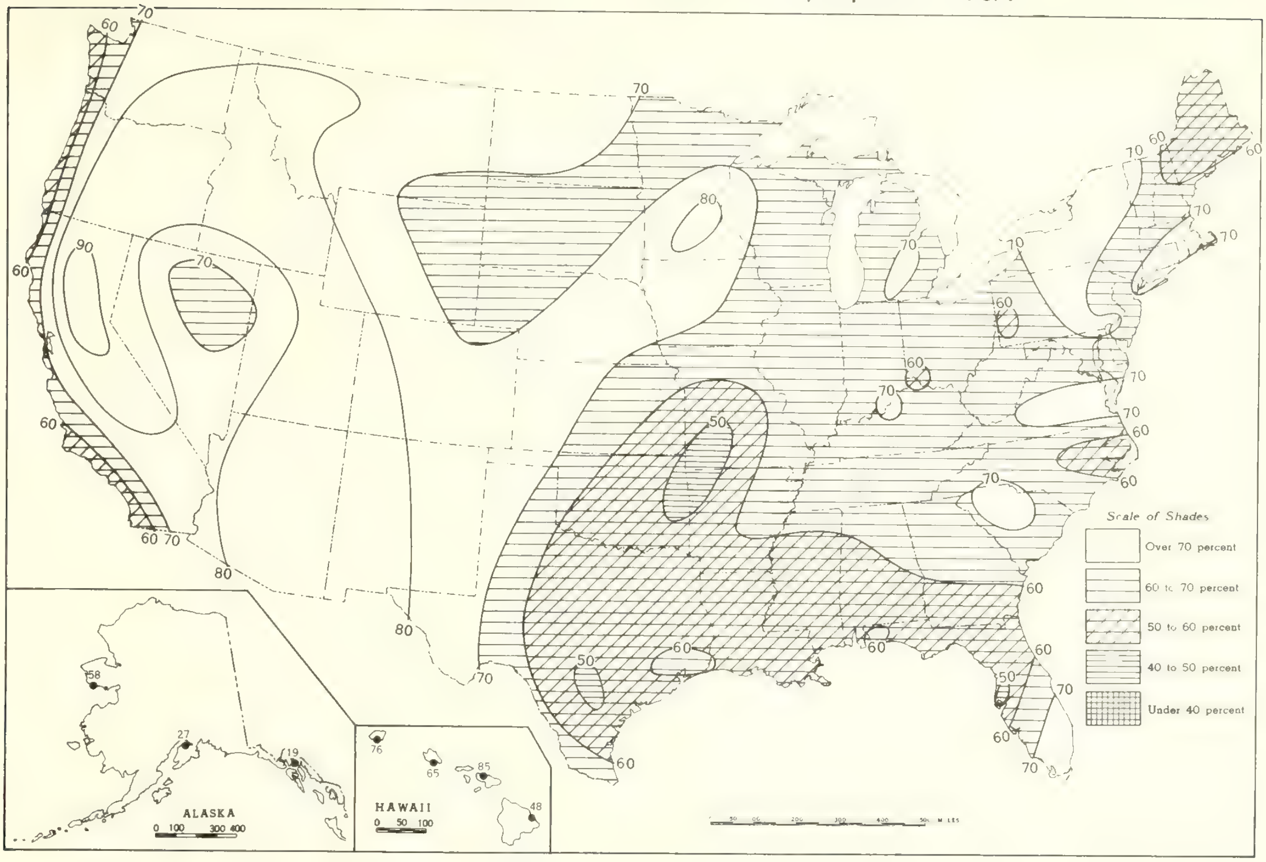
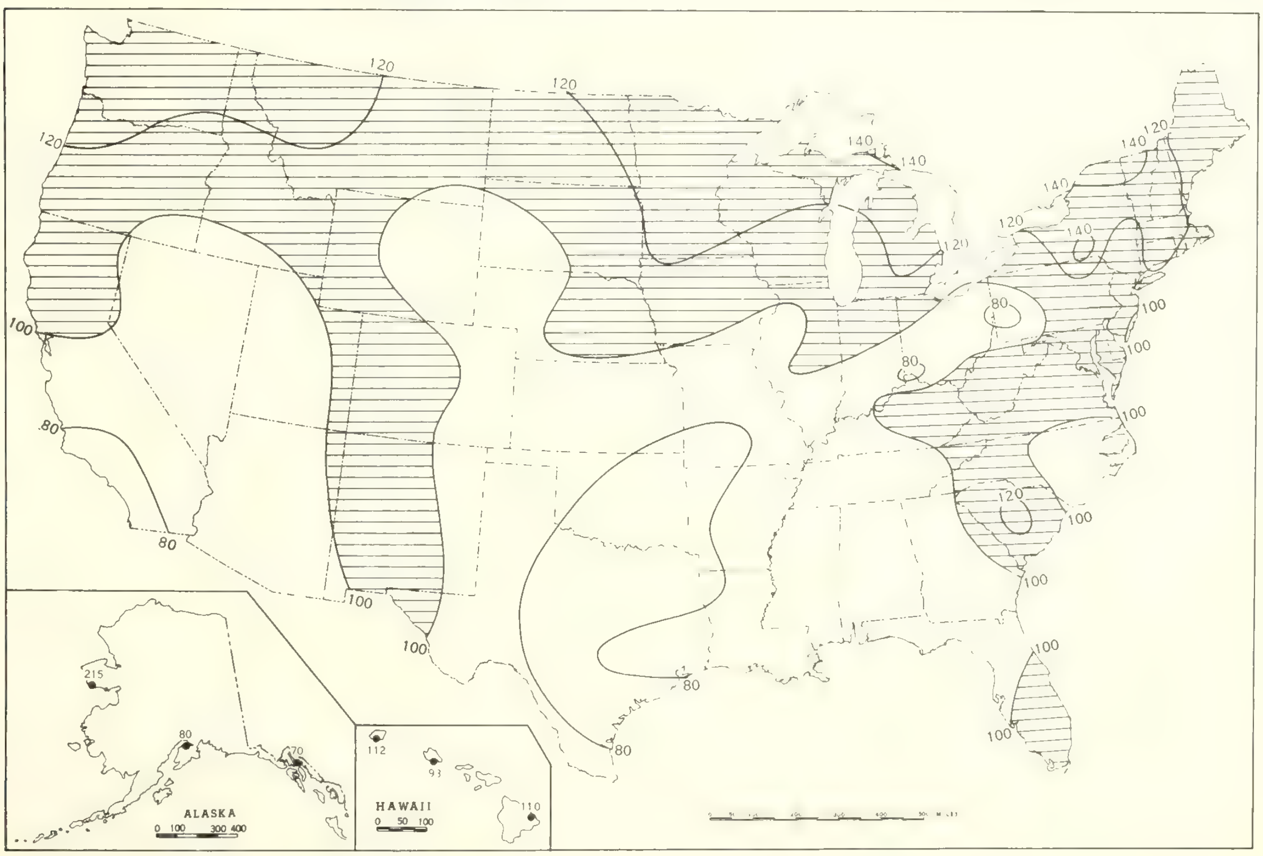


Chart VI. A. Percentage of Possible Sunshine, September 1967.

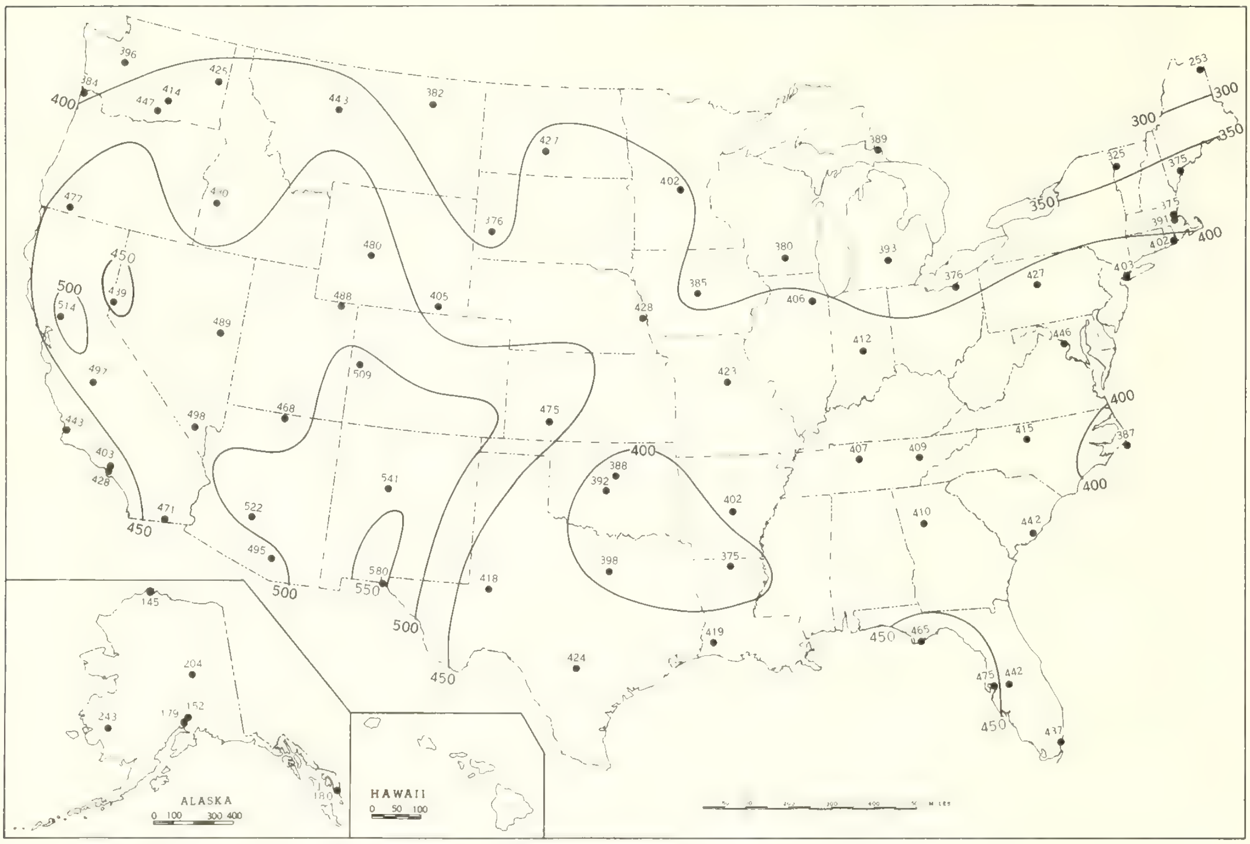


B. Percentage of Mean Monthly Sunshine, September 1967.

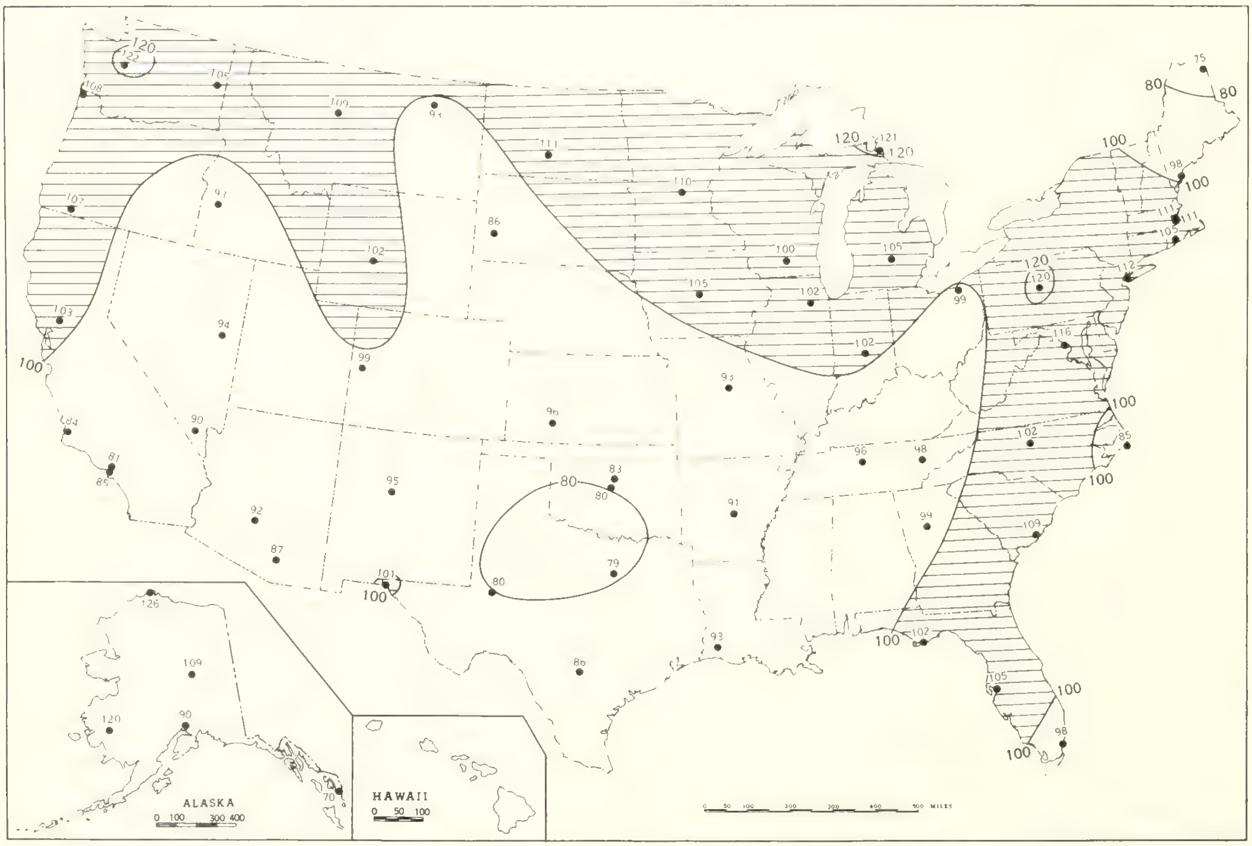


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, September 1967.

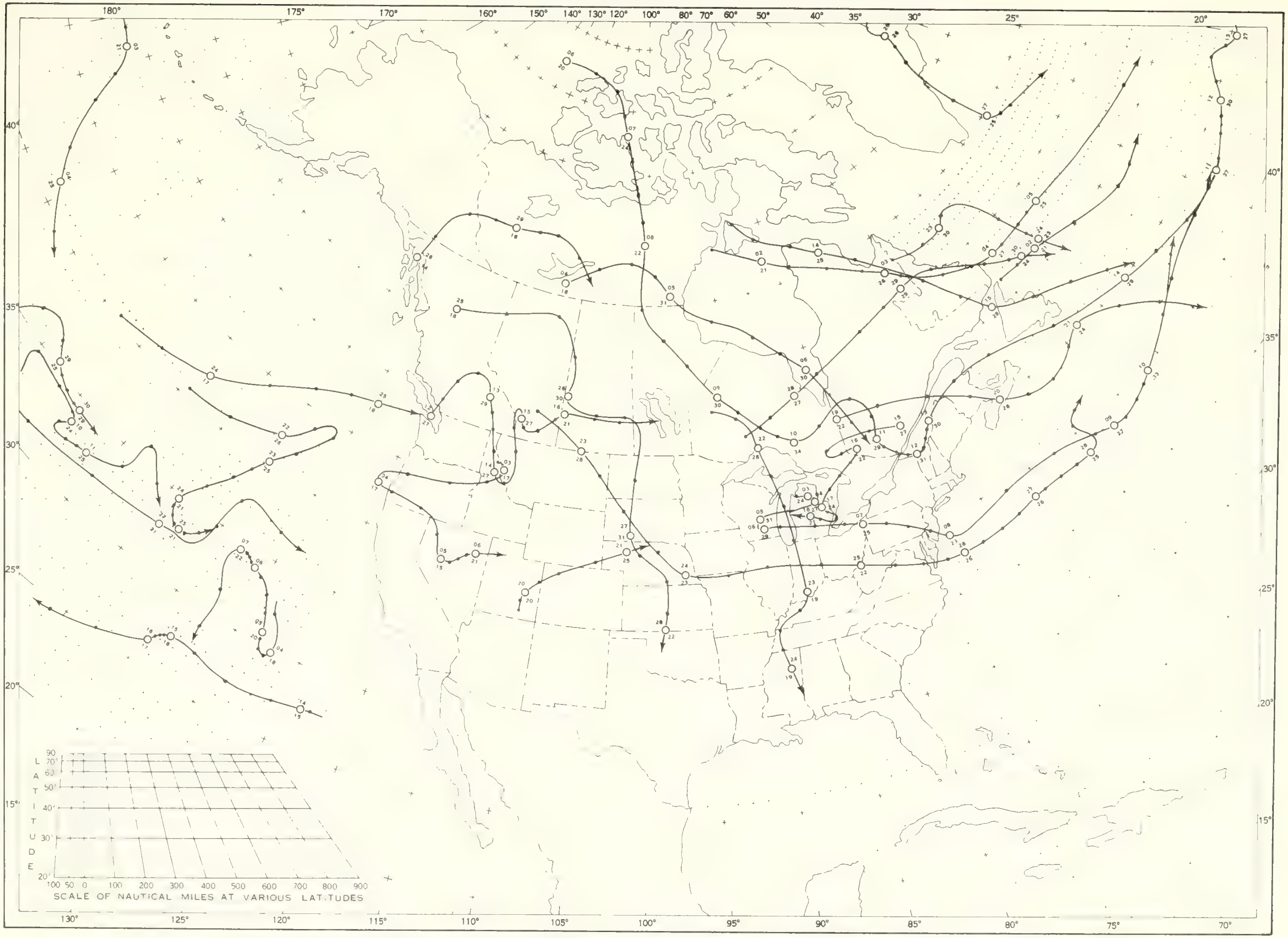


B. Percentage of Mean Daily Solar Radiation, September 1967.



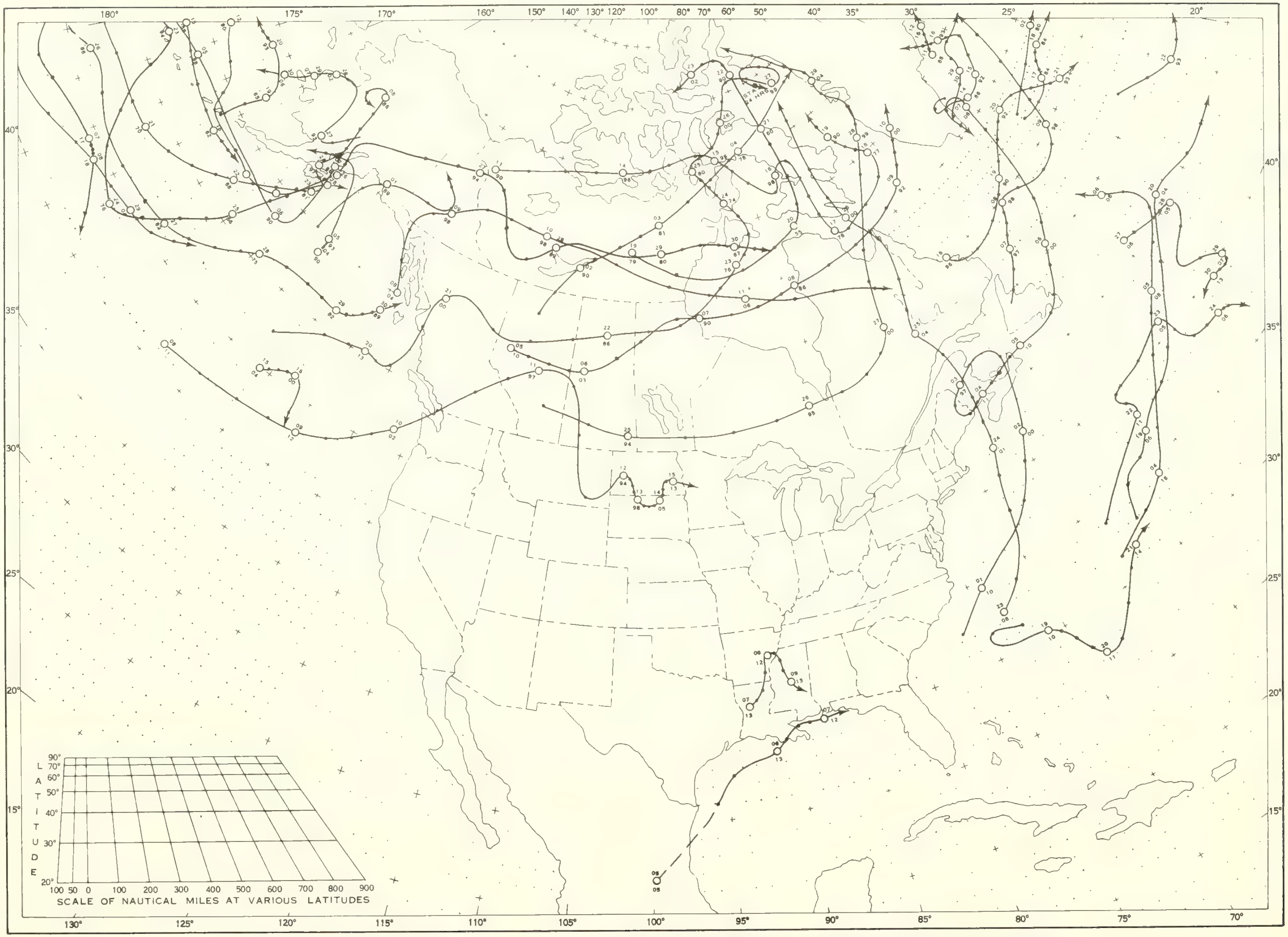
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, **September 1967**.



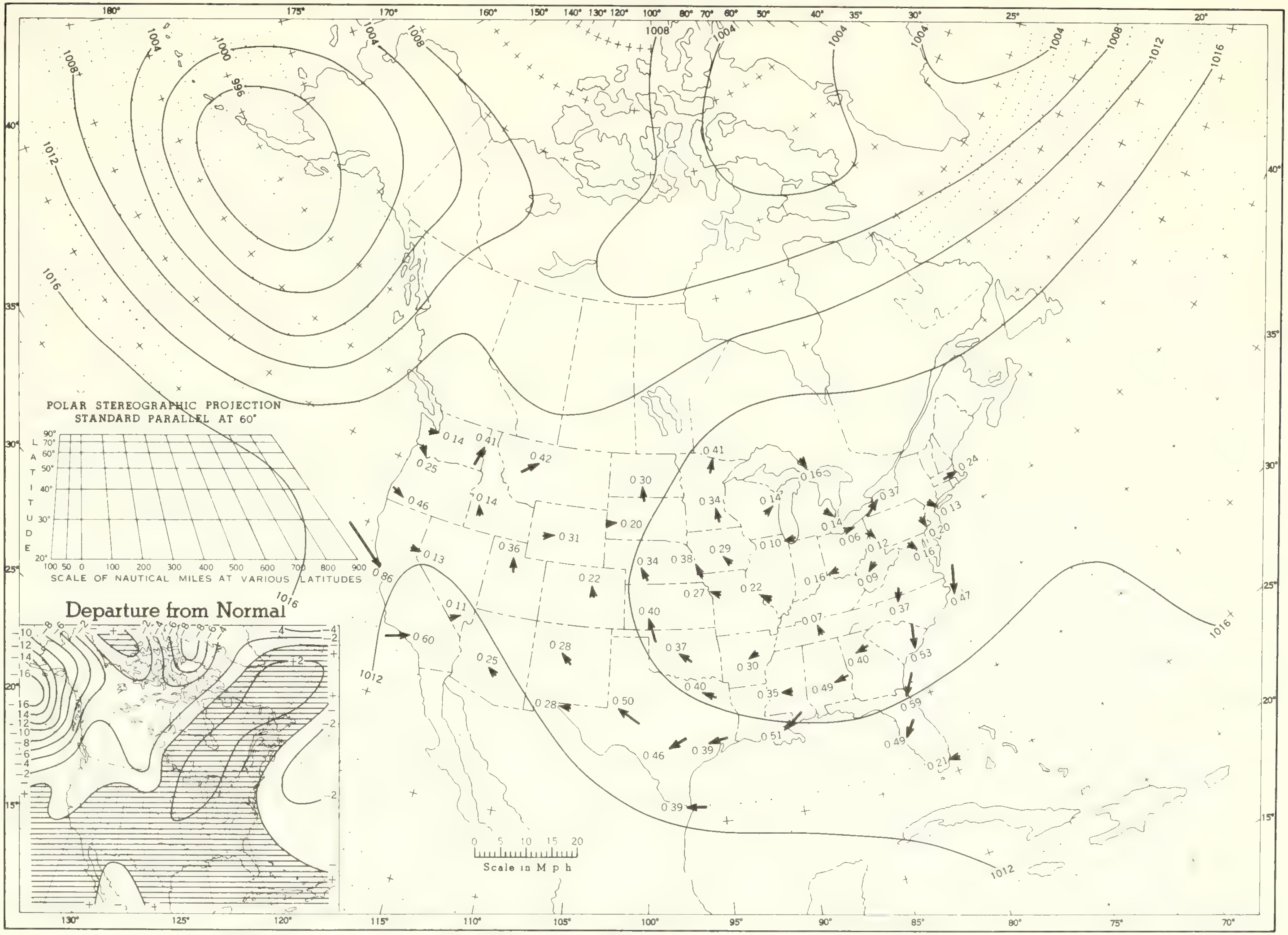
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, September 1967.



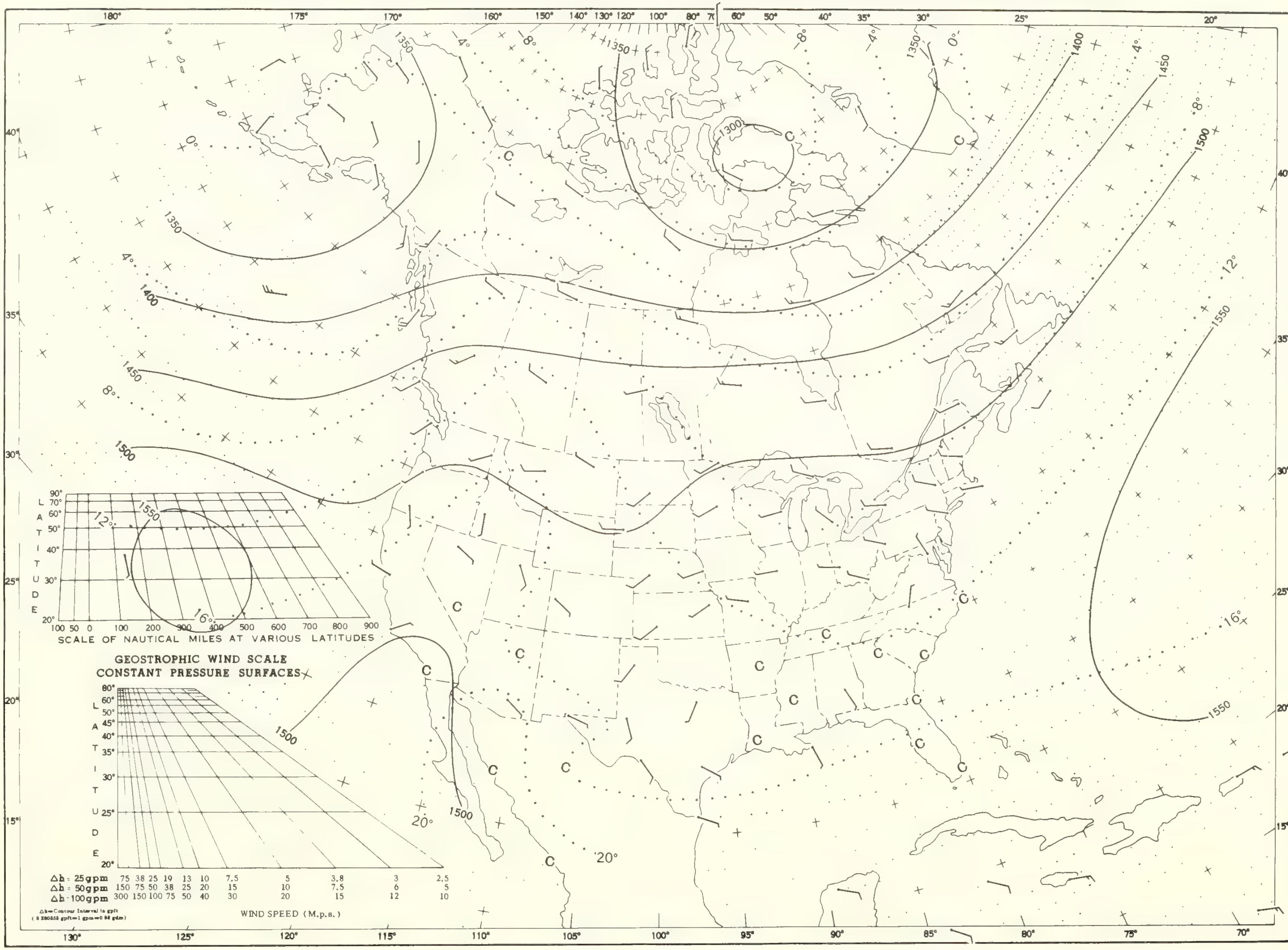
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, **September 1967**. Inset: Departure of Average Pressure (mb) from Normal, **September 1967**.



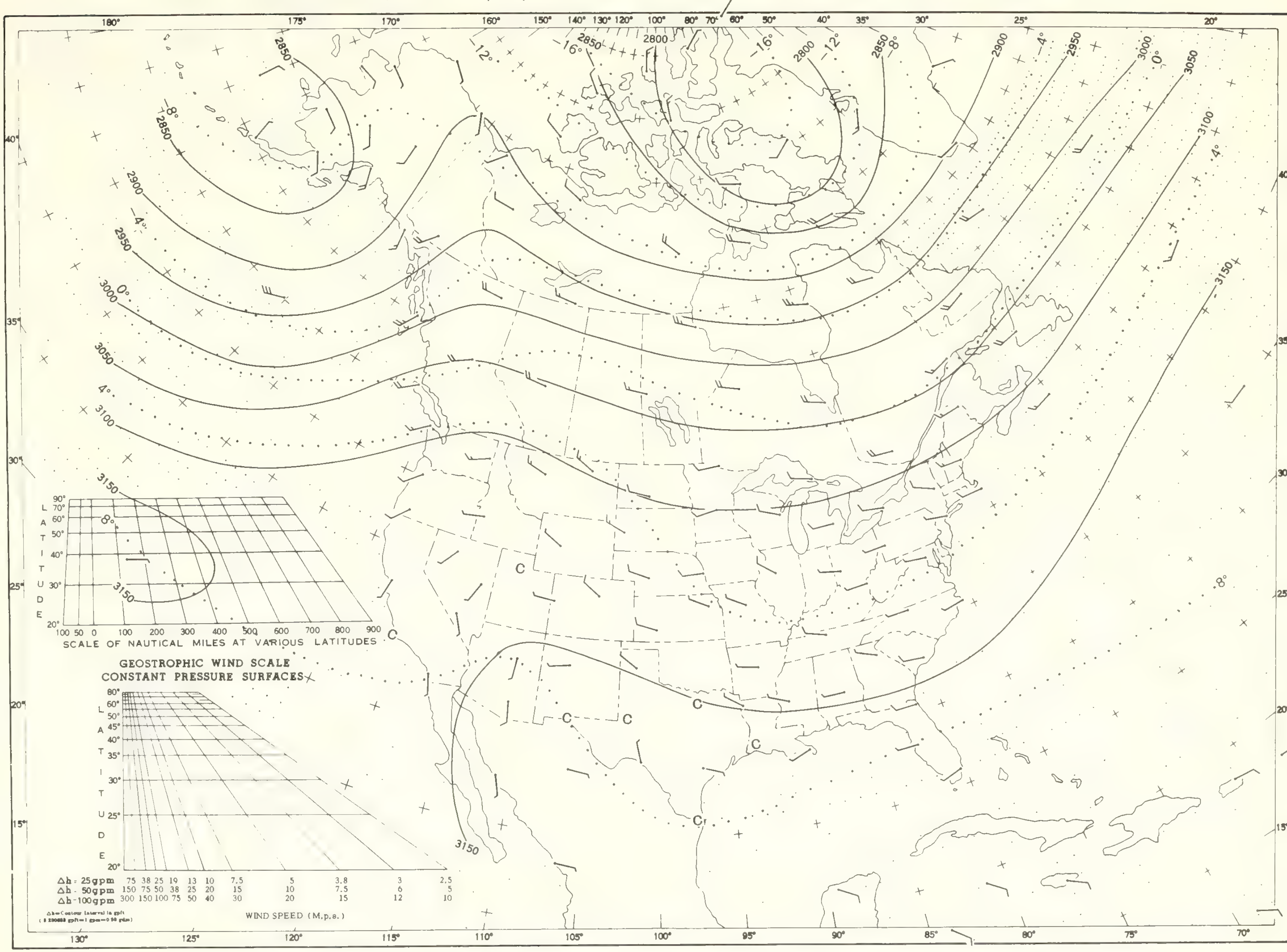
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb Surface, 1200 GMT, September 1967. Average Height and Temperature, and Resultant Winds.



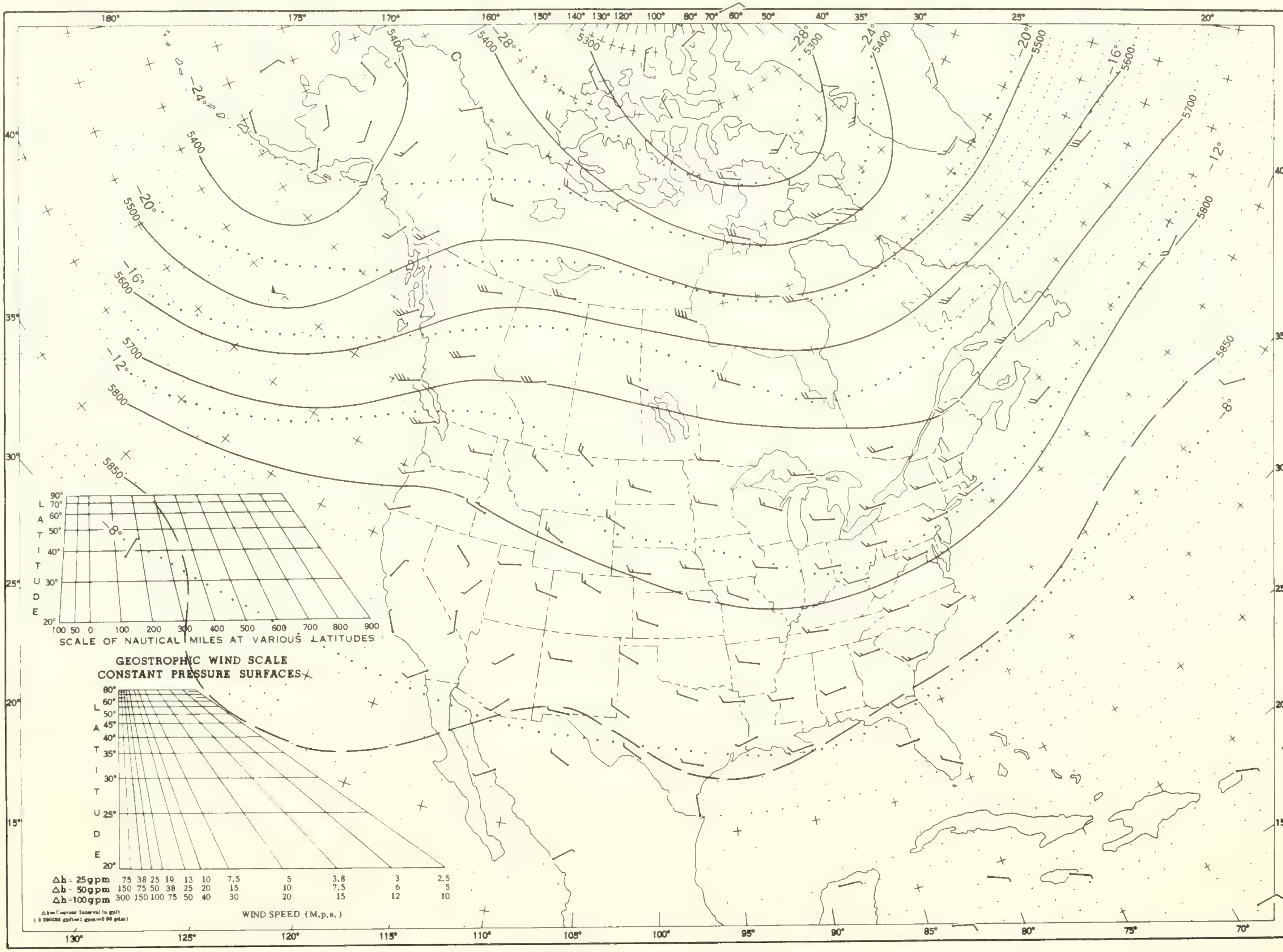
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, **September 1967**. Average Height and Temperature, and Resultant Winds.



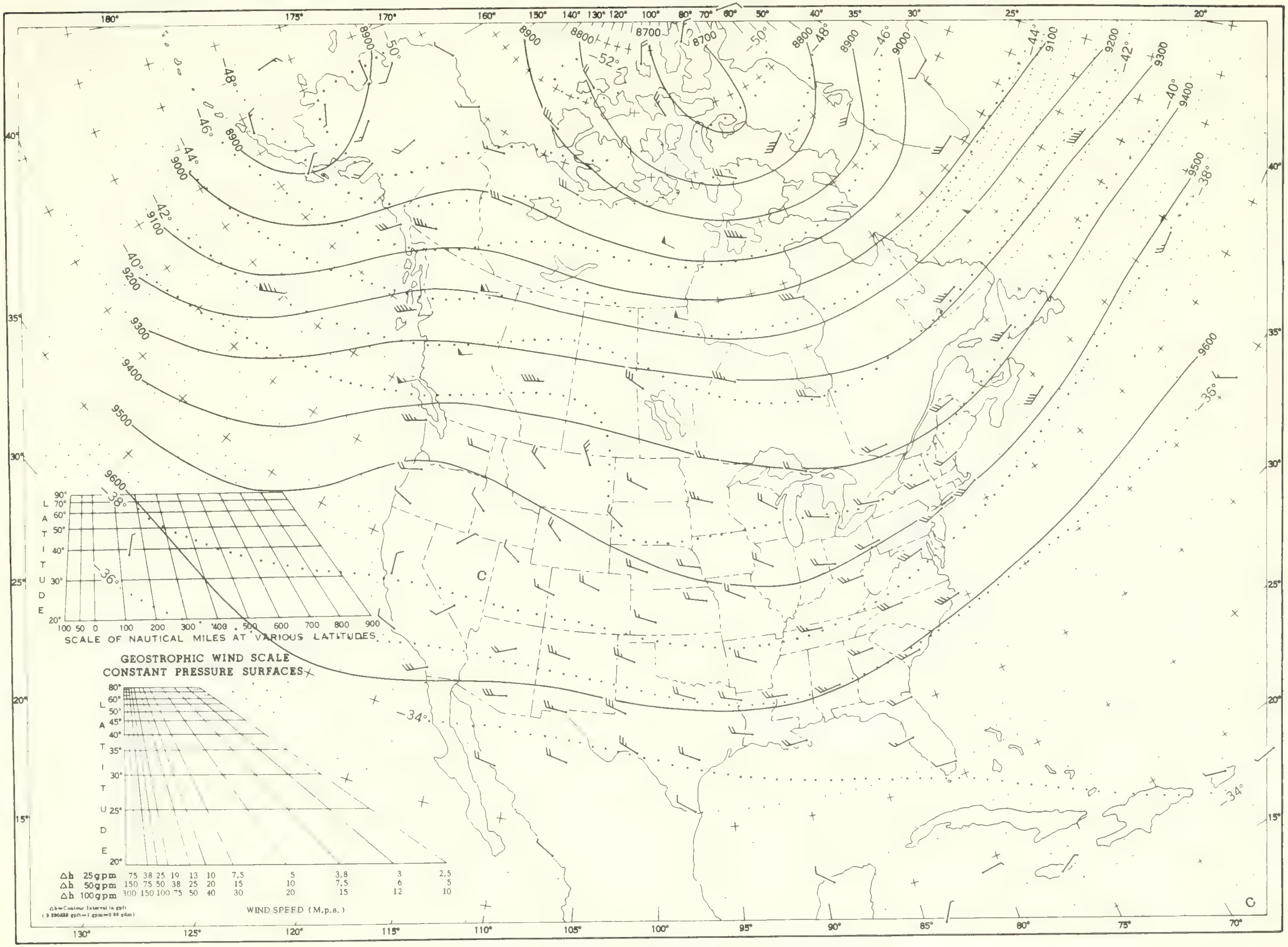
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, **September 1967**. Average Height and Temperature, and Resultant Winds.



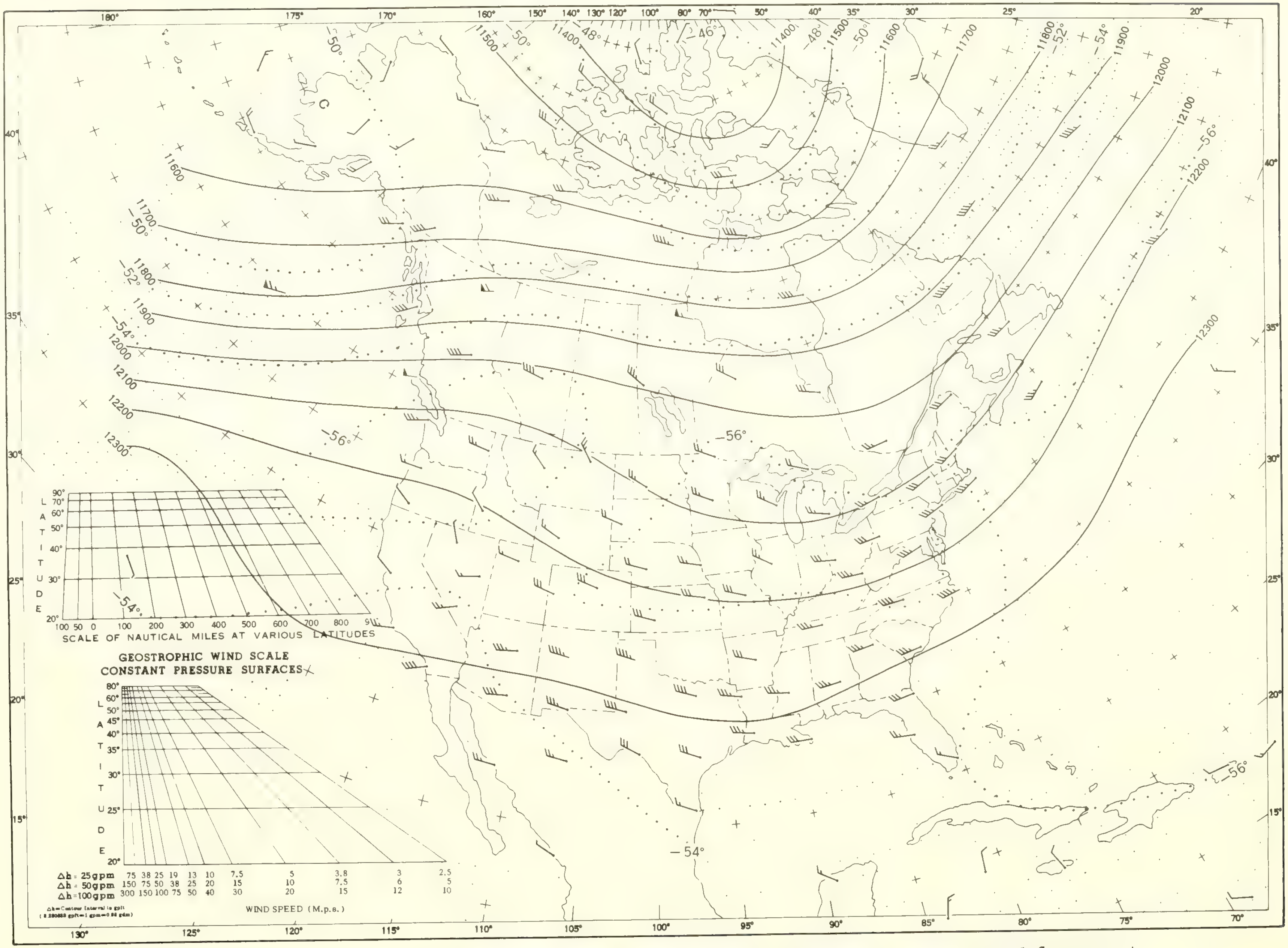
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, September 1967. Average Height and Temperature, and Resultant Winds.



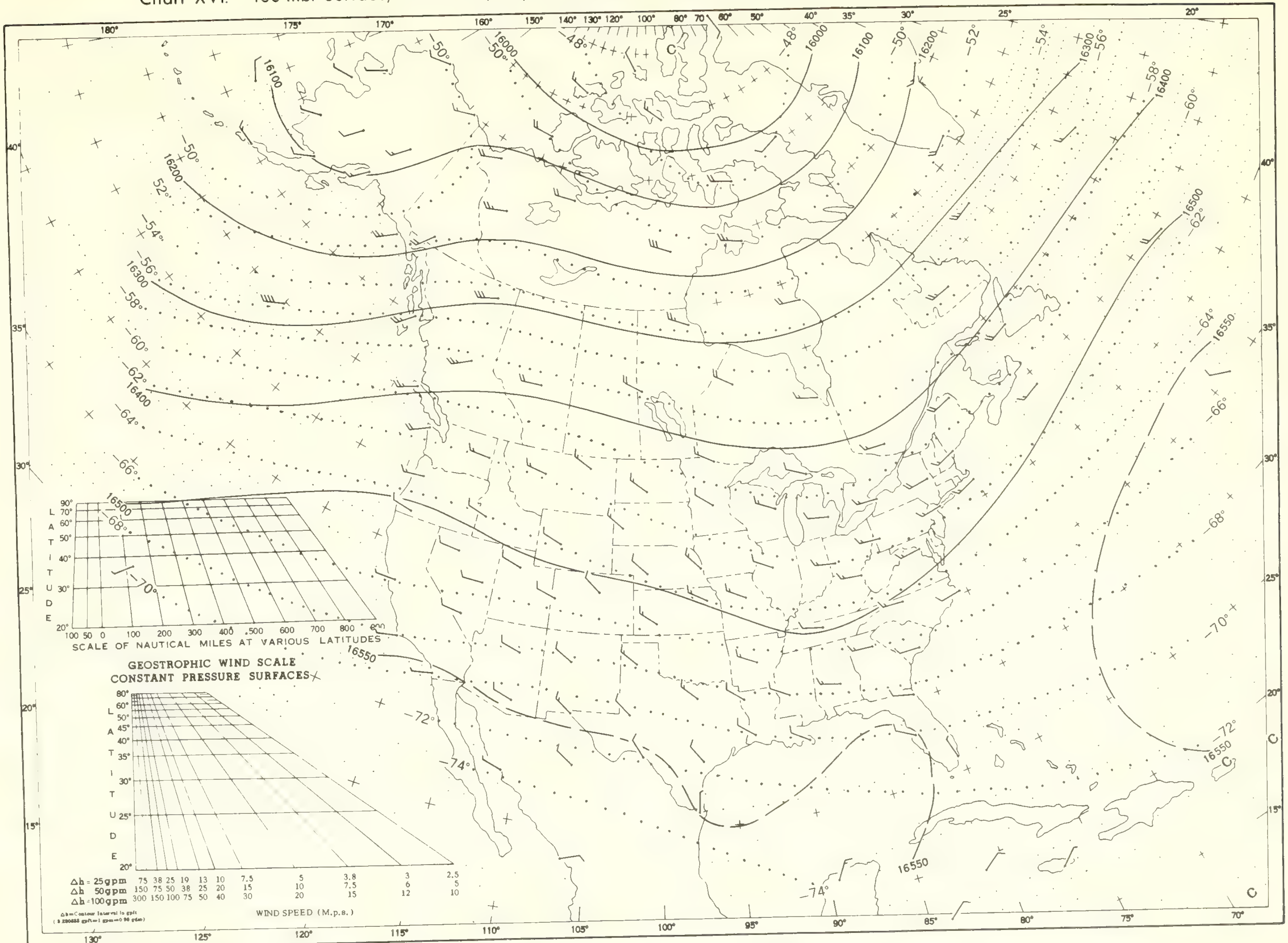
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, **September 1967**. Average Height and Temperature, and Resultant Winds.



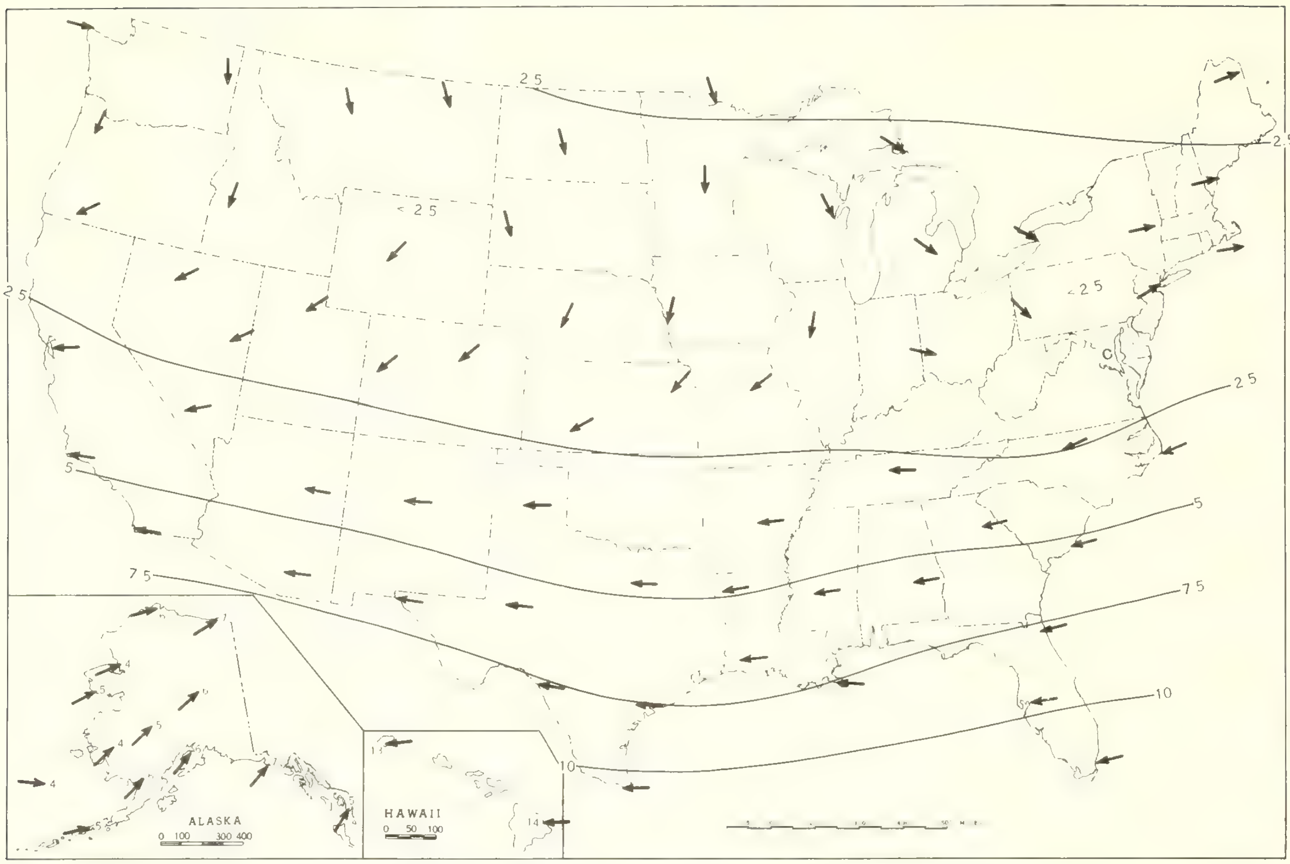
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, September 1967. Average Height and Temperature, and Resultant Winds.

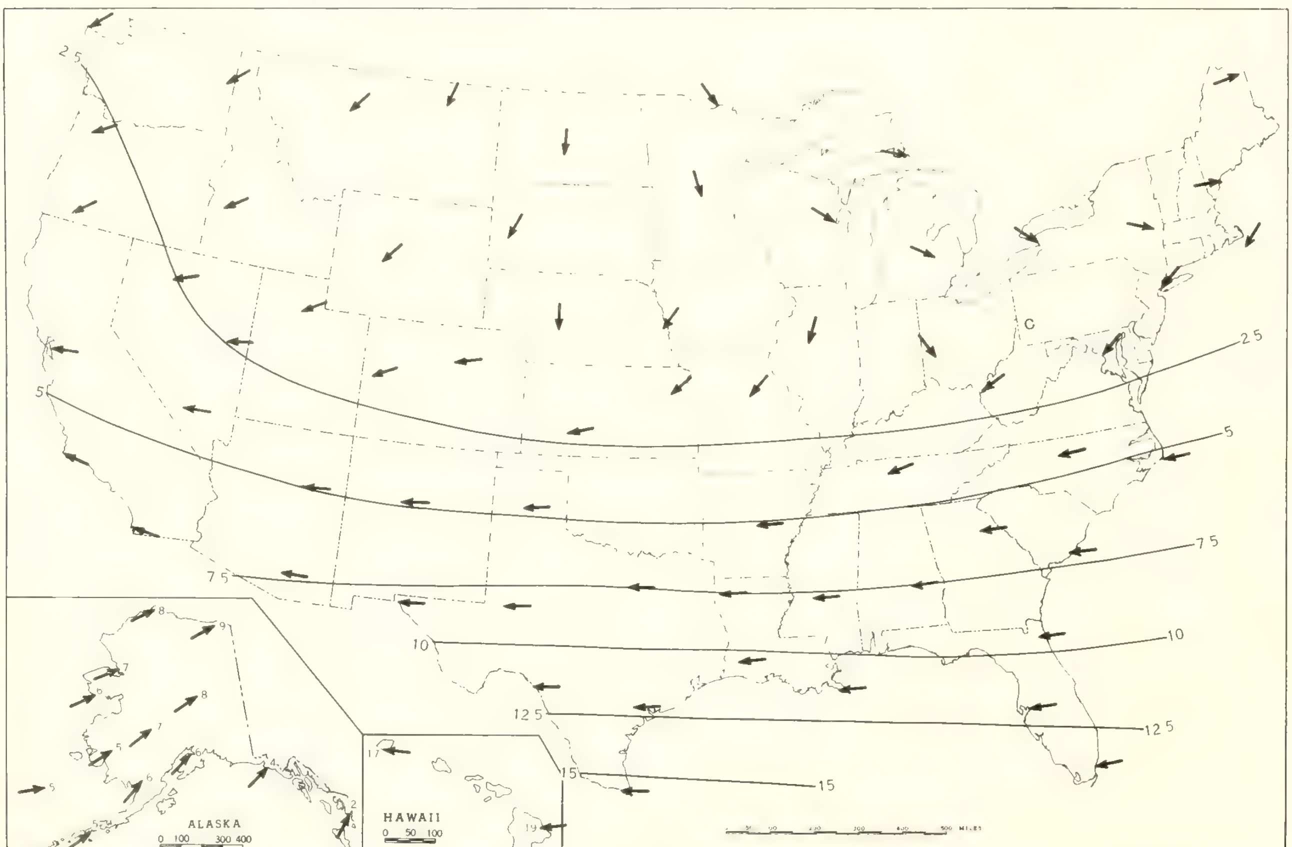


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, September 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, September 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

OCTOBER 1967

Volume 18 No. 10

ASHEVILLE: 1968

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 10 OCTOBER 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Heavy precipitation in Midwest.
2. Cold, damp weather delayed harvests in Corn and Cotton Belts.
3. Early snowfall in some areas.
4. Early frost and freeze some southern areas.
5. Continued warm in West, cold in East.

TEMPERATURE.--October was slightly warmer than normal in New York and New England and west of the Great Plains. Elsewhere the month was relatively cool. The month was a pleasant one in most areas.

In most central and southeastern areas, temperatures have averaged below normal for every month since April. Hardly any new temperature records were set in these areas for October, although several locations were among the 10 coldest. The period May through October was the coolest such period at Jackson, Miss. Frost was somewhat early in many southern areas. Memphis, Tenn., and Alexandria, La., reported light frost as early as the 19th. Freezing extended south to Augusta and Macon, Ga., on the 29th, which was about 3 weeks earlier than the average date for these locations.

Temperatures in the Far West have averaged above normal for every month since June and in the Pacific Northwest since May. This was one of the 10 warmest Octobers in scattered locations. Nevertheless, invasions of cool Pacific air during the early, middle, and closing days of the month were responsible for brief cool periods. The first cool period caused temperatures to average below normal in Oregon, for the first time since mid-June.

Indian summer weather prevailed a considerable portion of the month over much of the 48 States. Nantucket, Mass., reported an unusually long period of Indian summer weather.

In the West the growing season (days between the last 32° in spring and the earliest in autumn) was unusually long. The first autumn freeze at Pueblo, Colo., on the 16th ended the second longest growing season (199 days) on record there.

PRECIPITATION.--The main area of above normal precipitation was a broad belt extending from eastern Texas to the Great Lakes and including the lower Missouri Valley and most of the Ohio Valley. Moderate to heavy frontal rains fell in this area about the 7th and 8th, 15th and 16th, 24th, and 29th and 30th. Some stations reported over 300 percent of normal rainfall for the month. Dubuque, Iowa, measured 8.58 inches, the wettest October on record back to 1851. Near record monthly amounts were reported by Kansas City, Mo., 8.63 inches; Evansville, Ind., 7.92; Topeka, Kans., 6.01; and Marquette, Mich., 5.50 inches. At the end of the month a surplus of soil moisture was reported in extreme southern Texas and in small areas of Arkansas, Illinois, and Upper Michigan.

Several smaller areas received above normal precipitation for the month. Among these were Alabama and the central Gulf coast, New York State and much of Pennsylvania, North Dakota and adjacent areas of Minnesota and Montana, western portions of Wyoming and Montana and eastern Idaho, and western portions of Washington and Oregon. A few stations in each of these areas reported more than twice the normal precipitation for October.

Areas with less than 50 percent of normal rainfall included the Far Southwest and a few smaller areas scattered through the Great Plains and along the Atlantic coast. Boston, Mass., had only 0.96 inch which is the least for October since 1946 and one of the 10 smallest amounts in 150 years. Wilmington, N. C., had its driest October since 1962; Rapid City, S. Dak., since 1960; and Sioux Falls, S. Dak., reported its sixth consecutive month with below normal precipitation.

At the end of the month topsoil moisture was short in immediate coastal areas from Virginia to Texas and in the northern two-thirds of Florida and most of Louisiana. Soil moisture was also short in Minnesota and the western portions of the Great Plains from Nebraska southward. In the Corn Belt harvesting operations were behind normal, particularly in the eastern portion, due mostly to cold, damp weather. The cotton harvest in much of the South was also behind for the same reason.

SNOWFALL.--Snowfall was unseasonably early in some northern areas and unusually heavy at some stations in the path of the storm of the 26th and 27th in midcontinent and northeastern areas. In Moline, Ill., 6.6 inches of snow during this storm was the most there for any October; and 1.8 inches was the most for October in Peoria, Ill., since 1929. Other records for both October and 24 hours were Grand Rapids, Lansing, and Muskegon, Mich., with 8.4, 7.5 and 4.9 inches, respectively. A trace fell at Evansville, Ind., on the 26-27th, and at Oklahoma City, Okla., on the 24th.

SEVERE STORMS.--Tornadoes were more frequent than usual for October. One caused 30 injuries and over $1 million damage in Pensacola, Fla., on the 30th. An outbreak of tornadoes occurred in the Ohio and middle Mississippi Valleys on the 24th and several of these storms in the St. Louis, Mo., area were responsible for 12 injuries and $545,000 damage; also on the 24th, a small tornado caused property damage in Jasper, Ind.

During a storm in the Buffalo, N. Y., area the night of the 27th, the Coast Guard reported wind gusts up to 96 m.p.h. and the Weather Bureau Airport Station 59 m.p.h. Damage estimates up to $250,000 were reported.

On the 2d and 3d a Pacific storm moved into the Northwest, causing widespread damage to apples and walnuts in Oregon's Willamette Valley. Gale winds were reported in Washington and northern California.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	91	7	Russellville 2	25	29+	Thomasville	8.99	Florence	1.72
Alaska	Data delayed									
Arizona	Buckeye	103	3+	2 Stations	9	30	Canelo 1NW	2.03	46 Stations	.00
Arkansas	2 Stations	93	5+	Gilbert	24	28	White Rock	12.01	Portland	.75
California	Culver City	106	15	Bodie	4	15	Elk Valley	7.26	238 Stations	.00
Colorado	4 Stations	96	4+	2 Stations	-7	30	Berthoud Pass	3.02	2 Stations	.00
Connecticut	2 Stations	86	6+	Falls Village	18	30	Bulls Bridge Dam	4.58	Westbrook	1.34
Delaware	Dover	88	5	Bridgeville 1NW	26	30+	Georgetown 5SW	2.55	Dover	1.90
Florida	Flamingo Ranger Sta	93	26	Steinhatchee McCain Tr	32	20	Kendall 2E	17.90	De Land 3N	.03
Georgia	2 Stations	94	8+	Blairsville Exp Sta	22	29	La Fayette	5.90	Louisville	.20
Hawaii	Data delayed									
Idaho	Glenns Ferry	84	11	Stanley 1NNE	8	22	Mullan FAA	9.05	Bruneau	.22
Illinois	2 Stations	90	5+	Aurora College	21	21	Benton Forest Service	9.56	Antioch 2NW	3.00
Indiana	3 Stations	90	5+	Osgood	14	22	Evansville WBAP	7.92	Vevay	1.74
Iowa	2 Stations	90	4+	Le Mars 2N	7	28	Columbus Junction	9.38	Rock Rapids	.49
Kansas	4 Stations	98	3+	Atwood	19	31	Herington 3WSW	8.52	2 Stations	.00
Kentucky	3 Stations	90	5+	Blaine 2W	20	30+	Henderson 7SSW	4.86	Jeremiah	.55
Louisiana	2 Stations	93	7+	Many	30	19	Saint Bernard	10.75	Keithville	1.06
Maine	Saco	83	3	Long Falls Dam	19	31	Ripogenus Dam	4.36	Brunswick	.96
Maryland	Picardy	92	5	Oakland 1SE	17	29	Edgemont	4.24	Charlotte Hall School	1.04
Massachusetts	Sandwich	86	5	2 Stations	19	30	Chester 2	5.61	Brockton	.77
Michigan	3 Stations	87	4	Stambaugh 1S	14	12	Cornell	7.24	Vanderbilt Trout Sta	2.19
Minnesota	2 Stations	88	3+	3 Stations	6	28	Rosemount Agri Exp Sta	2.90	Luverne	.19
Mississippi	do	92	5+	Merrill	28	27+	Gulfport Naval Center	11.97	Batesville 2SW	.32
Missouri	Kennett Radio KBOA	93	5	2 Stations	19	29+	Kansas City U of Mo	11.27	Round Spring 3NNW	2.60
Montana	Miles City	85	21+	Jackson	7	26	Bozeman 12NE	8.22	Powderville 8NNE	T
Nebraska	2 Stations	98	3	Harrisburg 10NW	11	27	Falls City	6.54	Harrison	.04
Nevada	Sunrise Manor Las Vegas	95	12+	Charleston	2	16+	2 Stations	1.13	34 Stations	.00
New Hampshire	Lebanon FAA AP	85	3	Mount Washington	13	29+	Mount Washington	6.67	Portsmouth	.94
New Jersey	Hammonton 2NNE	90	6+	Sussex 1SE	18	30	Midland Park	5.40	Cape May 3W	.85
New Mexico	Columbus	96	5	Gavilan	-8	30	Lake Maloya	1.67	27 Stations	.00
New York	New York Laurel Hill	89	5	Roxbury	11	30	Sodus Center	7.22	Cutchogue	.25
North Carolina	Laurinburg	90	6	Celo 2S	17	29	Lake Toxaway 2SW	7.10	Arcola	.30
North Dakota	Dunn Center 2SW	86	1	2 Stations	10	25	Bisbee	2.64	Medora 22NNW	.14
Ohio	2 Stations	89	5+	4 Stations	18	30+	Paulding 1NE	4.87	Lithopolis 2S	1.10
Oklahoma	Buffalo	100	4+	Kenton	23	27	Kiamichi Tower	9.71	Goodwell	.04
Oregon	Pendleton Brch Exp Sta	88	9	2 Stations	12	15	Valsetz	21.20	P-Ranch Refuge	.26
Pennsylvania	Phila 10th Chestnut	89	5+	do	16	31+	Laurelton St Village	6.56	Virginville	1.69
Puerto Rico	Guayama	96	2	Aibonito	56	18+	Maricao	21.81	Ensenada	1.32
Rhode Island	Providence WBAP	85	5	Kingston	26	23	Kingston	3.00	Block Island WBAP	1.32
South Carolina	McColl	90	6	Union 8SW	25	29	Caesars Head	5.88	Rimini	.00
South Dakota	Wood	97	3	Sisseton	7	28	Chamberlain	2.51	Midland	.11
Tennessee	2 Stations	90	6+	Mountain City No 2	18	29	Martin U of T Branch	4.96	Pope 2N	1.44
Texas	5 Stations	99	7+	3 Stations	23	31+	Wills Point	12.54	7 Stations	.00
Utah	Zion National Park	92	10	Woodruff	5	29	Mountain Dell Dam	2.45	14 Stations	.00
Vermont	Bellows Falls	86	4	Mount Mansfield	17	7	Enosburg Falls	6.26	Gilman	2.62
Virginia	Danville-Bridge St	92	6	2 Stations	17	29	Montebello 3NE	5.24	Back Bay WL Ref	.42
Washington	3 Stations	85	9+	Othello 6ESE	19	26	Spruce	30.93	Ice Harbor Dam	.12
West Virginia	Cairo 3S	89	3	Bayard	12	29	Pickens 1	4.69	Williamson	1.32
Wisconsin	Kenosha	89	2	Gordon 2ESE	8	28	El Dorado	7.10	Danbury	1.12
Wyoming	4 Stations	90	3	Kendall	1	30	Alta 1NNW	3.90	3 Stations	T

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	996.6	1019.4	75	46	60.7	- 5.0	85	7+	33	28	0	0	49	72	4.23	1.28	2.94	6	2	0.0	0	0.9	9	25	NW	24	21	2	8	3.7	75
HUNTSVILLE	600	995.9	1019.0	74	47	60.4	- 2.8	86	7	34	28	0	0	46	62	3.89	1.17	1.75	8	2	0.0	0	1.7	15	29	31	24	18	7	6	3.6	
MOBILE	211	1010.8	1018.6	79	54	66.7	- 3.2	88	6+	42	19	0	0		68	6.69	3.66	4.30	6	3	0.0	0	1.8	9	28	14	30	17	9	5	3.5	
MONTGOMERY	194	1011.9	1019.3	76	50	63.0	- 3.6	87	7	39	20	0	0	51	70	4.38	2.10	1.60	7	3	0.0	0	0.4	9	21	W	24	17	7	7	3.5	73
ALASKA												B																				
ANCHORAGE	114	995.3	1000.0	44	28	35.7	- 0.1	56	9+	15	31	0	26	25	66	0.51	- 1.36	0.39	5	0	4.8	4	2.4	1	18	14	15+	8	5	18	6.7	54
ANNETTE	110	1001.7	1005.8	54	43	48.3	1.6	66	2	35	31+	0	0	42	81	17.90	1.02	3.48	29	0	0.0	0	7.3	15	39	14	9	2	2	27	8.7	
BARROW	31	1010.8	1011.5	18	8	12.7	- 3.9	34	5	-11	30	0	31	11	89	0.32	- 0.18	0.06	14	0	5.2	6	4.1	8	25	5	27	1	2	28	9.0	
BARTER ISLAND	39	1009.8	1011.7	17	5	10.7	- 6.5	40	5	-16	17	0	31	3	66	0.42	- 0.42	0.24	8	0	2.8	3	1.1	25	40	27	3	4	5	22	8.2	
BETHEL	125	998.0	1003.6	34	21	27.4	- 4.0	55	4	- 2	31	0	26	24	86	0.39	- 1.15	0.17	5	0	2.4	2	5.6	2	29	4	8	5	3	23	7.7	
COLD BAY	96	997.3	1001.2	43	33	38.2	- 1.9	54	3	22	27	0	15	33	82	2.71	- 1.88	0.91	26	0	4.5	1	3.1	33	53	18	31	0	10	21	8.5	
FAIRBANKS	436	987.8	1005.1	32	17	24.8	- 1.4	47	6+	- 2	29	0	31	18	75	0.32	- 0.53	0.11	8	0	5.8	4	3.2	1	23	25	3	5	5	21	7.4	
JUNEAU	12	1002.7	1003.4	49	37	43.1	1.5	60	5+	29	8+	0	4	38	86	5.71	- 2.62	0.94	23	0	0.0	0	8.7	11	35	12	19	1	4	26	9.1	26
KING SALMON	49	998.0	1000.1	38	22	30.0	- 5.7	62	4	- 1	28	0	24	23	73	0.52	- 1.63	0.21	6	0	1.2	1	4.4	2	35	8	8	5	7	19	7.3	
KOTZEBUE	10	1006.4	1006.9	29	19	23.7	- 1.0	44	2+	- 3	30	0	25	18	79	0.33	- 0.26	0.13	7	0	6.2	5	8.6	9	37	12	4	8	3	20	7.0	
MC GRATH	344	991.5	1004.5	31	16	23.4	- 3.4	50	3	- 8	31	0	30	17	76	0.24	- 1.08	0.09	7	0	4.9	3	2.5	35	23	2	8	4	7	20	7.7	
NOME	13	1004.1	1005.0	34	20	27.0	- 2.7	48	4	2	23	0	25	16	62	0.79	- 0.92	0.34	7	0	1.8	4	4.7	4	29	1	14	8	7	16	6.2	38
ST. PAUL ISLAND	22	1002.4	1003.4	42	34	37.8	0.6	50	4	22	30+	0	13	31	75	1.89	- 1.26	0.38	24	0	7.2	3	5.1	3	49	12	31+	0	10	21	8.5	
SHEMYA	122	1000.7	1004.3	45	37	41.1	1.4	49	3+	29	27	0	2	37	84	4.37	1.61	1.30	25	0	0.1	T	5.1	27	46	20	4+	3	13	15	7.2	
YAKUTAT	28	999.3	1000.3	48	33	40.0	- 1.9	63	1	23	8	0	13	35	85	17.03	- 2.56	2.20	23	2	1.6	1	4.3	8	28	12	26	5	3	23	7.9	
ARIZONA																																
FLAGSTAFF	6993	791.1	1019.0	68	32	50.0	3.0	75	13+	23	27	0	17	24	44	0.30	- 1.22	0.25	3	1	0.0	0	1.1	12	28	5	29	18	11	2	2.8	
PHOENIX	1117	974.6	1013.2	89	58	73.5	2.8	98	1	45	31	18	0	39	34	0.67	0.21	0.66	2	2	0.0	0	2.6	11	45Y	S	3	22	8	1	2.1	96
TUCSON	2584	926.5	1013.4	86	58	71.6	1.6	95	5	41	31	5	0	38	35	1.03	0.39	1.03	2	2	0.0	0	3.3	13	32	E	16	21	7	3	2.4	92
WINSLOW	4895	854.7	1018.4	76	38	57.0	- 0.4	87	1	25	30	0	7	22	29	0.11	- 0.55	0.11	1	0	0.0	0	2.0	24	26	34	29	21	7	3	2.5	
YUMA	194	1005.8	1012.9	92	62	76.7	2.2	96	17+	51	31	25	0	43	36	0.00	- 0.38	0.00	0	0	0.0	0	0.5	1	32	N	29	26	3	2	1.5	96
ARKANSAS																																
FORT SMITH	447	1000.3	1016.8	76	48	62.1	- 1.7	91	5+	32	28	4	1	47	64	6.96	3.51	3.28	7	3	0.0	0	1.0	29	30	NW	24	11	9	11	5.3	63
LITTLE ROCK	257	1007.8	1017.3	74	48	60.9	- 2.2	87	5	33	28	0	0	49	69	4.96	2.08	2.65	10	1	0.0	0	2.8	21	35	SE	30	13	6	12	4.8	73
TEXARKANA	391	1004.4	1017.5	78	54	66.0	- 0.1	90	5+	41	19	3	0			4.30	1.32	2.74	6	2	0.0	0	3.2	21	23	25	29+	16	7	8	4.1	
CALIFORNIA																																
BAKERSFIELD	475	999.7	1017.1	82	56	69.0	2.2	93	15	45	30	3	0	42	42	0.00	- 0.32	0.00	0	0	0.0	0	1.1	33	18	15	15	25	6	0	1.5	
BISHOP	4108	876.4		81	38	59.3	1.9	88	12	30	15	0	5			0.00	- 0.43	0.00	0		0.0	0						21	7	3	2.5	
BLUE CANYON	5280			65	47	56.1	2.3	76	30	33	3+	0	0			2.76	- 0.65	2.39	5		0.0	0			33	29	2	16	5	10	4.2	
EUREKA U	43			64	50	56.9	2.5	74	17	42	29	0	0			2.15	- 1.04	0.50	10		0.0	0			45	SE	2	9	10	12	5.4	65
FRESNO	328	1005.1	1016.8	83	49	66.0	1.4	90	17+	40	30	4	0	46	55	0.07	- 0.36	0.07	1	0	0.0	0	1.1	30	20	NW	5+	22	8	1	2.0	93
LONG BEACH	34	1013.9	1015.3	84	60	71.6	5.1	99	17+	53	19	8	0	52	62	T	- 0.17	T	0	0	0.0	0	1.5	30	23	8	15	17	12	2	3.3	
LOS ANGELES	97	1011.2	1014.7	77	60	68.5	3.6	97	15	54	30	4	0	50	63	T	- 0.39	T	0	0	0.0	0	2.7	26	29Y	W	5	17	11	3	3.2	
LOS ANGELES U	270			84	61	72.5	5.1	99	17+	58	30+	6	0			0.00	- 0.41	0.00	0		0.0	0			16	N	5	22	7	2	2.2	71
MT SHASTA R	3544			65	37	50.9	- 1.0	76	17+	30	26	0	4			1.89	- 0.55	1.62	6		0.0	0										
OAKLAND	6	1018.0	1018.1	73	55	63.6	2.5	85	15	50	29	0	0	53	71	0.53	- 0.25	0.37	5	0	0.0	0	2.5	28	25	20	2	19	5	7	3.2	
RED BLUFF	342	1005.1	1017.9	81	52	66.1	0.5	89	30+	46	7	0	0	39	45	0.08	- 1.29	0.07	2	0	0.0	0	3.1	34	43	SE	2	17	9	5	3.7	83
SACRAMENTO	17	1016.3	1017.2	81	50	65.5	2.0	88	18+	44	30+	0	0	47	60	0.24	- 0.53	0.17	2	0	0.0	0	1.8	31	29	NW	29+	19	6	6	3.3	90
SANDBERG R	4517	865.6		70	51	60.9	2.2	83	11	36	6	0	0	26	33	0.00	- 0.49	0.00	0		0.0	0	5.8	3	53	34	28	28	3	0	1.1	
SAN DIEGO	13	1013.5	1014.6	77	60	68.1	2.0	91	16	54	25	1	0	52	64	0.00	- 0.49	0.00	0	0	0.0	0	2.8	31	19	NW	6	22	8	1	2.6	85
SAN FRANCISCO	8	1017.3	1018.1	74	53	63.5	3.0	86	16	46	26	0	0	49	67	0.48	- 0.26	0.38	4	0	0.0	0	6.7	29	40	WNW	2	22	3	6	2.8	
SAN FRANCISCO U	52			73	59	65.5	4.1	86	17	55	26+	0	0			0.53	- 0.36	0.50	3		0.0	0			28	S	2					86
SANTA CATALINA	1568	960.0		78	62	70.4	5.1	97	15	54	21	3	0			0.00	- 0.94	0.00	0	0	0.0	0										
SANTA MARIA	236			78	47	62.4	2.0	91	16	41	20	2	0			T	- 0.60	T	0		0.0	0						25	6	0	1.4	
STOCKTON	22	1016.6	1017.7	81	51	66.0	2.0	89	11	42	30	0	0	47	57	0.15	- 0.48	0.11	2	0	0.0	0	4.3	31	32	31	2	21	6	4	2.8	
COLORADO																																
ALAMOSA	7536	774.1		65	22	43.4	- 1.0	75	12+	- 2	30	0	26			0.42	- 0.18	0.42	1		4.3	4						15	12	4	3.8	
COLORADO SPRINGS	6145	813.1	1017.1	65	39	52.3	2.0	84	3	23	30+	0	5	28	45	1.68	0.99	0.89	7	2	T	T	3.5	2	38	36	26	16	8	7	3.9	
DENVER	5283	837.5	1015.5	69	36	52.5	1.1	87	3	22	27	0	10	29	48	1.13	0.12	0.54	6	1	1.7	2	2.0	19	37	NW	23	13	11	7	4.7	71
GRAND JUNCTION	4855	855.1	1017.7	70	41	55.3	0.3	85	3	26	30+	0	7	24	34	0.63	- 0.11	0.30	4	0	T	T	1.4	12	38	NW	23	17	9	5	3.7	85

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	857.1	1016.6	69	36	52.3	- 2.5	86	3	23	27	0	12	29	47	0.79	- 0.20	0.44	5	1	T	0	2.3	35	42	N	26+	16	6	9	4.3	80
CONNECTICUT																																
BRIDGEPORT	7	1019.0	1019.5	65	48	56.4	1.0	84	5	30	30	0	1	45	67	2.39	- 0.99	1.56	3	0	0.0	0	3.9	27	51	24	19	9	10	12	5.5	
HARTFORD	169	1012.2	1018.8	64	42	52.8	- 0.2	85	5	27	30	0	5	42	69	2.59	- 0.59	1.25	6	1	0.0	0	2.0	26	34	NW	29	9	5	17	6.3	54
NEW HAVEN	6	1019.3		64	45	54.5	0.5	83	5	29	30	0	1			2.45	- 1.00	1.36	5		0.0	0			35	SW	19	9	9	13	5.6	68
DELAWARE																																
WILMINGTON	74	1016.9	1020.0	66	44	54.7	- 1.9	87	5	30	30	0	2	46	75	2.05	- 0.86	0.86	4	1	0.0	0	2.2	27	33	18	18	10	7	14	5.7	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1018.0	1020.2	69	47	57.9	- 1.1	91	5	35	30	1	0	46	67	1.77	- 1.30	0.69	4	0	0.0	0	1.1	23	34	SW	18	10	6	15	5.7	53
FLORIDA																																
APALACHICOLA U	13			76	59	67.9	- 3.3	83	8+	48	19	0	0			1.96	- 0.48	1.47	3	1	0.0	0			31	E	29	21	3	7	3.5	74
DAYTONA BEACH	31	1016.9	1018.4	80	63	71.3	- 2.1	86	17	50	20	0	0	62	74	0.19	- 5.42	0.19	1	1	0.0	0	4.7	4	22	1	21	9	11	11	5.9	
FORT MYERS	15	1016.6	1016.9	83	69	75.8	- 0.3	86	30+	59	20	0	0	67	78	3.08	- 1.01	1.70	7	3	0.0	0	6.2	5	21	10	24+	11	14	6	4.8	
JACKSONVILLE	20	1018.0	1019.0	81	58	69.5	- 1.5	89	7	46	20	0	0	57	70	1.13	- 4.03	0.83	5	0	0.0	0	4.2	2	29	E	30	14	6	11	5.1	62
KEY WEST	4	1014.9	1015.5	84	76	79.7	0.7	86	26+	72	20	0	0	72	79	5.63	- 0.19	1.90	10	5	0.0	0	8.1	6	27	SE	30	4	9	18	7.0	57
LAKELAND U	214			81	63	72.3	- 2.2	86	17	53	20	0	0			1.04	- 1.89	0.59	5		0.0	0						12	12	7	4.5	81
MIAMI	7	1015.6	1015.9	82	70	76.2	- 1.6	87	8	63	19	0	0	69	80	12.88	4.67	3.23	16	5	0.0	0	6.2	5	25	6	20	4	13	14	6.6	
ORLANDO	108	1013.9	1018.2	84	64	74.0	0.0	89	17	54	20	0	0	61	70	0.35	- 3.61	0.16	5	0	0.0	0	5.0	4	21	9	30+	8	14	9	5.3	
PENSACOLA	112	1014.6	1018.7	79	55	66.5	- 3.9	87	6+	42	26	0	0	54	69	5.79	2.81	4.98	4		0.0	0	2.1	6	54	E	30	17	7	7	3.6	81
TALLAHASSEE	55	1016.6	1018.8	82	51	66.4	- 3.2	91	7	37	26	2	0	53	70	3.39	0.96	2.07	5	0	0.0	0	1.9	5	18	12	30	17	8	6	3.6	
TAMPA	19	1017.3	1017.5	84	63	73.5	- 1.2	88	8+	51	28+	0	0	62	72	2.42	- 0.36	2.02	3	2	0.0	0	5.9	5	21	30	18+	16	7	8	4.5	74
WEST PALM BEACH	15	1015.6	1016.4	84	69	76.5	- 1.7	88	17	60	19	0	0	66	72	10.00	2.04	4.80	11	8	0.0	0	6.3	6	35	26	17	4	15	12	6.5	
GEORGIA																																
ATHENS	802	990.5	1019.6	74	48	60.6	- 2.4	88	6	35	29+	0	0	48	68	3.60	0.74	1.39	5	2	0.0	0	0.8	2	21	31	18	17	7	7	3.9	
ATLANTA	1010	982.7	1019.6	72	47	59.4	- 3.0	84	6	35	29+	0	0	47	67	2.51	0.07	1.13	7	2	0.0	0	1.0	1	26	NW	18	18	7	6	3.6	80
AUGUSTA	145	1013.9	1019.2	78	45	61.9	- 3.3	90	6+	30	29	2	1	48	70	0.55	- 1.46	0.47	3	0	0.0	0	0.5	5	23	24	18	15	9	7	3.8	
COLUMBUS	385			77	49	62.9	- 2.5	88	7	36	20+	0	0	51	71	3.23	1.46	1.93	7		0.0	0	1.0	4	21	29	17	18	4	9	3.8	
MACON	354	1006.1	1019.2	78	45	61.4	- 4.8	89	7	30	29	0	3	48	66	1.22	- 0.79	0.52	6	1	0.0	0	1.0	4	24	NW	18	18	8	5	3.6	76
ROME	637			74	44	58.7	- 2.5	87	7	30	29+	0	4			3.81	0.88	1.26	9		0.0	0										
SAVANNAH	46	1017.6	1019.3	78	51	64.4	- 2.8	88	6	37	29	0	0	53	73	1.36	- 1.22	0.75	5	2	0.0	0	1.6	5	22	NW	18	16	7	8	4.5	76
HAWAII																																
HILO	27	1014.2	1015.3	85	70	77.2	2.1	90	4	64	8	1	0	67	75	10.08	- 0.72	3.67	19	1	0.0	0	1.4	21	15	E	8	8	9	14	6.5	43
HONOLULU	7	1014.2	1014.8	88	73	80.6	2.4	92	3	69	9	9	0	67	67	1.53	- 0.31	0.53	14	1	0.0	0	6.3	6	32	E	21	8	13	10	5.5	63
KAHULUI	48	1012.2	1014.5	86	69	77.2	- 0.1	89	13+	62	9+	0	0	67	74	0.77	- 0.10	0.27	9	0	0.0	0	8.6	4	28	NE	24+	16	5	10	4.7	71
LIHUE	103	1010.8	1016.1	84	71	77.5	0.6	86	29	65	31	0	0	69	77	1.85	- 2.18	0.63	22	1	0.0	0	8.1	5	21	E	22+	6	14	11	6.0	65
IDAHO																																
BOISE	2838	919.4	1020.1	64	38	50.7	- 0.9	78	10	24	26	0	5	34	57	0.42	- 0.42	0.20	8	0	0.0	0	1.4	13	29	NW	28	11	8	12	5.7	66
LEWISTON	1413			64	43	53.4	1.4	77	9+	33	29+	0	0			0.88	- 0.33	0.27	9		0.0	0						3	11	17	7.6	
POCATELLO	4454	866.2	1020.0	63	32	47.3	- 1.8	76	11	17	27	0	16	29	55	0.80	- 0.09	0.45	5	1	T	0	6.9	23	38	SW	2	10	13	8	5.1	69
ILLINOIS																																
CAIRO U	314			71	52	61.2	- 0.7	89	5	37	28	0	0			5.54	2.66	2.96	9		0.0	0			30	SW	15	13	6	12	5.1	59
CHICAGO O HARE	658	991.5	1015.9	62	44	52.9	- 0.2	87	4	28	12	0	4	42	68	3.89	1.14	1.10	12	1	6.6	4	3.9	23	40	20	24	7	5	19	7.0	
CHICAGO MIDWAY	607	993.6		62	45	53.4	- 1.7	87	4	31	26	0	1	40	64	4.67	1.89	1.91	11	2	4.4	3	4.2	21	33	SE	24	6	8	17	6.9	46
MOLINE	582	993.9	1015.5	62	43	52.1	- 2.7	87	4	28	28	0	7	41	69	6.23	3.77	1.76	11	3	6.6	5	2.8	23	29	W	20	7	10	14	6.4	54
PEORIA	652	992.2	1016.2	62	43	52.6	- 2.7	86	4	25	26	0	3	42	69	5.56	3.03	1.57	12	5	1.8	1	2.8	21	39	SW	24	9	7	15	6.3	50
ROCKFORD	724	988.2	1015.1	60	42	51.3	- 1.2	86	4	28	21	0	5	42	74	5.06	2.36	1.46	12	2	2.2	1	2.5	24	28	28	20	6	7	18	6.9	
SPRINGFIELD	588	993.9	1016.2	65	45	54.9	- 1.8	88	4	30	28	0	4	44	70	4.20	1.29	1.32	12	4	0.1	T	3.8	20	36	S	24	8	8	15	6.5	53
INDIANA																																
EVANSVILLE	381	1003.7	1017.8	69	46	57.3	- 1.8	90	4	31	26	1	4	46	69	7.92	5.35	3.00	9	4	0.0	0	2.6	20	34	SW	24	9	6	16	6.3	56
FORT WAYNE	791	987.1	1017.5	61	41	51.1	- 1.9	86	4	26	29	0	7	41	73	4.22	1.36	1.60	13	1	0.0	0	5.0	22	37	W	27	8	4	19	6.9	49
INDIANAPOLIS	792	988.2	1017.4	66	45	55.2	- 0.2	87	4	30	12	0	3	45	72	5.72	3.10	1.96	12	3	T	T	3.0	21	42	W	24	5	7	19	7.3	41

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 °F. or above	No. of days: Min. 32 °F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
SOUTH BEND	773	988.2	1016.2	59	44	51.7	- 1.7	85	4	31	26	0	3	44	77	5.01	1.84	1.22	18	4	5.0	1	4.3	22	28	23	24	4	7	20	7.5	
IOWA																																
BURLINGTON	692			63	44	53.0	- 2.4	87	4	26	28+	0	4	42	72	5.63	2.93		12	7	3.4		2.0	25	23	18	14+	10	7	14	6.0	
DES MOINES	938	981.0	1016.0	61	42	51.5	- 2.7	86	2	22	28	0	7	38	62	1.93	- 0.13	0.63	7	3	2.4	2	1.7	29	33	NW	24+	10	4	17	6.2	59
DUBUQUE	1056	976.0		58	40	49.1	- 1.6	80	4+	25	26	0	8			8.58	5.84	2.56	10		0.6	T						7	6	18	7.0	
SIOUX CITY	1095	975.6	1015.7	63	38	50.4	- 3.6	88	2	15	28	0	10	36	62	1.26	- 0.16	0.82	7	1	1.7	1	2.3	31	38	NW	24	10	6	15	5.8	64
WATERLOO	868	983.1	1015.3	57	35	46.4	- 5.3	83	2	15	28	0	15	38	74	2.80	0.68	1.37	8	2	T	T	1.4	26	25	19	23	8	6	17	6.6	
KANSAS																																
CONCORDIA	1470	962.4	1015.3	66	44	54.9	- 2.8	88	1	29	28	0	4	42	66	1.48	- 0.20	0.81	7	4	0.0	0	0.9	17	31	S	23	14	7	10	4.6	71
DODGE CITY	2582	924.5	1014.9	72	44	58.3	0.0	94	2	30	30+	3	4	34	45	0.31	- 1.11	0.16	5	1	T	0	0.8	29	42	N	23	14	9	8	4.2	84
GOODLAND	3650	888.6	1015.3	70	37	53.5	0.4	93	3	23	27	1	11	31	48	0.52	- 0.24	0.22	4	0	T	T	3.7	29	35	32	28+	17	8	6	3.7	
TOPEKA	876	984.1	1015.9	66	44	54.7	- 3.5	86	4	25	28	0	3	44	70	6.01	3.67	2.99	9	5	0.0	0	1.2	27	31	NW	24+	13	6	12	5.5	63
WICHITA	1321	967.5	1015.3	69	46	57.7	- 2.2	89	6	33	25	0	0	43	61	2.98	0.58	2.17	4	3	0.0	0	1.4	19	42	NW	6	14	8	9	4.5	75
KENTUCKY																																
COVINGTON	869	986.8	1018.4	66	45	55.5	- 0.6	87	4	30	29	0	4	45	70	2.65	0.39	0.64	10	1	T	0	3.9	22	35	27	24	6	5	20	7.2	
LEXINGTON	966	983.4	1018.9	67	46	56.1	- 2.0	81	4	31	29	0	2	45	69	2.11	- 0.17	1.10	8	2	0.0	0	4.6	18	23	25	27+	7	9	15	6.3	
LOUISVILLE	477	1000.3	1018.1	69	46	57.2	- 0.7	85	4	33	29+	0	0	46	71	3.06	0.81	0.83	11	3	0.0	0	2.6	21	34	SE	24	7	9	15	6.4	57
LOUISIANA																																
ALEXANDRIA	92	1013.9	1018.1	79	47	62.7	- 4.4	87	3	34	19	0	0	51	71	4.31	0.78	3.74	5	0	0.0	0	1.2	17	21	29	17	15	9	7	3.8	
BATON ROUGE	64	1015.9	1018.6	79	51	65.2	- 3.9	88	14	40	26+	0	0	52	68	2.17	- 0.28	1.04	5	1	0.0	0	1.1	10	22	27	17	17	8	6	3.3	
LAKE CHARLES	9	1017.3	1018.4	81	55	68.0	- 2.5	89	3	43	19	0	0	57	74	4.57	1.51	3.51	7	2	0.0	0	1.8	12	26	15	29	15	11	5	3.9	
NEW ORLEANS	3	1017.6	1018.4	79	53	65.6	- 4.8	86	6	41	26+	0	0	57	75	3.79	0.95	2.54	5	2	0.0	0	2.1	6	28	25	30	19	8	4	3.3	
SHREVEPORT	254	1008.1	1017.3	81	52	66.5	- 1.8	92	4+	41	31	3	0	50	61	1.34	- 1.47	0.56	6	1	0.0	0	2.5	18	25	32	17	13	12	6	4.2	72
MAINE																																
CARIBOU	624	994.2		52	37	44.2	1.2	69	3	26	8	0	9			2.81	- 0.55	1.10	14		T	0						3	4	24	8.3	
PORTLAND	47	1016.3	1018.7	59	40	49.7	1.1	77	4+	28	23	0	10	42	77	1.31	- 1.89	0.56	8	0	0.0	0	2.4	23	28	SW	19	10	7	14	5.7	57
MARYLAND																																
BALTIMORE	148	1014.6	1020.0	67	44	55.3	- 1.7	89	5	31	30	0	3	46	74	1.34	- 1.84	0.77	3	0	0.0	0	2.4	27	38	W	18	12	6	13	5.5	53
MASSACHUSETTS																																
BLUE HILL OBS R	629			61	44	52.7	0.0	80	5	28	30	0	2			1.31	- 2.44	0.48	7		0.0	0			50	SW	19+					61
BOSTON	15	1018.0	1019.0	61	46	53.8	- 1.2	81	5	34	30	0	0	44	72	0.96	- 2.18	0.39	8	0	0.0	0	3.8	24	36	SW	19	12	7	12	5.1	65
NANTUCKET	43	1019.0	1019.3	62	47	54.5	0.2	77	4	34	23+	0	0	49	80	2.77	- 0.93	2.03	8	0	0.0	0	1.8	23	37	SW	19	11	9	11	5.7	62
PITTSFIELD	1170			59	37	48.1	0.0	80	3	21	30	0	14			3.55	0.30	1.47	6		0.0	0										
WORCESTER	986	982.4	1019.6	61	43	51.5	1.0	80	3	26	30	0	2	42	72	1.83	- 1.64	0.79	8	0	0.0	0	4.5	26	29	17	19	11	7	13	5.5	
MICHIGAN																																
ALPENA	689	989.8	1015.2	56	36	46.4	0.1	85	4	25	22+	0	12	38	73	2.28	- 0.14	0.53	12	0	0.2	T	2.1	21	28	SE	24	4	4	23	7.5	41
DETROIT	619			61	47	54.0	0.2	86	4	31	29	0	1	43	68	3.88	1.21		6	2	T	0	4.2	24	25	28	27					
DETROIT M WAYNE CO	633	991.9	1016.3	60	41	50.7	- 3.3	84	4+	25	29+	0	4	41	72	4.87	2.30	1.72	12	2	T	T	4.6	22	33	W	27	5	9	17	7.0	53
DETROIT WILLOW RUN	711	988.2	1016.8	59	41	50.0	- 3.9	82	4+	24	29	0	5	40	70	4.06	1.53	1.49	9	2	1.0	T	5.1	23	32	27	27	5	9	17	7.1	
FLINT	770	987.8	1015.8	58	41	49.3	- 2.1	81	4+	25	29	0	5	39	69	3.32	0.95	1.05	13	0	2.6	1	5.0	22	23	32	27+	3	6	22	7.8	
GRAND RAPIDS	784	986.5	1015.7	58	42	49.9	- 1.2	84	4	26	28	0	6	42	77	4.42	1.81	1.04	15	1	8.4	5	3.3	21	35	W	25	4	7	20	7.7	37
HOUGHTON LAKE	1149	973.2	1015.7	55	38	46.2		79	4	24	22	0	8	39	78	2.73		0.73	15	0	3.0	2	2.7	23	25	20	24	5	5	21	7.5	
LANSING	841	983.7	1015.7	58	40	49.0	- 2.3	84	4	21	28	0	8	41	75	3.45	0.95	0.97	12	0	7.5	6	4.6	22	30	SE	24	4	9	18	7.5	48
MARQUETTE U	677			52	39	45.5	- 2.5	74	4	29	27	0	5			5.50	3.17	1.48	16		5.4	4			31	NW	25	4	5	22	8.0	39
MUSKEGON	627	992.2	1015.3	58	44	50.9	- 1.6	79	4	29	22	0	5	43	73	4.06	1.51	0.78	15	2	4.9	3	2.5	21	26	18	24	5	8	18	7.5	
SAULT STE MARIE	721	987.5	1014.5	53	34	43.4	- 2.9	75	2	23	19	0	14	38	84	3.53	0.71	0.72	17	0	1.3	T	1.3	16	30	SE	25	4	5	22	8.0	34
MINNESOTA																																
DULUTH	1428	962.4	1014.4	51	34	42.4	- 2.2	73	4	22	28	0	17	31	65	1.44	- 0.73	0.80	6	1	0.8	1	2.1	30	46	NW	25	3	10	18	7.4	38
INTERNATIONAL FALLS	1179	970.5	1014.2	50	32	41.0	- 1.4	78	1	23	28	0	17	31	70	1.60	- 0.14	0.73	10	1	1.4	1	2.1	24	28	21	19	5	3	23	7.8	
MINNEAPOLIS	834	984.1	1014.7	57	36	46.3	- 2.6	85	1	18	28	0	10	37	71	1.73	0.14	0.69	8	2	0.3	T	1.8	29	33	SW	22	10	7	14	6.1	61
ROCHESTER	1297	967.2	1015.2	57	36	46.0	- 3.9	83	3	15	28	0	14	35	69	2.34	0.64	1.42	6	1	T	T	3.5	25	33	19	22+	9	9	13	6.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

OCTOBER 1967

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ST CLOUD	1034	976.3	1014.4	55	34	44.8	-2.5	83	1	14	28	0	13		66	1.14	-0.50	0.86	8		1.1	1						5	9	17	6.9	
MISSISSIPPI																																
JACKSON	310	1006.8	1018.7	77	46	61.4	-5.6	87	14+	32	19	0	1	50	73	2.78	0.74	1.50	5	0	0.0	0	2.2	15	25	SE	30+	17	7	7	3.8	77
MERIDIAN	290	1008.1	1019.2	77	44	60.5	-5.1	87	14+	33	20+	0	0	48	73	2.40	0.18	1.27	5	1	0.0	0	0.5	19	33	34	24	17	6	8	3.8	
MISSOURI																																
COLUMBIA	778	987.5	1015.7	67	47	57.0	-1.7	91	4	29	28	1	2	43	65	6.02	2.90	1.90	12	4	T	T	1.8	22	38	NW	24	11	7	13	6.0	52
KANSAS CITY	742	988.8	1015.7	69	48	58.6	-1.6	90	4	33	28	1	0	46	68	8.63	5.77	2.90	9	5	T	T	1.6	23	33	SE	23	10	9	12	5.7	57
ST JOSEPH	811			68	43	55.8	-1.6	90	4	24	28	1	5	43	72	5.99	3.81		12	4	T		1.2	28	30	18	23	14	4	13	5.1	
ST LOUIS	535	996.3	1016.7	68	47	57.5	-0.9	88	4	34	28+	0	0	46	69	3.45	0.59	1.52	13	2	T	0	2.8	22	48	SW	24	9	6	16	6.5	52
SPRINGFIELD	1268	971.2	1016.5	70	46	58.0	-1.7	87	4	29	28	0	2	45	67	8.70	4.94	3.41	10	6	0.0	0	2.8	19	34	NW	24	11	7	13	5.7	53
MONTANA																																
BILLINGS	3567	891.0	1015.3	60	40	49.9	0.4	77	21	28	27	0	1	30	51	1.04	-0.05	0.74	6	2	T	0	7.6	27	56	NW	19	7	10	14	6.4	55
GLASGOW	2284	931.6		58	35	46.4	1.0	76	21+	21	27	0	9			1.13	0.49	0.87	11		0.0	0									6.8	
GREAT FALLS	3662	887.2	1014.6	61	40	50.2	2.7	73	21+	29	27	0	3	30	49	1.13	0.40	0.59	8	1	0.7	T	13.1	23	56	SW	19	3	16	12	6.8	56
HAVRE	2582	921.1	1013.5	61	35	48.1	2.3	76	21	19	27	0	10	32	58	0.37	-0.42	0.23	5	0	T	0	7.6	25	47	W	19	1	17	13	7.2	55
HELENA	3828	881.5	1017.5	59	35	47.4	1.8	73	21+	21	27	0	9	32	61	1.50	0.84	0.78	9	0	T	0	6.2	27	36	W	21	4	11	16	6.8	52
KALISPELL	2965	912.0	1017.4	55	34	44.5	0.6	71	8	22	27+	0	13	36	76	1.60	0.36	0.33	17	2	T	T	4.7	18	23	22	3	2	6	23	8.3	
MILES CITY	2629	921.1	1014.6	62	37	49.1	0.1	79	11	19	27	0	9	32	55	0.47	-0.40		7	1	T		4.6	29								
MISSOULA	3190	906.2	1019.5	56	33	44.6	0.6	73	8	25	21	0	16	35	74	1.64	0.65	0.42	13	1	0.3	T	2.1	29	37	SW	19	2	8	21	7.8	39
NEBRASKA																																
GRAND ISLAND	1841	949.5	1016.1	66	40	52.8	-0.6	89	3	24	31	0	7	37	61	1.37	0.41	0.58	6	2	T	T	1.8	31	30	33	24+	12	10	9	4.9	
LINCOLN U	1150			64	44	53.7	-3.0	85	3	25	28	0	3			1.91	0.33	1.18	11		T	0			34	SW	12	12	10	9	5.0	64
NORFOLK	1544			62	37	49.6	-3.3	88	2	20	28	0	11			1.68	0.50	0.63	6		0.5	T						13	7	11	5.4	
NORTH PLATTE	2775	917.7	1016.2	68	32	49.8	-1.2	91	3	18	31	1	20	30	54	0.58	-0.33	0.27	5	1	T	T	2.2	1	34	NW	12	13	13	5	4.7	77
OMAHA	977	980.4	1016.0	64	40	52.1	-3.6	87	1	21	28	0	7	40	68	1.69	-0.04	0.90	9	4	1.5	T	1.2	33	33	NW	9	12	7	12	5.5	62
SCOTTSBLUFF	3957	880.1	1016.2	68	35	51.3	0.9	92	3	20	27	1	12	30	50	0.17	-0.52	0.12	2	0	0.0	0	4.3	32	38	30	12	10	13	8	4.9	
VALENTINE	2587			66	34	50.1	0.8	94	3	20	25	1	17			0.98	0.10	0.73	3		0.0	0			39	NW	19	12	7	12	5.5	66
NEVADA																																
ELKO	5050	848.3	1020.1	70	30	49.9	3.0	84	8	20	29+	0	21	23	41	0.27	-0.48	0.18	2	0	T	0	2.3	24	23	30	28+	15	6	10	4.8	
ELY	6253	812.7	1019.8	68	28	47.7	1.8	84	8	14	30+	0	24	19	40	0.13	-0.60	0.13	1	1	0.0	0	4.3	20	35	SE	3	16	9	6	3.8	75
LAS VEGAS	2162	940.1	1015.9	84	54	69.1	2.5	93	2	41	30	8	0	26	22	0.00	-0.20	0.00	0	0	0.0	0	2.6	25	40	NE	28	24	5	2	1.9	96
RENO	4404	869.6	1020.0	74	28	51.0	1.8	84	13+	21	29	0	27	26	41	0.04	-0.47	0.04	1	0	0.0	0	1.3	28	39	SW	2	15	10	6	3.9	90
WINNEMUCCA	4299	871.3	1019.9	71	26	48.6	0.9	81	11+	12	29	0	25	23	40	0.09	-0.72	0.04	3	0	0.0	0	2.3	24	34	SW	3+	12	5	14	5.0	61
NEW HAMPSHIRE																																
CONCORD	342	1006.4	1019.2	62	37	49.3	0.6	84	3	18	30	0	14	40	71	0.99	-1.67	0.42	5	0	0.0	0	1.8	22	29	S	19	9	8	14	6.0	58
MT WASHINGTON OBS	6262			38	25	31.8	0.9	54	3	13	29+	0	23			6.67	0.48	1.90	19	0	5.9	1			102Y	W	20	4	8	19	7.7	38
NEW JERSEY																																
ATLANTIC CITY	64	1018.0	1020.4	65	40	52.4	-4.8	87	5	24	30	0	8	44	76	2.86	-0.34	1.64	4	2	0.0	0	2.1	26	30	22	18	11	9	11	5.2	54
ATLANTIC CITY U	11			66	51	58.3	-0.4	87	5+	36	30	0	0			2.64	-0.75	1.63	4						45	SW	25					
NEWARK	7	1019.0	1019.9	65	48	56.4	-0.2	87	5	35	30+	0	0	46	69	2.87	-0.24	1.27	4	1	0.0	0	2.4	25	31	21	18	13	7	11	5.1	
TRENTON U	56			65	47	56.2	-0.6	86	5	34	30	0	0			3.08	0.24	1.29	5		0.0	0			35	S	18	13	6	12	5.3	59
NEW MEXICO																																
ALBUQUERQUE	5311	840.5	1016.6	73	43	58.2	0.2	85	3	28	31	0	2	25	33	0.18	-0.57	0.13	2	1	0.2	T	0.9	15	42	E	10	18	10	3	2.9	91
CLAYTON	4969			72	40	56.2	0.9	88	3	27	30	0	7			0.12	-0.88	0.07	2		0.7	T						19	7	5	3.4	
RATON	6379			69	33	51.0	-0.1	84	3	20	16	0	17			0.05	-0.99	0.03	2		0.3	T						16	6	9	4.3	
ROSWELL	3617	893.0		80	39	59.3	0.3	93	6+	23	31	4	10	33	41	0.02	-1.05	0.02	1	0	0.0	0	1.0	27	30	NW	29	16	9	6	3.6	84
SILVER CITY	5373			75	44	59.6	-0.1	86	1	24	30	0	3			0.32	-0.49	0.30	2		0.0	0						20	8	3	2.8	
NEW YORK																																
ALBANY	275	1008.5	1019.1	62	40	51.0	0.2	83	3	24	30	0	11	40	68	3.48	0.71	1.76	7	0	T	0	3.7	23	33	NW	25+	4	8	19	7.3	44
BINGHAMTON	1590	959.7	1019.1	56	41	48.6	-1.2	78	3	25	30	0	6	41	77	3.29	0.20	1.68	8	1	T	T	4.5	22	32	SE	25	6	5	20	7.5	40
BUFFALO	705	991.5	1017.2	60	44	51.9	1.1	78	2	27	29	0	1	42	71	4.78	1.78	1.56	13	2	T	0	6.9	23	38	SW	27	4	10	17	7.2	50

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
J.F. KENNEDY	13	1019.0	1019.8	63	48	55.5	-2.1	84	5+	34	30	0	0	43	65	1.89	-1.32	0.68	3	0	0.0	0	2.4	27	39	26	19	12	9	10	5.1	
NEW YORK U	132	1016.3	1019.4	65	49	57.2	-1.1	86	5	35	30	0	0	41	59	3.47	0.33	1.43	3	2	0.0	0	1.4	25	29	SW	19+					63
NEW YORK LA GUARDIA	11	1018.3	1019.9	64	51	57.2	-1.4	85	5	36	30	0	0	43	60	2.66	-0.71	0.96	3	2	0.0	0	2.5	28	37	SW	18	12	7	12	5.5	
ROCHESTER	547	998.0	1018.4	61	43	52.1	0.3	81	4	31	29	0	2	41	69	4.35	1.77	1.56	12	1	T	0	4.4	23	47	W	27	3	13	15	7.1	41
SYRACUSE	410	1003.1	1018.0	61	43	51.8	0.0	84	3	27	30	0	3	41	69	3.52	0.34	1.69	10	1	T	T	3.9	22	32	SW	27+	7	5	19	7.3	44
NORTH CAROLINA																																
ASHEVILLE	2140	943.8	1020.1	67	40	53.5	-2.3	80	4	25	29	0	8	44	77	3.30	0.17	0.98	8	2	0.0	0	1.0	34	30	34	18	12	8	11	5.2	64
CAPE HATTERAS R	7	1019.6	1019.8	71	57	64.2	-1.2	82	6	45	21	0	0	55	72	2.83	-1.41	0.85	8	1	0.0	0	4.8	36	38	SW	18	16	9	6	3.7	63
CHARLOTTE	736	992.2	1019.7	72	48	60.0	-2.5	86	4	32	20	0	1	48	68	0.83	-2.13	0.30	4	1	0.0	0	0.5	4	24	S	18	10	13	8	4.8	66
GREENSBORO	897	988.2	1020.1	71	46	58.5	-0.8	86	5	31	29+	0	2	50	78	1.23	-1.48	0.63	7	1	0.0	0	0.3	29	24	NW	19	11	13	7	5.0	64
RALEIGH	434	1004.1	1019.8	72	47	59.4	-1.1	85	5+	31	29	0	1	49	72	2.26	-0.45	0.88	6	1	0.0	0	0.9	9	29	23	18	15	8	8	4.2	63
WILMINGTON	28	1018.6	1019.9	77	53	64.9	-0.5	88	6+	38	29	0	0	52	67	1.07	-1.94	0.63	4	1	0.0	0	1.6	4	32	SW	18	17	10	4	3.5	72
NORTH DAKOTA																																
BISMARCK	1647	954.6	1015.0	56	34	45.0	-1.7	76	3	18	27	0	16	31	63	1.72	0.87	1.04	7	0	T	T	4.0	29	40	NW	19	7	5	19	7.1	46
FARGO	896	981.4	1014.4	55	33	44.0	-2.5	83	1	16	28	0	13	33	68	1.06	-0.05	0.58	7	0	0.7	1	2.2	28	42	NW	19	7	5	19	6.9	43
WILLISTON	1899	944.8	1013.8	57	34	45.2	-0.4	74	31+	18	25	0	13	32	65	1.15	0.42	0.54	8	0	T	T	3.7	28	49	NW	19	6	11	14	6.5	53
OHIO																																
AKRON	1208	973.6	1018.3	63	43	53.2	0.3	82	4+	30	29+	0	3	42	70	1.98	-0.50	0.85	10	2	T	0	5.2	21	29	21	27	9	5	17	6.5	
CINCINNATI OBS	761			66	45	55.5	-2.4	88	4	30	29	0	2			2.41	0.17	0.64	11		0.0	0			27	SW	24					46
CLEVELAND	777	988.5	1017.8	64	44	54.0	0.6	84	4	29	22	0	3	42	67	2.11	-0.31	0.75	12	1	0.1	T	6.5	21	35	SW	27	7	8	16	6.6	50
COLUMBUS	812	988.2	1018.6	62	42	51.9	-2.3	82	4	24	29	0	5	44	78	1.39	-0.72	0.35	11	1	T	0	3.6	21	38	W	27	8	9	14	6.5	46
DAYTON	1002	981.7	1018.1	65	45	54.7	-0.9	86	4	31	29+	0	3	43	67	2.23	0.00	0.43	14	0	T	0	4.5	21	34	W	18	8	6	17	6.7	51
MANSFIELD	1295			62	44	52.6	0.2	82	4	28	29	0	4	40	67	1.75	-0.52	0.67	10	2	T	0	7.0	21				8	8	15	6.5	
TOLEDO	669	992.2	1017.4	61	41	51.2	-0.9	85	4	24	29+	0	7	41	70	3.07	0.68	1.33	10	0	T	0	4.5	23	32	W	27	6	10	15	6.9	54
YOUNGSTOWN	1178	975.3	1018.3	60	41	50.6	-1.3	81	4	22	29	0	5	41	74	3.26	0.55	1.28	11	1	0.6	T	4.7	21	29	24	27	10	5	16	6.6	
OKLAHOMA																																
OKLAHOMA CITY	1285	969.5	1015.6	74	51	62.6	-0.3	88	6+	37	27	0	0	47	61	2.92	0.41	1.41	5	2	T	0	2.2	18	36	N	30	16	10	5	4.1	74
TULSA	650	991.9	1016.0	74	48	61.2	-1.6	90	6	35	28+	1	0	47	64	3.75	0.44	1.97	7	2	T	T	3.8	20	38	N	30+	12	12	7	4.5	67
OREGON																																
ASTORIA	8	1016.3	1016.9	61	45	52.9	0.0	75	17	36	26+	0	0	50	90	11.06	3.28	1.79	23	4	0.0	0	4.1	19	29	19	22	0	7	24	8.5	
BURNS U	4151	876.4	1020.6	62	31	46.2	-2.2	74	17+	21	29	0	22	31	60	1.22	0.36	1.00	7		0.0	0	2.5	29				11	9	11	5.5	
EUGENE	359	1005.4	1018.9	64	45	54.4	1.2	74	31+	38	29+	0	0	49	86	5.10	1.27	2.11	13	0	0.0	0	5.3	19	41	18	2	2	13	16	7.2	
MEACHAM	4050	878.4	1018.5	56	38	46.5	0.2	71	10+	28	26+	0	5			3.82	0.98	1.77	12		T	0	2.6	22				2	6	23	8.2	
MEDFORD	1298	972.6	1020.5	68	40	53.6	0.6	79	15	31	15	0	3	43	73	2.34	0.40	1.62	10	0	0.0	0	1.1	26	35	19	2	7	15	9	5.5	
PENDLETON	1482	964.4	1018.2	67	43	54.9	1.2	80	18	32	20	0	1	37	54	0.64	-0.54	0.32	7	1	0.0	0	5.0	24	39	24	22	5	11	15	6.9	
PORTLAND	21	1016.6	1018.0	64	46	54.8	0.6	73	7	36	26	0	0	48	82	4.72	1.11	1.29	18	2	0.0	0	4.0	19	70	S	2	2	4	25	8.4	37
SALEM	196	1011.2	1018.4	65	44	54.3	0.2	78	10	36	26+	0	0	47	80	5.08	1.17	1.33	17	2	0.0	0	6.1	19	68	26	2	3	11	17	7.6	
SEXTON SUMMIT R	3836	886.6	1019.0	57	42	49.3	-1.4	72	17	34	29+	0	0			2.51	-0.90	1.16	12		0.0	0			37	18	21	10	10	11	5.2	
PACIFIC AREA																																
JOHNSTON	7	1012.2	1012.9	85	77	81.3	0.4	87	15+	73	31	0	0	73	77	4.96	1.69	3.83	16	1	0.0	0	15.4	9	40	SE	22	7	14	10	5.7	67
KOROR R	94	1005.1	1008.8	88	76	81.6	0.4	91	30	72	5+	5	0	75	85	17.06	3.97	3.03	20	3	0.0	0	4.9	25	30	SW	14	1	0	30	9.5	68
KWAJALEIN	8	1008.8	1009.5	87	77	81.6	-0.3	89	24+	71	6	0	0	75	80	11.18	0.30	2.16	24	1	0.0	0	5.9	9	32	6	6	1	4	26	9.0	
MAJURO	10	1009.8	1010.0	86	77	81.4	0.9	88	26+	70	23	0	0	74	79	15.16	-0.01	4.46	19	2	0.0	0	2.8	8	29	E	13	0	6	25	8.6	55
MARCUS ISLAND	20			86	76	80.9	-0.9	88	7	72	20	0	0			0.88	-2.70	0.24	19		0.0	0			37	SE	4					
PAGO PAGO	12	1011.5	1011.7	85	72	78.8		89	29+	70	23+	0	0	73	84	15.92		7.50	23	3	0.0	0	5.3	9	32	E	9	3	15	13	7.3	39
PONAPE R	123	1004.1	1009.4	88	72	79.8	0.1	92	7	70	27+	6	0	74	88	16.37	0.40	3.88	26	1	0.0	0	2.2	16	17	E	14	0	9	22	8.3	45
TAGUAC GUAM R	361			85	71	77.9	-1.4	87	26+	67	25	0	0			14.20	1.10	4.40	24		0.0	0			27	SE	31					43
TRUK MOEN ISLAND	5	1008.8	1009.0	87	75	81.0	0.4	89	25+	72	19	0	0	75	84	15.80	2.35	2.81	23	1	0.0	0	2.0	15	24	N	22	0	3	28	9.2	56
WAKE	11	1012.9	1013.2	87	77	82.3	0.7	90	28	73	20	1	0	75	79	3.12	-2.15	1.77	19	0	0.0	0	16.2	8	29	E	15	2	19	10	6.4	
YAP R	62	1005.8	1007.6	87	76	81.3	-0.3	92	11	71	13	4	0	76	87	12.80	-0.39	2.22	23	4	0.0	0	2.2	25	29	SW	14	0	6	25	9.0	40
PENNSYLVANIA																																
ALLENTOWN	387	1005.8	1019.8	63	39	51.1	-2.7	84	4	25	30	0	8	42	74	2.30	-0.67	1.15	5	2	0.0	0	2.6	25	35	18	18	10	7	14	6.0	
ERIE	731	990.9	1017.7	61	45	53.1	0.5	82	4	33	29+	0	0	42	69	2.77	-0.53	1.16	14	2	T	0	6.7	21	39	21	27	7	7	17	6.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
HARRISBURG	338	1006.8	1019.8	64	43	53.3	- 2.4	85	5	29	30+	0	2	44	72	3.15	0.18	1.32	9	1	0.0	0	1.7	25	32	NW	18	9	4	18	6.6	46
PHILADELPHIA	5	1019.0	1020.0	67	46	56.8	1.1	88	5	34	30	0	0	46	69	2.00	- 0.78	1.00	3	1	0.0	0	1.9	27	33	SW	18	9	7	15	5.9	59
PITTSBURGH	1137	974.6	1018.9	63	42	52.5	- 0.6	81	4+	22	29	0	5	41	69	2.05	- 0.47	0.62	11	1	T	0	3.3	22	30	25	27	7	6	18	6.7	41
READING U	266			65	46	55.3	- 1.9	85	5+	30	30	0	1			3.16	0.32	1.57	5		0.0	0			52	S	18	9	10	12	5.8	50
SCRANTON	930	985.4	1019.9	60	42	51.2	0.2	80	4	25	30	0	2	42	73	2.58	- 0.92	1.00	7	1	T	0	3.3	21	31	SE	25	10	6	15	6.1	51
WILLIAMSPORT	524	1000.3	1019.6	62	41	51.8	- 1.3	84	4	25	30	0	8	45	79	4.50	1.18	2.08	8	2	0.0	0	1.2	23	25	25	18	7	6	18	7.0	
RHODE ISLAND																																
BLOCK ISLAND	110			61	50	55.5	0.3	77	4	35	30	0	0			1.32	- 1.70	0.40	8		0.0	0						10	13	8	5.3	
PROVIDENCE	51	1016.9	1019.4	64	43	53.7	0.5	85	5	31	30	0	2	44	72	2.25	- 0.85	0.76	9	1	0.0	0	2.2	25	37	14	26	12	8	11	5.3	57
SOUTH CAROLINA																																
CHARLESTON	40	1017.6	1019.2	77	49	62.6	- 3.6	87	6	31	29	0	1	52	73	0.52	- 2.32	0.27	4	1	0.0	0	1.7	5	54Y	W	18	14	10	7	4.0	70
CHARLESTON U	9			74	59	66.5	- 1.6	85	5	48	19	0	0			0.69	- 2.05	0.44	3		0.0	0			28	NE	30+					
COLUMBIA	213	1011.5	1019.8	75	46	60.2	- 4.5	87	6	29	29	0	2	49	75	0.62	- 1.76	0.42	5	1	0.0	0	0.7	35	20	25	18	16	9	6	3.7	71
GNVLE-SPARTANBURG	957	985.1	1019.8	72	47	59.7	- 2.7	86	5	33	29	0	0	47	68	2.35	- 1.01	1.19	5	1	0.0	0	1.3	3	20	W	25	14	9	8	4.7	60
SOUTH DAKOTA																																
ABERDEEN	1296	967.8	1015.0	59	33	46.3	- 1.9	82	1	16	27	0	17	34	65	0.65	- 0.54	0.31	5	0	1.4	1	2.4	30	30	31	24	10	5	16	6.5	
HURON	1282	968.2	1015.1	62	34	48.2	- 0.6	85	1	16	28+	0	15	33	60	0.29	- 0.86	0.26	3	1	T	T	2.3	28	36	NW	19	7	10	14	6.4	61
RAPID CITY	3162	904.2	1015.6	64	36	50.1	0.1	87	3	21	27	0	15	26	43	0.28	- 0.51	0.12	4	0	0.0	0	5.3	32	57	NW	19	12	11	8	4.9	68
SIOUX FALLS	1418	963.8	1015.5	62	33	47.2	- 3.1	88	2	13	28	0	16	33	63	0.39	- 0.86	0.29	5	0	0.5	T	2.3	30	26	31	19	9	8	14	6.0	
TENNESSEE																																
BRISTOL	1507	965.5	1020.0	69	43	56.1	- 1.9	80	16+	27	29	0	6	46	74	1.99	- 0.16	0.82	7	0	0.0	0	0.7	24	18	25	25+	10	13	8	5.1	
CHATTANOOGA	665	994.6	1019.2	72	47	59.4	- 2.7	85	7+	32	28	0	1	48	72	4.91	1.89	1.74	10	3	0.0	0	1.1	22	30	NW	24	19	3	9	4.4	63
KNOXVILLE	980	983.7	1018.7	70	46	58.2	- 2.7	83	6	30	29	0	2	47	73	2.33	- 0.28	1.03	9	2	0.0	0	0.7	30	35	NW	24	10	11	10	5.0	68
MEMPHIS	258	1008.1	1018.3	75	50	62.4	- 0.7	89	6	36	28	0	0	47	59	2.38	- 0.34	1.70	6	1	0.0	0	3.8	19	29	W	24	15	9	7	4.4	76
NASHVILLE	590	996.6	1018.3	72	47	59.3	- 2.2	85	15+	33	26+	0	0	45	64	1.57	- 0.75	0.81	6	1	0.0	0	3.6	20	30	S	24	12	10	9	4.3	73
OAK RIDGE R	905			70	45	57.8	- 2.1	82	6	30	29+	0	3			3.61	0.94	1.11	10		0.0	0			39Y		18	13	8	10	5.0	
TEXAS																																
ABILENE	1762	955.3	1016.3	75	52	63.7	- 2.5	85	5	39	31	0	0	51	65	1.74	- 1.11	0.97	5	2	T	0	4.7	21	35	N	30	15	9	7	4.2	72
AMARILLO	3604	891.6	1014.0	75	47	60.9	0.4	93	4	34	27	4	0	36	45	1.61	- 0.15	1.56	3	1	T	T	3.4	25	43	N	15	17	8	6	3.5	80
AUSTIN	597	995.6	1017.5	79	56	67.7	- 3.0	87	10+	43	31	0	0	54	66	4.55	1.72	3.04	5	4	0.0	0	1.0	23	47	NW	29	12	11	8	4.2	71
BROWNSVILLE	19	1015.9	1016.6	82	64	72.8	- 3.1	86	14+	52	31+	0	0	64	76	2.82	- 0.71	1.50	7	3	0.0	0	2.5	12	38	NE	3	9	17	5	5.0	71
CORPUS CHRISTI	41	1015.6	1017.2	81	61	71.0	- 3.5	86	7+	43	31	0	0	62	76	2.86	0.10	2.35	7	4	0.0	0	2.7	11	42	NW	30	12	13	6	4.6	68
DALLAS	481	999.7	1016.8	78	56	66.7	- 1.1	90	4	41	30	1	0	51	60	4.76	2.06	1.75	5	2	0.0	0	4.5	18	30	S	29	17	8	6	3.6	77
DEL RIO	1026	980.7	1016.7	80	57	68.2	- 3.2	86	9+	38	31	0	0	53	62	1.39	- 0.59	0.89	5	2	T	T	5.1	12	46	33	29	14	11	6	4.0	
EL PASO	3918	883.8	1014.8	79	48	63.7	- 0.7	90	5	27	31	1	1	33	34	0.09	- 0.76	0.06	2	1	0.0	0	0.5	21	42	NE	29	21	5	5	2.8	92
FORT WORTH	537	996.6	1016.9	77	53	65.4	- 2.5	89	4	41	30	0	0	52	66	4.19	1.60	1.75	5	3	0.0	0	3.6	21	33	20	29	20	4	7	3.5	
GALVESTON U	7			78	67	72.3	- 1.2	84	10	49	31+	0	0			3.18	0.32	2.35	7		0.0	0			47	NW	30					66
HOUSTON	50	1015.6	1017.6	82	59	70.5	- 0.9	89	7+	43	31	0	0	57	68	3.18	- 0.59	2.09	7	2	0.0	0	1.8	13	35	31	30	13	12	6	4.5	71
LUBBOCK	3254	904.8	1015.4	76	45	60.5	- 0.7	89	1	32	27	0	1	38	49	0.45	- 1.55	0.40	4	2	0.2	T	2.8	23	43	34	31	17	6	8	3.9	
MIDLAND	2851	917.4	1015.0	79	49	64.0	- 1.9	90	6	38	28	1	0	40	48	0.20	- 1.46	0.19	2	0	0.0	0	3.6	17	35	34	30+	20	4	7	3.4	
PORT ARTHUR	16	1017.3	1018.0	81	57	69.0	- 1.3	89	3+	43	17	0	0	56	68	2.13	- 0.75	0.74	7	2	0.0	0	1.9	13	34	NW	30+	15	10	6	4.2	68
SAN ANGELO	1903	949.9	1016.1	79	53	66.1	- 2.2	89	3	39	25+	0	0	53	66	1.82	- 0.01	1.64	3	2	0.0	0	4.6	21	31	34	30	15	10	6	4.0	
SAN ANTONIO	788	989.8	1017.8	79	55	66.9	- 3.7	86	14	39	31	0	0	54	67	2.00	- 0.50	0.99	6	2	0.0	0	0.9	17	39	NW	29	12	10	9	4.5	71
VICTORIA	104	1013.2	1017.2	82	60	70.8	- 1.8	88	3	43	31	0	0	60	72	4.92	1.44	3.14	6	3	0.0	0	2.0	11	54Y	NNW	30	13	9	9	4.7	
WACO	501	999.0	1017.0	80	57	68.4	- 1.0	91	4	45	31+	2	0	53	61	3.80	1.25	2.07	4	1	0.0	0	4.3	19	29	32	30+	16	8	7	3.8	
WICHITA FALLS	994	979.7	1015.9	80	50	65.1	- 1.3	91	6+	33	30	6	0	47	57	1.98	- 0.89	1.34	4	2	T	0	3.5	20	48	32	7	13	10	8	4.5	
UTAH																																
MILFORD	5028	850.0		71	34	52.3	1.6	82	13	20	30	0	17			0.22	- 0.55	0.22	1		0.0	0						17	11	3	3.2	
SALT LAKE CITY	4220	875.4	1019.8	68	37	52.4	0.7	82	2	27	30+	0	11	31	49	0.66	- 0.49	0.34	6	1	0.0	0	2.1	17	41	NW	5	12	10	9	5.1	75
WENDOVER	4237			63	41	51.7	- 1.5	83	2	30	30	0	2			0.28	- 0.18	0.25	2		0.0	0										
VERMONT																																
BURLINGTON	332	1005.1	1017.8	57	41	48.8	1.2	77	3	23	30	0	7	39	70	3.03	0.06	1.15	15	1	T	0	3.6	20	40	SW	19	4	6	21	7.4	62

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VIRGINIA																																
LYNCHBURG	916	986.1		66	42	54.3	- 3.9	84	4	28	20	0	3	43	69	1.83	- 0.81	0.63	6	1	0.0	0	0.9	31	23	S	25	13	7	11	4.9	59
NORFOLK	22	1019.0	1020.1	69	49	58.7	- 3.3	86	5	36	30	0	0	48	69	0.93	- 1.99	0.51	5	1	0.0	0	1.7	6	37	SW	18	18	4	9	3.9	79
RICHMOND	164	1014.2	1020.3	71	43	57.2	- 1.5	90	5	30	29+	1	3	48	76	1.00	- 2.00	0.37	5	1	0.0	0	0.6	17	29	SW	18	11	10	10	5.1	65
ROANOKE	1149	977.7	1020.0	67	43	54.7	- 3.5	84	5	26	29	0	4	42	65	2.42	- 0.79	0.86	8	0	0.0	0	1.5	27	32	32	18	11	10	10	5.2	
WALLOPS ISLAND	9	1020.7	1021.1	65	49	56.6		85	5	37	30+	0	0	50	80	1.05		0.40	7	2	0.0	0	0.4	7	45Y	SW	18	16	4	11	4.4	
WASHINGTON																																
OLYMPIA	195	1009.8	1017.0	61	44	52.5	1.1	73	8+	33	20	0	0	49	89	10.08	4.80	1.77	22	0	0.0	0	6.1	21	29	18	27	2	5	24	8.5	
QUILLAYUTE	179	1007.5	1014.9	58	46	52.0	0.6	69	17	37	26	0	0	50	92	24.86	14.33	3.18	29	3	0.0	0	4.1	17	28	SW	22	0	5	26	8.9	15
SEATTLE TACOMA	400	1000.3	1016.6	61	49	54.8	2.4	71	9	40	20	0	0	49	83	6.66	2.64	1.32	18	0	0.0	0	5.6	19	36	20	1	0	5	26	8.7	29
SPOKANE	2356	932.3	1016.5	59	38	48.4	- 0.7	73	8	27	24	0	7	36	67	1.18	- 0.39	0.35	12	0	T	0	6.5	20	38	SW	3	4	8	19	7.1	43
STAMPEDE PASS R	3958	879.8		46	36	40.8	- 1.6	61	9	26	26	0	11			23.55	14.74	4.17	24		26.3	7						0	3	28	9.4	
WALLA WALLA U	949			67	47	56.7	1.6	78	18	37	24	0	0			0.88	- 0.65	0.65	8		0.0	0			34	W	22	4	6	21	7.6	47
YAKIMA	1052	978.7	1017.3	66	38	51.8	1.3	75	9+	28	29	0	5	37	62	0.21	- 0.39	0.17	4	0	0.0	0	4.4	27	30	28	31+	5	9	17	6.9	
WEST INDIES																																
SAN JUAN P.R.	13	1011.9	1014.3	88	75	81.4	1.4	93	4	73	19+	4	0	70	71	4.47	- 1.36	1.00	16	11	0.0	0	4.1	10	29	SE	25	3	21	7	5.6	66
SWAN ISLAND	28			86	76	81.1	- 0.6	89	13	71	17	0	0			5.83	- 3.87	1.57	19		0.0	0						0	10	21	7.8	
WEST VIRGINIA																																
BECKLEY	2504	930.9	1019.7	62	42	51.9		76	4	25	29	0	7	41	71	2.42		1.11	10	0	T	T	3.5	19	29	16	16	10	9	12	5.9	
CHARLESTON	939	984.8	1018.9	68	44	55.9	- 1.4	84	5	25	29	0	7	43	66	2.09	- 0.49	0.81	10	1	0.0	0	2.3	21	21	23	27+	10	10	11	5.7	
ELKINS	1970	948.2	1020.0	64	37	50.4	- 1.7	79	4	21	29	0	11	41	76	3.44	0.41	0.94	7	0	T	0	2.4	26	24	18	25	8	7	16	6.2	
HUNTINGTON	827	988.8	1019.1	67	43	55.2	- 2.1	84	5+	27	29	0	6	44	71	2.27	0.42	0.57	11	3	0.0	0	2.4	21	23	26	27	6	13	12	6.1	
PARKERSBURG U	615			67	45	56.2	- 0.8	83	5+	28	29	0	3			1.94	- 0.11	0.60	9		T	0			34	W	27					52
WISCONSIN																																
GREEN BAY	682	988.8	1014.6	56	38	46.7	- 2.7	84	4	21	28	0	5	39	77	4.71	2.80	1.81	12	1	0.5	T	2.4	25	33	W	25+	7	7	17	6.6	44
LA CROSSE	651	990.2	1015.0	59	40	49.3	- 1.8	83	2	26	28+	0	7	38	70	2.52	0.33	1.03	6	1	T	T	1.7	26	28	27	20	9	7	15	6.3	
MADISON	858	983.4	1015.1	58	38	48.0	- 1.9	85	4	23	11	0	11	38	70	5.52	3.31	1.61	12	1	0.9	1	2.5	26	30	NW	24	7	5	19	7.0	49
MILWAUKEE	672	989.8	1015.3	59	42	50.4	0.4	85	4	26	12	0	4	41	71	2.70	0.60	1.00	12	1	0.8	T	3.0	25	36	W	24	7	7	17	6.9	45
WYOMING																																
CASPER	5338	838.5	1016.3	62	34	48.2	- 0.1	77	3	15	29	0	15	26	49	1.37	0.53	0.44	11	2	4.3	2	8.9	24	38	22	3	9	11	11	5.6	
CHEYENNE	6126	813.8	1016.5	64	35	49.3	1.8	83	3	17	27	0	12	24	43	0.46	- 0.37	0.32	6	0	0.4	T	8.7	30	55	SW	28+	12	15	4	4.4	67
LANDER	5563	830.0	1016.3	63	34	48.1	1.0	75	5	21	30	0	15	26	46	0.21	- 1.00	0.12	5	1	1.4	1	2.8	25	51	NW	23	7	14	10	5.7	74
SHERIDAN	3964	878.8	1016.4	63	32	47.2	- 0.6	80	11	19	27	0	18	29	51	0.88	- 0.25	0.26	12	2	0.2	T	3.1	31	39	NW	19	5	17	9	6.0	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊘	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity
	M.	Mb.	Mb.	C.	C.	C.	C.	C		C.				C.	%
ALABAMA															
BIRMINGHAM	189	996.6	1019.4	23.9	7.8	15.9	-2.8	29.4	7+	0.6	28	0	0	9.4	72
HUNTSVILLE	183	995.9	1019.0	23.3	8.3	15.8	-1.6	30.0	7	1.1	28	0	0	7.8	62
MOBILE	64	1010.8	1018.6	26.1	12.2	19.3	-1.8	31.1	6+	5.6	19	0	0		68
MONTGOMERY	59	1011.9	1019.3	24.4	10.0	17.2	-2.0	30.6	7	3.9	20	0	0	10.6	70
ALASKA												B			
ANCHORAGE	35	995.3	1000.0	6.7	- 2.2	2.1	-0.1	13.3	9+	- 9.4	31	0	26	- 3.9	66
ANNETTE	34	1001.7	1005.8	12.2	6.1	9.1	0.9	18.9	2	1.7	31+	0	0	5.6	81
BARROW	9	1010.8	1011.5	- 7.8	-13.3	-10.7	-2.2	1.1	5	-23.9	30	0	31	-11.7	89
BARTER ISLAND	12	1009.8	1011.7	- 8.3	-15.0	-11.8	-3.6	4.4	5	-26.7	17	0	31	-16.1	66
BETHEL	38	998.0	1003.6	1.1	- 6.1	- 2.6	-2.2	12.8	4	-18.9	31	0	26	- 4.4	86
COLD BAY	29	997.3	1001.2	6.1	0.6	3.4	-1.1	12.2	3	- 5.6	27	0	15	0.6	82
FAIRBANKS	133	987.8	1005.1	0.0	- 8.3	- 4.0	-0.8	8.3	6+	-18.9	29	0	31	- 7.8	75
JUNEAU	4	1002.7	1003.4	9.4	2.8	6.2	0.8	15.6	5+	- 1.7	8+	0	4	3.3	86
KING SALMON	15	998.0	1000.1	3.3	- 5.6	- 1.1	-3.2	16.7	4	-18.3	28	0	24	- 5.0	73
KOTZEBUE	3	1006.4	1006.9	- 1.7	- 7.2	- 4.6	-0.6	6.7	2+	-19.4	30	0	25	- 7.8	79
MC GRATH	105	991.5	1004.5	- 0.6	- 8.9	- 4.8	-1.9	10.0	3	-22.2	31	0	30	- 8.3	76
NOME	4	1004.1	1005.0	1.1	- 6.7	- 2.8	-1.5	8.9	4	-16.7	23	0	25	- 8.9	62
ST. PAUL ISLAND	7	1002.4	1003.4	5.6	1.1	3.2	0.3	10.0	4	- 5.6	30+	0	13	- 0.6	75
SHEMYA	37	1000.7	1004.3	7.2	2.8	5.1	0.8	9.4	3+	- 1.7	27	0	2	2.8	64
YAKUTAT	9	999.3	1000.3	8.9	0.6	4.4	-1.1	17.2	1	- 5.0	8	0	13	1.7	85
ARIZONA															
FLAGSTAFF	2131	791.1	1019.0	20.0	0.0	10.0	1.7	23.9	13+	- 5.0	27	0	17	- 4.4	44
PHOENIX	340	974.6	1013.2	31.7	14.4	23.1	1.6	36.7	1	7.2	31	18	0	3.9	34
TUCSON	788	926.5	1013.4	30.0	14.4	22.0	0.9	35.0	5	5.0	31	5	0	3.3	35
WINSLOW	1492	854.7	1018.4	24.4	3.3	13.9	-0.2	30.6	1	- 3.9	30	0	7	- 5.6	29
YUMA	59	1005.8	1012.9	33.3	16.7	24.8	1.2	35.6	17+	10.6	31	25	0	6.1	36
ARKANSAS															
FORT SMITH	136	1000.3	1016.8	24.4	8.9	16.7	-0.9	32.8	5+	0.0	28	4	1	8.3	64
LITTLE ROCK	78	1007.8	1017.3	23.3	8.9	16.1	-1.2	30.6	5	0.6	28	0	0	9.4	69
TEXARKANA	119	1004.4	1017.5	25.6	12.2	18.9	-0.1	32.2	5+	5.0	19	3	0		
CALIFORNIA															
BAKERSFIELD	145	999.7	1017.1	27.8	13.3	20.6	1.2	33.9	15	7.2	30	3	0	5.6	42
BISHOP	1252	876.4		27.2	3.3	15.2	1.1	31.1	12	- 1.1	15	0	5		
BLUE CANYON	1609			18.3	8.3	13.4	1.3	24.4	30	0.6	3+	0	0		
EUREKA U	13			17.8	10.0	13.8	1.4	23.3	17	5.6	29	0	0		
FRESNO	100	1005.1	1016.8	28.3	9.4	18.9	0.8	32.2	17+	4.4	30	4	0	7.8	55
LONG BEACH	10	1013.9	1015.3	28.9	15.6	22.0	2.8	37.2	17+	11.7	19	8	0	11.1	62
LOS ANGELES	30	1011.2	1014.7	25.0	15.6	20.3	2.0	36.1	15	12.2	30	4	0	10.0	63
LOS ANGELES U	82			28.9	16.1	22.5	2.8	37.2	17+	14.4	30+	6	0		
MT SHASTA R	1080			18.3	2.8	10.5	-0.6	24.4	17+	- 1.1	26	0	4		
OAKLAND	2	1018.0	1018.1	22.8	12.8	17.6	1.4	29.4	15	10.0	29	0	0	11.7	71
RED BLUFF	104	1005.1	1017.9	27.2	11.1	18.9	0.3	31.7	30+	7.8	7	0	0	3.9	45
SACRAMENTO	5	1016.3	1017.2	27.2	10.0	18.6	1.1	31.1	18+	6.7	30+	0	0	8.3	60
SANDBERG R	1377	865.6		21.1	10.6	16.1	1.2	28.3	11	2.2	6	0	0	- 3.3	33
SAN DIEGO	4	1013.5	1014.6	25.0	15.6	20.1	1.1	32.8	16	12.2	25	1	0	11.1	64
SAN FRANCISCO	2	1017.3	1018.1	23.3	11.7	17.5	1.7	30.0	16	7.8	26	0	0	9.4	67
SAN FRANCISCO U	16			22.8	15.0	18.6	2.3	30.0	17	12.8	26+	0	0		
SANTA CATALINA	478	960.0		25.6	16.7	21.3	2.8	36.1	15	12.2	21	3	0		
SANTA MARIA	72			25.6	8.3	16.9	1.1	32.8	16	5.0	20	2	0		
STOCKTON	7	1016.6	1017.7	27.2	10.6	18.9	1.1	31.7	11	5.6	30	0	0	8.3	57
COLORADO															
ALAMOSA	2297	774.1		18.3	- 5.6	6.3	-0.6	23.9	12+	-18.9	30	0	26		
COLORADO SPRINGS	1873	813.1	1017.1	18.3	3.9	11.3	1.1	28.9	3	- 5.0	30+	0	5	- 2.2	45
DENVER	1610	837.5	1015.5	20.6	2.2	11.4	0.6	30.6	3	- 5.6	27	0	10	- 1.7	48
GRAND JUNCTION	1480	855.1	1017.7	21.1	5.0	12.9	0.2	29.4	3	- 3.3	30+	0	7	- 4.4	34
PUEBLO	1428	857.1	1016.6	20.6	2.2	11.3	-1.4	30.0	3	- 5.0	27	0	12	- 1.7	47

State and Station	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Mm.	Mm.	Mm.			Mm	Mm	M.p.s.		M.p.s							%
ALABAMA																	
BIRMINGHAM	107	33	75	6	2	0	0	0.4	9	11.2	NW	24	21	2	8	3.7	75
HUNTSVILLE	99	30	44	8	2	0	0	0.8	15	13.0	31	24	18	7	6	3.6	
MOBILE	170	93	109	6	3	0	0	0.8	9	12.5	14	30	17	9	5	3.5	
MONTGOMERY	111	53	41	7	3	0	0	0.2	9	9.4	W	24	17	7	7	3.5	73
ALASKA																	
ANCHORAGE	13	- 35	10	5	0	122	102	1.1	1	8.0	14	15+	8	5	18	6.7	54
ANNETTE	455	26	88	29	0	0	0	3.3	15	17.4	14	9	2	2	27	8.7	
BARROW	8	- 5	2	14	0	132	152	1.8	8	11.2	5	27	1	2	28	9.0	
BARTER ISLAND	11	- 11	6	8	0	71	76	0.5	25	17.9	27	3	4	5	22	8.2	
BETHEL	10	- 29	4	5	0	61	51	2.5	2	13.0	4	8	5	3	23	7.7	
COLD BAY	69	- 48	23	26	0	114	25	1.4	33	23.7	18	31	0	10	21	8.5	
FAIRBANKS	8	- 13	3	8	0	147	102	1.4	1	10.3	25	3	5	5	21	7.4	
JUNEAU	145	- 67	24	23	0	0	0	3.9	11	15.6	12	19	1	4	26	9.1	26
KING SALMON	13	- 41	5	6	0	30	25	2.0	2	15.6	8	8	5	7	19	7.3	
KOTZEBUE	8	- 7	3	7	0	157	127	3.8	9	16.5	12	4	8	3	20	7.0	
MC GRATH	6	- 27	2	7	0	124	76	1.1	35	10.3	2	8	4	7	20	7.7	
NOME	20	- 23	9	7	0	46	102	2.1	4	13.0	1	14	8	7	16	6.2	38
ST. PAUL ISLAND	48	- 32	10	24	0	183	76	2.3	3	21.9	12	31+	0	10	21	8.5	
SHEMYA	111	41	33	25	0	T	T	2.3	27	20.6	20	4+	3	13	15	7.2	
YAKUTAT	433	- 65	56	23	2	41	25	1.9	8	12.5	12	26	5	3	23	7.9	
ARIZONA																	
FLAGSTAFF	8	- 31	6	3	1	0	0	0.5	12	12.5	5	29	18	11	2	2.8	
PHOENIX	17	5	17	2	2	0	0	1.2	11	20.1Y	S	3	22	8	1	2.1	96
TUCSON	26	10	26	2	2	0	0	1.5	13	14.3	E	16	21	7	3	2.4	92
WINSLOW	3	- 14	3	1	0	0	0	0.9	24	11.6	34	29	21	7	3	2.5	
YUMA	0	- 10	0	0	0	0	0	0.2	1	14.3	N	29	26	3	2	1.5	96
ARKANSAS																	
FORT SMITH	177	89	83	7	3	0	0	0.4	29	13.4	NW	24	11	9	11	5.3	63
LITTLE ROCK	126	53	67	10	1	0	0	1.3	21	15.6	SE	30	13	6	12	4.8	73
TEXARKANA	109	34	70	6	2	0	0	1.4	21	10.3	25	29+	16	7	8	4.1	
CALIFORNIA																	
BAKERSFIELD	0	- 8	0	0	0	0	0	0.5	33	8.0	15	15	25	6	0	1.5	
BISHOP	0	- 11	0	0		0	0						21	7	3	2.5	
BLUE CANYON	70	- 17	61	5		0	0			14.8	29	2	16	5	10	4.2	
EUREKA U	55	- 26	13	10		0	0			20.1	SE	2	9	10	12	5.4	65
FRESNO	2	- 9	2	1	0	0	0	0.5	30	8.9	NW	5+	22	8	1	2.0	93
LONG BEACH	T	- 4	T	0	0	0	0	0.7	30	10.3	8	15	17	12	2	3.3	
LOS ANGELES	T	- 10	T	0	0	0	0	1.2	26	13.0Y	W	5	17	11	3	3.2	
LOS ANGELES U	0	- 10	0	0		0	0			7.2	N	5	22	7	2	2.2	71
MT SHASTA R	48	- 14	41	6		0	0										
OAKLAND	13	- 6	9	5	0	0	0	1.1	28	11.2	20	2	19	5	7	3.2	
RED BLUFF	2	- 33	2	2	0	0	0	1.4	34	19.2	SE	2	17	9	5	3.7	83
SACRAMENTO	6	- 13	4	2	0	0	0	0.8	31	13.0	NW	29+	19	6	6	3.3	90
SANDBERG R	0	- 12	0	0		0	0	2.6	3	23.7	34	28	28	3	0	1.1	
SAN DIEGO	0	- 12	0	0	0	0	0	1.3	31	8.5	NW	6	22	8	1	2.6	85
SAN FRANCISCO	12	- 7	10	4	0	0	0	3.0	29	17.9	WNW	2	22	3	6	2.8	
SAN FRANCISCO U	13	- 9	13	3		0	0			12.5	S	2					86
SANTA CATALINA	0	- 24	0	0	0	0	0										
SANTA MARIA	T	- 15	T	0		0	0						25	6	0	1.4	
STOCKTON	4	- 12	3	2	0	0	0	1.9	31	14.3	31	2	21	6	4	2.8	
COLORADO																	
ALAMOSA	11	- 5	11	1		109	102						15	12	4	3.8	
COLORADO SPRINGS	43	25	23	7	2	T	T	1.6	2	17.0	36	26	16	8	7	3.9	
DENVER	29	3	14	6	1	43	51	0.9	19	16.5	NW	23	13	11	7	4.7	71
GRAND JUNCTION	16	- 3	8	4	0	T	T	0.6	12	17.0	NW	23	17	9	5	3.7	85
PUEBLO	20	- 5	11	5	1	T	0	1.0	35	18.8	N	26+	16	6	9	4.3	80

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
CONNECTICUT																																
BRIDGEPORT	2	1019.0	1019.5	18.3	8.9	13.6	0.6	28.9	5	- 1.1	30	0	1	7.2	67	61	- 25	40	3	0	0	0	1.7	27	22.8	24	19	9	10	12	5.5	
HARTFORD	52	1012.2	1018.8	17.8	5.6	11.6	-0.1	29.4	5	- 2.8	30	0	5	5.6	69	66	- 15	32	6	1	0	0	0.9	26	15.2	NW	29	9	5	17	6.3	54
NEW HAVEN	2	1019.3		17.8	7.2	12.5	0.3	28.3	5	- 1.7	30	0	1			62	- 25	35	5		0	0			15.6	SW	19	9	9	13	5.6	68
DELAWARE																																
WILMINGTON	23	1016.9	1020.0	18.9	6.7	12.6	-1.1	30.6	5	- 1.1	30	0	2	7.8	75	52	- 22	22	4	1	0	0	1.0	27	14.8	18	18	10	7	14	5.7	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1018.0	1020.2	20.6	8.3	14.4	-0.6	32.8	5	1.7	30	1	0	7.8	67	45	- 33	18	4	0	0	0	0.5	23	15.2	SW	18	10	6	15	5.7	53
FLORIDA																																
APALACHICOLA U	4			24.4	15.0	19.9	-1.8	28.3	8+	8.9	19	0	0			50	- 12	37	3	1	0	0			13.9	E	29	21	3	7	3.5	74
DAYTONA BEACH	9	1016.9	1018.4	26.7	17.2	21.8	-1.2	30.0	17	10.0	20	0	0	16.7	74	5	-138	5	1	1	0	0	2.1	4	9.8	1	21	9	11	11	5.9	
FORT MYERS	5	1016.6	1016.9	28.3	20.6	24.3	-0.2	30.0	30+	15.0	20	0	0	19.4	78	78	- 26	43	7	3	0	0	2.8	5	9.4	10	24+	11	14	6	4.8	
JACKSONVILLE	6	1018.0	1019.0	27.2	14.4	20.8	-0.8	31.7	7	7.8	20	0	0	13.9	70	29	-102	21	5	0	0	0	1.9	2	13.0	E	30	14	6	11	5.1	62
KEY WEST	1	1014.9	1015.5	28.9	24.4	26.5	0.4	30.0	26+	22.2	20	0	0	22.2	79	143	- 5	48	10	5	0	0	3.6	6	12.1	SE	30	4	9	18	7.0	57
LAKELAND U	65			27.2	17.2	22.4	-1.2	30.0	17	11.7	20	0	0			26	- 48	15	5		0	0						12	12	7	4.5	81
MIAMI	2	1015.6	1015.9	27.8	21.1	24.6	-0.9	30.6	8	17.2	19	0	0	20.6	80	327	119	82	16	5	0	0	2.8	5	11.2	6	20	4	13	14	6.6	
ORLANDO	33	1013.9	1018.2	28.9	17.8	23.3	0.0	31.7	17	12.2	20	0	0	16.1	70	9	- 92	4	5	0	0	0	2.2	4	9.4	9	30+	8	14	9	5.3	
PENSACOLA	34	1014.6	1018.7	26.1	12.8	19.2	-2.2	30.6	6+	5.6	26	0	0	12.2	69	147	71	126	4		0	0	0.9	6	24.1	E	30	17	7	7	3.6	81
TALLAHASSEE	17	1016.6	1018.8	27.8	10.6	19.1	-1.8	32.8	7	2.8	26	2	0	11.7	70	86	24	53	5	0	0	0	0.8	5	8.0	12	30	17	8	6	3.6	
TAMPA	6	1017.3	1017.5	28.9	17.2	23.1	-0.7	31.1	8+	10.6	28+	0	0	16.7	72	61	- 9	51	3	2	0	0	2.6	5	9.4	30	18+	16	7	8	4.5	74
WEST PALM BEACH	5	1015.6	1016.4	28.9	20.6	24.7	-0.9	31.1	17	15.6	19	0	0	18.9	72	254	52	122	11	8	0	0	2.8	6	15.6	26	17	4	15	12	6.5	
GEORGIA																																
ATHENS	244	990.5	1019.6	23.3	8.9	15.9	-1.3	31.1	6	1.7	29+	0	0	8.9	68	91	19	35	5	2	0	0	0.4	2	9.4	31	18	17	7	7	3.9	
ATLANTA	308	982.7	1019.6	22.2	8.3	15.2	-1.7	28.9	6	1.7	29+	0	0	8.3	67	64	2	29	7	2	0	0	0.4	1	11.6	NW	18	18	7	6	3.6	80
AUGUSTA	44	1013.9	1019.2	25.6	7.2	16.6	-1.8	32.2	6+	- 1.1	29	2	1	8.9	70	14	- 37	12	3	0	0	0	0.2	5	10.3	24	18	15	9	7	3.8	
COLUMBUS	117			25.0	9.4	17.2	-1.4	31.1	7	2.2	20+	0	0	10.6	71	82	37	49	7		0	0	0.4	4	9.4	29	17	18	4	9	3.8	
MACON	108	1006.1	1019.2	25.6	7.2	16.3	-2.7	31.7	7	- 1.1	29	0	3	8.9	66	31	- 20	13	6	1	0	0	0.4	4	10.7	NW	18	18	8	5	3.6	76
ROME	194			23.3	6.7	14.8	-1.4	30.6	7	- 1.1	29+	0	4			97	22	32	9		0	0										
SAVANNAH	14	1017.6	1019.3	25.6	10.6	18.0	-1.6	31.1	6	2.8	29	0	0	11.7	73	35	- 31	19	5	2	0	0	0.7	5	9.8	NW	18	16	7	8	4.5	76
HAWAII																																
HILO	8	1014.2	1015.3	29.4	21.1	25.1	1.2	32.2	4	17.8	8	1	0	19.4	75	256	- 18	93	19	1	0	0	0.6	21	6.7	E	8	8	9	14	6.5	43
HONOLULU	2	1014.2	1014.8	31.1	22.8	27.0	1.3	33.3	3	20.6	9	9	0	19.4	67	39	- 8	13	14	1	0	0	2.8	6	14.3	E	21	8	13	10	5.5	63
KAHULUI	15	1012.2	1014.5	30.0	20.6	25.1	-0.1	31.7	13+	16.7	9+	0	0	19.4	74	20	- 3	7	9	0	0	0	3.8	4	12.5	NE	24+	16	5	10	4.7	71
LIHUE	31	1010.8	1016.1	28.9	21.7	25.3	0.3	30.0	29	18.3	31	0	0	20.6	77	47	- 55	16	22	1	0	0	3.6	5	9.4	E	22+	6	14	11	6.0	65
IDAHO																																
BOISE	865	919.4	1020.1	17.8	3.3	10.4	-0.5	25.6	10	- 4.4	26	0	5	1.1	57	11	- 11	5	8	0	0	0	0.6	13	13.0	NW	28	11	8	12	5.7	66
LEWISTON	431			17.8	6.1	11.9	0.8	25.0	9+	0.6	29+	0	0			22	- 8	7	9		0	0						3	11	17	7.6	
POCATELLO	1358	866.2	1020.0	17.2	0.0	8.5	-1.0	24.4	11	- 8.3	27	0	16	- 1.7	55	20	- 2	11	5	1	T	0	3.1	23	17.0	SW	2	10	13	8	5.1	69
ILLINOIS																																
CAIRO U	96			21.7	11.1	16.2	-0.4	31.7	5	2.8	28	0	0			141	68	75	9		0	0			13.4	SW	15	13	6	12	5.1	59
CHICAGO O HARE	201	991.5	1015.9	16.7	6.7	11.6	-0.1	30.6	4	- 2.2	12	0	4	5.6	68	99	29	28	12	1	168	102	1.7	23	17.9	20	24	7	5	19	7.0	
CHICAGO MIDWAY	185	993.6		16.7	7.2	11.9	-0.9	30.6	4	- 0.6	26	0	1	4.4	64	119	48	49	11	2	112	76	1.9	21	14.8	SE	24	6	8	17	6.9	46
MOLINE	177	993.9	1015.5	16.7	6.1	11.2	-1.5	30.6	4	- 2.2	28	0	7	5.0	69	158	96	45	11	3	168	127	1.3	23	13.0	W	20	7	10	14	6.4	54
PEORIA	199	992.2	1016.2	16.7	6.1	11.4	-1.5	30.0	4	- 3.9	26	0	3	5.6	69	141	77	40	12	5	46	25	1.3	21	17.4	SW	24	9	7	15	6.3	50
ROCKFORD	221	988.2	1015.1	15.6	5.6	10.7	-0.7	30.0	4	- 2.2	21	0	5	5.6	74	129	60	37	12	2	56	25	1.1	24	12.5	28	20	6	7	18	6.9	
SPRINGFIELD	179	993.9	1016.2	18.3	7.2	12.7	-1.0	31.1	4	- 1.1	28	0	4	6.7	70	107	33	34	12	4	T	T	1.7	20	16.1	S	24	8	8	15	6.5	53
INDIANA																																
EVANSVILLE	116	1003.7	1017.8	20.6	7.8	14.1	-1.0	32.2	4	- 0.6	26	1	4	7.8	69	201	136	76	9	4	0	0	1.2	20	15.2	SW	24	9	6	16	6.3	56
FORT WAYNE	241	987.1	1017.5	16.1	5.0	10.6	-1.1	30.0	4	- 3.3	29	0	7	5.0	73	107	35	41	13	1	0	0	2.2	22	16.5	W	27	8	4	19	6.9	49
INDIANAPOLIS	241	988.2	1017.4	18.9	7.2	12.9	-0.1	30.6	4	- 1.1	12	0	3	7.2	72	145	79	50	12	3	T	T	1.3	21	18.8	W	24	5	7	19	7.3	41
SOUTH BEND	236	988.2	1016.2	15.0	6.7	10.9	-0.9	29.4	4	- 0.6	26	0	3	6.7	77	127	47	31	18	4	127	25	1.9	22	12.5	23	24	4	7	20	7.5	
IOWA																																
BURLINGTON	211			17.2	6.7	11.7	-1.3	30.6	4	- 3.3	28+	0	4	5.6	72	143	74		12	7	86		0.9	25	10.3	18	14+	10	7	14	6.0	
DES MOINES	286	981.0	1016.0	16.1	5.6	10.8	-1.5	30.0	2	- 5.6	28	0	7	3.3	62	49	- 3	16	7	3	61	51	0.8	29	14.8	NW	24+	10	4	17	6.2	59
DUBUQUE	322	976.0		14.4	4.4	9.5	-0.9	26.7	4+	- 3.9	26	0	8			218	148	65	10		15	T						7	6	18	7.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
SIOUX CITY	334	975.6	1015.7	17.2	3.3	10.2	-2.0	31.1	2	- 9.4	28	0	10	2.2	62	32	- 4	21	7	1	43	25	1.0	31	17.0	NW	24	10	6	15	5.8	64
WATERLOO	265	983.1	1015.3	13.9	1.7	8.0	-2.9	28.3	2	- 9.4	28	0	15	3.3	74	71	17	35	8	2	T	T	0.6	26	11.2	19	23	8	6	17	6.6	
KANSAS																																
CONCORDIA	448	962.4	1015.3	18.9	6.7	12.7	-1.6	31.1	1	- 1.7	28	0	4	5.6	66	38	- 5	21	7	4	0	0	0.4	17	13.9	S	23	14	7	10	4.6	71
DODGE CITY	787	924.5	1014.9	22.2	6.7	14.6	0.0	34.4	2	- 1.1	30+	3	4	1.1	45	8	- 28	4	5	1	T	0	0.4	29	18.8	N	23	14	9	8	4.2	84
GOODLAND	1113	888.6	1015.3	21.1	2.8	11.9	0.2	33.9	3	- 5.0	27	1	11	- 0.6	48	13	- 6	6	4	0	T	T	1.7	29	15.6	32	28+	17	8	6	3.7	
TOPEKA	267	984.1	1015.9	18.9	6.7	12.6	-1.9	30.0	4	- 3.9	28	0	3	6.7	70	153	93	76	9	5	0	0	0.5	27	13.9	NW	24+	13	6	12	5.5	63
WICHITA	403	967.5	1015.3	20.6	7.8	14.3	-1.2	31.7	6	0.6	25	0	0	6.1	61	76	15	55	4	3	0	0	0.6	19	18.8	NW	6	14	8	9	4.5	75
KENTUCKY																																
COVINGTON	265	986.8	1018.4	18.9	7.2	13.1	-0.3	30.6	4	- 1.1	29	0	4	7.2	70	67	10	16	10	1	T	0	1.7	22	15.6	27	24	6	5	20	7.2	
LEXINGTON	294	983.4	1018.9	19.4	7.8	13.4	-1.1	27.2	4	- 0.6	29	0	2	7.2	69	54	- 4	28	8	2	0	0	2.1	18	10.3	25	27+	7	9	15	6.3	
LOUISVILLE	145	1000.3	1018.1	20.6	7.8	14.0	-0.4	29.4	4	0.6	29+	0	0	7.8	71	78	21	21	11	3	0	0	1.2	21	15.2	SE	24	7	9	15	6.4	57
LOUISIANA																																
ALEXANDRIA	28	1013.9	1018.1	26.1	8.3	17.1	-2.4	30.6	3	1.1	19	0	0	10.6	71	109	20	95	5	0	0	0	0.5	17	9.4	29	17	15	9	7	3.8	
BATON ROUGE	20	1015.9	1018.6	26.1	10.6	18.4	-2.2	31.1	14	4.4	26+	0	0	11.1	68	55	- 7	26	5	1	0	0	0.5	10	9.8	27	17	17	8	6	3.3	
LAKE CHARLES	3	1017.3	1018.4	27.2	12.8	20.0	-1.4	31.7	3	6.1	19	0	0	13.9	74	116	38	89	7	2	0	0	0.8	12	11.6	15	29	15	11	5	3.9	
NEW ORLEANS	1	1017.6	1018.4	26.1	11.7	18.7	-2.7	30.0	6	5.0	26+	0	0	13.9	75	96	24	65	5	2	0	0	0.9	6	12.5	25	30	19	8	4	3.3	
SHREVEPORT	77	1008.1	1017.3	27.2	11.1	19.2	-1.0	33.3	4+	5.0	31	3	0	10.0	61	34	- 37	14	6	1	0	0	1.1	18	11.2	32	17	13	12	6	4.2	72
MAINE																																
CARIBOU	190	994.2		11.1	2.8	6.8	0.7	20.6	3	- 3.3	8	0	9			71	- 14	28	14		T	0						3	4	24	8.3	
PORTLAND	14	1016.3	1018.7	15.0	4.4	9.8	0.6	25.0	4+	- 2.2	23	0	10	5.6	77	33	- 48	14	8	0	0	0	1.1	23	12.5	SW	19	10	7	14	5.7	57
MARYLAND																																
BALTIMORE	45	1014.6	1020.0	19.4	6.7	12.9	-0.9	31.7	5	- 0.6	30	0	3	7.8	74	34	- 47	20	3	0	0	0	1.1	27	17.0	W	18	12	6	13	5.5	53
MASSACHUSETTS																																
BLUE HILL OBS R	192			16.1	6.7	11.5	0.0	26.7	5	- 2.2	30	0	2			33	- 62	12	7		0	0			22.4	SW	19+					61
BOSTON	5	1018.0	1019.0	16.1	7.8	12.1	-0.7	27.2	5	1.1	30	0	0	6.7	72	24	- 55	10	8	0	0	0	1.7	24	16.1	SW	19	12	7	12	5.1	65
NANTUCKET	13	1019.0	1019.3	16.7	8.3	12.5	0.1	25.0	4	1.1	23+	0	0	9.4	80	70	- 24	52	8	0	0	0	0.8	23	16.5	SW	19	11	9	11	5.7	62
PITTSFIELD	357			15.0	2.8	8.9	0.0	26.7	3	- 6.1	30	0	14			90	8	37	6		0	0										
WORCESTER	301	982.4	1019.6	16.1	6.1	10.8	0.6	26.7	3	- 3.3	30	0	2	5.6	72	46	- 42	20	8	0	0	0	2.0	26	13.0	17	19	11	7	13	5.5	
MICHIGAN																																
ALPENA	210	989.8	1015.2	13.3	2.2	8.0	0.1	29.4	4	- 3.9	22+	0	12	3.3	73	58	- 4	13	12	0	5	T	0.9	21	12.5	SE	24	4	4	23	7.5	41
DETROIT	189			16.1	8.3	12.2	0.1	30.0	4	- 0.6	29	0	1	6.1	68	99	31		6	2	T	0	1.9	24	11.2	28	27					
DETROIT M WAYNE CO	193	991.9	1016.3	15.6	5.0	10.4	-1.8	28.9	4+	- 3.9	29+	0	4	5.0	72	124	58	44	12	2	T	T	2.1	22	14.8	W	27	5	9	17	7.0	53
DETROIT WILLOW RUN	217	988.2	1016.8	15.0	5.0	10.0	-2.2	27.8	4+	- 4.4	29	0	5	4.4	70	103	39	38	9	2	25	T	2.3	23	14.3	27	27	5	9	17	7.1	
FLINT	235	987.8	1015.8	14.4	5.0	9.6	-1.2	27.2	4+	- 3.9	29	0	5	3.9	69	84	24	27	13	0	66	25	2.2	22	10.3	32	27+	3	6	22	7.8	
GRAND RAPIDS	239	986.5	1015.7	14.4	5.6	9.9	-0.7	28.9	4	- 3.3	28	0	6	5.6	77	112	46	26	15	1	213	127	1.5	21	15.6	W	25	4	7	20	7.7	37
HOUGHTON LAKE	350	973.2	1015.7	12.8	3.3	7.9		26.1	4	- 4.4	22	0	8	3.9	78	69		19	15	0	76	51	1.2	23	11.2	20	24	5	5	21	7.5	
LANSING	256	983.7	1015.7	14.4	4.4	9.4	-1.3	28.9	4	- 6.1	28	0	8	5.0	75	88	24	25	12	0	191	152	2.1	22	13.4	SE	24	4	9	18	7.5	48
MARQUETTE U	206			11.1	3.9	7.5	-1.4	23.3	4	- 1.7	27	0	5			140	81	38	16		137	102			13.9	NW	25	4	5	22	8.0	39
MUSKEGON	191	992.2	1015.3	14.4	6.7	10.5	-0.9	26.1	4	- 1.7	22	0	5	6.1	73	103	38	20	15	2	124	76	1.1	21	11.6	18	24	5	8	18	7.5	
SAULT STE MARIE	220	987.5	1014.5	11.7	1.1	6.3	-1.6	23.9	2	- 5.0	19	0	14	3.3	84	90	18	18	17	0	33	T	0.6	16	13.4	SE	25	4	5	22	8.0	34
MINNESOTA																																
DULUTH	435	962.4	1014.4	10.6	1.1	5.8	-1.2	22.8	4	- 5.6	28	0	17	- 0.6	65	37	- 19	20	6	1	20	25	0.9	30	20.6	NW	25	3	10	18	7.4	38
INTERNATIONAL FALLS	359	970.5	1014.2	10.0	0.0	5.0	-0.8	25.6	1	- 5.0	28	0	17	- 0.6	70	41	- 4	19	10	1	36	25	0.9	24	12.5	21	19	5	3	23	7.8	
MINNEAPOLIS	254	984.1	1014.7	13.9	2.2	7.9	-1.4	29.4	1	- 7.8	28	0	10	2.8	71	44	4	18	8	2	8	T	0.8	29	14.8	SW	22	10	7	14	6.1	61
ROCHESTER	395	967.2	1015.2	13.9	2.2	7.8	-2.2	28.3	3	- 9.4	28	0	14	1.7	69	59	16	36	6	1	T	T	1.6	25	14.8	19	22+	9	9	13	6.0	
ST CLOUD	315	976.3	1014.4	12.8	1.1	7.1	-1.4	28.3	1	-10.0	28	0	13		66	29	- 13	22	8		28	25						5	9	17	6.9	
MISSISSIPPI																																
JACKSON	94	1006.8	1018.7	25.0	7.8	16.3	-3.1	30.6	14+	0.0	19	0	1	10.0	73	71	19	38	5	0	0	0	1.0	15	11.2	SE	30+	17	7	7	3.8	77
MERIDIAN	88	1008.1	1019.2	25.0	6.7	15.8	-2.8	30.6	14+	0.6	20+	0	0	8.9	73	61	5	32	5	1	0	0	0.2	19	14.8	34	24	17	6	8	3.8	
MISSOURI																																
COLUMBIA	237	987.5	1015.7	19.4	8.3	13.9	-0.9	32.8	4	- 1.7	28	1	2	6.1	65	153	74	48	12	4	T	T	0.8	22	17.0	NW	24	11	7	13	6.0	52
KANSAS CITY	226	988.8	1015.7	20.6	8.9	14.8	-0.9	32.2	4	0.6	28	1	0	7.8	68	219	147	74	9	5	T	T	0.7	23	14.8	SE	23	10	9	12	5.7	57

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
ST JOSEPH	247			20.0	6.1	13.2	-0.9	32.2	4	- 4.4	28	1	5	6.1	72	152	97		12	4	T		0.5	28	13.4	18	23	14	4	13	5.1	
ST LOUIS	163	996.3	1016.7	20.0	8.3	14.2	-0.5	31.1	4	1.1	28+	0	0	7.8	69	88	15	39	13	2	T	0	1.3	22	21.5	SW	24	9	6	16	6.5	52
SPRINGFIELD	386	971.2	1016.5	21.1	7.8	14.4	-0.9	30.6	4	- 1.7	28	0	2	7.2	67	221	125	87	10	6	0	0	1.3	19	15.2	NW	24	11	7	13	5.7	53
MONTANA																																
BILLINGS	1087	891.0	1015.3	15.0	4.4	9.9	0.2	25.0	21	- 2.2	27	0	1	- 1.1	51	26	- 1	19	6	2	T	0	3.4	27	25.0	NW	19	7	10	14	6.4	55
GLASGOW	696	931.6		14.4	1.7	8.0	0.6	24.4	21+	- 6.1	27	0	9			29	12	22	11		0	0									6.8	
GREAT FALLS	1116	887.2	1014.6	16.1	4.4	10.1	1.5	22.8	21+	- 1.7	27	0	3	- 1.1	49	29	10	15	8	1	18	T	5.9	23	25.0	SW	19	3	16	12	6.8	56
HAVRE	787	921.1	1013.5	16.1	1.7	8.9	1.3	24.4	21	- 7.2	27	0	10	0.0	58	9	- 11	6	5	0	T	0	3.4	25	21.0	W	19	1	17	13	7.2	55
HELENA	1167	881.5	1017.5	15.0	1.7	8.6	1.0	22.8	21+	- 6.1	27	0	9	0.0	61	38	21	20	9	0	T	0	2.8	27	16.1	W	21	4	11	16	6.8	52
KALISPELL	904	912.0	1017.4	12.8	1.1	6.9	0.3	21.7	8	- 5.6	27+	0	13	2.2	76	41	9	8	17	2	T	T	2.1	18	10.3	22	3	2	6	23	8.3	
MILES CITY	801	921.1	1014.6	16.7	2.8	9.5	0.1	26.1	11	- 7.2	27	0	9	0.0	55	12	- 10		7	1	T		2.1	29								
MISSOULA	972	906.2	1019.5	13.3	0.6	7.0	0.3	22.8	8	- 3.9	21	0	16	1.7	74	42	17	11	13	1	8	T	0.9	29	16.5	SW	19	2	8	21	7.8	39
NEBRASKA																																
GRAND ISLAND	561	949.5	1016.1	18.9	4.4	11.6	-0.3	31.7	3	- 4.4	31	0	7	2.8	61	35	10	15	6	2	T	T	0.8	31	13.4	33	24+	12	10	9	4.9	
LINCOLN U	351			17.8	6.7	12.1	-1.7	29.4	3	- 3.9	28	0	3			49	8	30	11		T	0			15.2	SW	12	12	10	9	5.0	64
NORFOLK	471			16.7	2.8	9.8	-1.8	31.1	2	- 6.7	28	0	11			43	13	16	6		13	T						13	7	11	5.4	
NORTH PLATTE	846	917.7	1016.2	20.0	0.0	9.9	-0.7	32.8	3	- 7.8	31	1	20	- 1.1	54	15	- 8	7	5	1	T	T	1.0	1	15.2	NW	12	13	13	5	4.7	77
OMAHA	298	980.4	1016.0	17.8	4.4	11.2	-2.0	30.6	1	- 6.1	28	0	7	4.4	68	43	- 1	23	9	4	38	T	0.5	33	14.8	NW	9	12	7	12	5.5	62
SCOTTSBLUFF	1206	880.1	1016.2	20.0	1.7	10.7	0.5	33.3	3	- 6.7	27	1	12	- 1.1	50	4	- 13	3	2	0	0	0	1.9	32	17.0	30	12	10	13	8	4.9	
VALENTINE	789			18.9	1.1	10.1	0.4	34.4	3	- 6.7	25	1	17			25	3	19	3		0	0			17.4	NW	19	12	7	12	5.5	66
NEVADA																																
ELKO	1539	848.3	1020.1	21.1	- 1.1	9.9	1.7	28.9	8	- 6.7	29+	0	21	- 5.0	41	7	- 12	5	2	0	T	0	1.0	24	10.3	30	28+	15	6	10	4.8	
ELY	1906	812.7	1019.8	20.0	- 2.2	8.7	1.0	28.9	8	-10.0	30+	0	24	- 7.2	40	3	- 15	3	1	1	0	0	1.9	20	15.6	SE	3	16	9	6	3.8	75
LAS VEGAS	659	940.1	1015.9	28.9	12.2	20.6	1.4	33.9	2	5.0	30	8	0	- 3.3	22	0	- 5	0	0	0	0	0	1.2	25	17.9	NE	28	24	5	2	1.9	96
RENO	1342	869.6	1020.0	23.3	- 2.2	10.6	1.0	28.9	13+	- 6.1	29	0	27	- 3.3	41	1	- 12	1	1	0	0	0	0.6	28	17.4	SW	2	15	10	6	3.9	90
WINNEMUCCA	1310	871.3	1019.9	21.7	- 3.3	9.2	0.5	27.2	11+	-11.1	29	0	25	- 5.0	40	2	- 18	1	3	0	0	0	1.0	24	15.2	SW	3+	12	5	14	5.0	61
NEW HAMPSHIRE																																
CONCORD	104	1006.4	1019.2	16.7	2.8	9.6	0.3	28.9	3	- 7.8	30	0	14	4.4	71	25	- 42	11	5	0	0	0	0.8	22	13.0	S	19	9	8	14	6.0	58
MT WASHINGTON OBS	1909			3.3	- 3.9	- 0.1	0.5	12.2	3	-10.6	29+	0	23			169	12	48	19	0	150	25			45.6Y	W	20	4	8	19	7.7	38
NEW JERSEY																																
ATLANTIC CITY	20	1018.0	1020.4	18.3	4.4	11.3	-2.7	30.6	5	- 4.4	30	0	8	6.7	76	73	- 9	42	4	2	0	0	0.9	26	13.4	22	18	11	9	11	5.2	54
ATLANTIC CITY U	3			18.9	10.6	14.6	-0.2	30.6	5+	2.2	30	0	0			67	- 19	41	4						20.1	SW	25					
NEWARK	2	1019.0	1019.9	18.3	8.9	13.6	-0.1	30.6	5	1.7	30+	0	0	7.8	69	73	- 6	32	4	1	0	0	1.1	25	13.9	21	18	13	7	11	5.1	
TRENTON U	17			18.3	8.3	13.4	-0.3	30.0	5	1.1	30	0	0			78	6	33	5		0	0			15.6	S	18	13	6	12	5.3	59
NEW MEXICO																																
ALBUQUERQUE	1619	840.5	1016.6	22.8	6.1	14.6	0.1	29.4	3	- 2.2	31	0	2	- 3.9	33	5	- 14	3	2	1	5	T	0.4	15	18.8	E	10	18	10	3	2.9	91
CLAYTON	1515			22.2	4.4	13.4	0.5	31.1	3	- 2.8	30	0	7			3	- 22	2	2		18	T						19	7	5	3.4	
RATON	1944			20.6	0.6	10.6	-0.1	28.9	3	- 6.7	16	0	17			1	- 25	1	2		8	T						16	6	9	4.3	
ROSWELL	1102	893.0		26.7	3.9	15.2	0.2	33.9	6+	- 5.0	31	4	10	0.6	41	1	- 27	1	1	0	0	0	0.4	27	13.4	NW	29	16	9	6	3.6	84
SILVER CITY	1638			23.9	6.7	15.3	-0.1	30.0	1	- 4.4	30	0	3			8	- 12	8	2		0	0						20	8	3	2.8	
NEW YORK																																
ALBANY	84	1008.5	1019.1	16.7	4.4	10.6	0.1	28.3	3	- 4.4	30	0	11	4.4	68	88	18	45	7	0	T	0	1.7	23	14.8	NW	25+	4	8	19	7.3	44
BINGHAMTON	485	959.7	1019.1	13.3	5.0	9.2	-0.7	25.6	3	- 3.9	30	0	6	5.0	77	84	5	43	8	1	T	T	2.0	22	14.3	SE	25	6	5	20	7.5	40
BUFFALO	215	991.5	1017.2	15.6	6.7	11.1	0.6	25.6	2	- 2.8	29	0	1	5.6	71	121	45	40	13	2	T	0	3.1	23	17.0	SW	27	4	10	17	7.2	50
J.F. KENNEDY	4	1019.0	1019.8	17.2	8.9	13.1	-1.2	28.9	5+	1.1	30	0	0	6.1	65	48	- 34	17	3	0	0	0	1.1	27	17.4	26	19	12	9	10	5.1	
NEW YORK U	40	1016.3	1019.4	18.3	9.4	14.0	-0.6	30.0	5	1.7	30	0	0	5.0	59	88	8	36	3	2	0	0	0.6	25	13.0	SW	19+					63
NEW YORK LA GUARDIA	3	1018.3	1019.9	17.8	10.6	14.0	-0.8	29.4	5	2.2	30	0	0	6.1	60	68	- 18	24	3	2	0	0	1.1	28	16.5	SW	18	12	7	12	5.5	
ROCHESTER	167	998.0	1018.4	16.1	6.1	11.2	0.2	27.2	4	- 0.6	29	0	2	5.0	69	110	45	40	12	1	T	0	2.0	23	21.0	W	27	3	13	15	7.1	41
SYRACUSE	125	1003.1	1018.0	16.1	6.1	11.0	0.0	28.9	3	- 2.8	30	0	3	5.0	69	89	9	43	10	1	T	T	1.7	22	14.3	SW	27+	7	5	19	7.3	44
NORTH CAROLINA																																
ASHEVILLE	652	943.8	1020.1	19.4	4.4	11.9	-1.3	26.7	4	- 3.9	29	0	8	6.7	77	84	4	25	8	2	0	0	0.4	34	13.4	34	18	12	8	11	5.2	64
CAPE HATTERAS R	2	1019.6	1019.8	21.7	13.9	17.9	-0.7	27.8	6	7.2	21	0	0	12.8	72	72	- 36	22	8	1	0	0	2.1	36	17.0	SW	18	16	9	6	3.7	63
CHARLOTTE	224	992.2	1019.7	22.2	8.9	15.6	-1.4	30.0	4	0.0	20	0	1	8.9	68	21	- 54	8	4	1	0	0	0.2	4	10.7	S	18	10	13	8	4.8	66
GREENSBORO	273	988.2	1020.1	21.7	7.8	14.7	-0.4	30.0	5	- 0.6	29+	0	2	10.0	78	31	- 38	16	7	1	0	0	0.1	29	10.7	NW	19	11	13	7	5.0	64
RALEIGH	132	1004.1	1019.8	22.2	8.3	15.2	-0.6	29.4	5+	- 0.6	29	0	1	9.4	72	57	- 11	22	6	1	0	0	0.4	9	13.0	23	18	15	8	8	4.2	63

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
WILMINGTON	9	1018.6	1019.9	25.0	11.7	18.3	-0.3	31.1	6+	3.3	29	0	0	11.1	67	27	- 49	16	4	1	0	0	0.7	4	14.3	SW	18	17	10	4	3.5	72
NORTH DAKOTA																																
BISMARCK	502	954.6	1015.0	13.3	1.1	7.2	-0.9	24.4	3	- 7.8	27	0	16	- 0.6	63	44	22	26	7	0	T	T	1.8	29	17.9	NW	19	7	5	19	7.1	46
FARGO	273	981.4	1014.4	12.8	0.6	6.7	-1.4	28.3	1	- 8.9	28	0	13	0.6	68	27	- 1	15	7	0	18	25	1.0	28	18.8	NW	19	7	5	19	6.9	43
WILLISTON	579	944.8	1013.8	13.9	1.1	7.3	-0.2	23.3	31+	- 7.8	25	0	13	0.0	65	29	11	14	8	0	T	T	1.7	28	21.9	NW	19	6	11	14	6.5	53
OHIO																																
AKRON	368	973.6	1018.3	17.2	6.1	11.8	0.2	27.8	4+	- 1.1	29+	0	3	5.6	70	50	- 13	22	10	2	T	0	2.3	21	13.0	21	27	9	5	17	6.5	
CINCINNATI OBS	232			18.9	7.2	13.1	-1.3	31.1	4	- 1.1	29	0	2			61	4	16	11		0	0			12.1	SW	24					46
CLEVELAND	237	988.5	1017.8	17.8	6.7	12.2	0.3	28.9	4	- 1.7	22	0	3	5.6	67	54	- 8	19	12	1	T	T	2.9	21	15.6	SW	27	7	8	16	6.6	50
COLUMBUS	247	988.2	1018.6	16.7	5.6	11.1	-1.3	27.8	4	- 4.4	29	0	5	6.7	78	35	- 18	9	11	1	T	0	1.6	21	17.0	W	27	8	9	14	6.5	46
DAYTON	305	981.7	1018.1	18.3	7.2	12.6	-0.5	30.0	4	- 0.6	29+	0	3	6.1	67	57	0	11	14	0	T	0	2.0	21	15.2	W	18	8	6	17	6.7	51
MANSFIELD	395			16.7	6.7	11.4	0.1	27.8	4	- 2.2	29	0	4	4.4	67	44	- 13	17	10	2	T	0	3.1	21				8	8	15	6.5	
TOLEDO	204	992.2	1017.4	16.1	5.0	10.7	-0.5	29.4	4	- 4.4	29+	0	7	5.0	70	78	17	34	10	0	T	0	2.0	23	14.3	W	27	6	10	15	6.9	54
YOUNGSTOWN	359	975.3	1018.3	15.6	5.0	10.3	-0.7	27.2	4	- 5.6	29	0	5	5.0	74	83	14	33	11	1	15	T	2.1	21	13.0	24	27	10	5	16	6.6	
OKLAHOMA																																
OKLAHOMA CITY	392	969.5	1015.6	23.3	10.6	17.0	-0.2	31.1	6+	2.8	27	0	0	8.3	61	74	10	36	5	2	T	0	1.0	18	16.1	N	30	16	10	5	4.1	74
TULSA	198	991.9	1016.0	23.3	8.9	16.2	-0.9	32.2	6	1.7	28+	1	0	8.3	64	95	11	50	7	2	T	T	1.7	20	17.0	N	30+	12	12	7	4.5	67
OREGON																																
ASTORIA	2	1016.3	1016.9	16.1	7.2	11.6	0.0	23.9	17	2.2	26+	0	0	10.0	90	281	83	45	23	4	0	0	1.8	19	13.0	19	22	0	7	24	8.5	
BURNS U	1265	876.4	1020.6	16.7	- 0.6	7.9	-1.2	23.3	17+	- 6.1	29	0	22	- 0.6	60	31	9	25	7		0	0	1.1	29				11	9	11	5.5	
EUGENE	109	1005.4	1018.9	17.8	7.2	12.4	0.7	23.3	31+	3.3	29+	0	0	9.4	86	130	32	54	13	0	0	0	2.4	19	18.3	18	2	2	13	16	7.2	
MEACHAM	1234	878.4	1018.5	13.3	3.3	8.1	0.1	21.7	10+	- 2.2	26+	0	5			97	25	45	12		T	0	1.2	22				2	6	23	8.2	
MEDFORD	396	972.6	1020.5	20.0	4.4	12.0	0.3	26.1	15	- 0.6	15	0	3	6.1	73	59	10	41	10	0	0	0	0.5	26	15.6	19	2	7	15	9	5.5	
PENDLETON	452	964.4	1018.2	19.4	6.1	12.7	0.7	26.7	18	0.0	20	0	1	2.8	54	16	- 14	8	7	1	0	0	2.2	24	17.4	24	22	5	11	15	6.9	
PORTLAND	6	1016.6	1018.0	17.8	7.8	12.7	0.3	22.8	7	2.2	26	0	0	8.9	82	120	28	33	18	2	0	0	1.8	19	31.3	S	2	2	4	25	8.4	37
SALEM	60	1011.2	1018.4	18.3	6.7	12.4	0.1	25.6	10	2.2	26+	0	0	8.3	80	129	30	34	17	2	0	0	2.7	19	30.4	26	2	3	11	17	7.6	
SEXTON SUMMIT R	1169	886.6	1019.0	13.9	5.6	9.6	-0.8	22.2	17	1.1	29+	0	0			64	- 23	29	12		0	0			16.5	18	21	10	10	11	5.2	
PACIFIC AREA																																
JOHNSTON	2	1012.2	1012.9	29.4	25.0	27.4	0.2	30.6	15+	22.8	31	0	0	22.8	77	126	43	97	16	1	0	0	6.9	9	17.9	SE	22	7	14	10	5.7	67
KOROR R	29	1005.1	1008.8	31.1	24.4	27.6	0.2	32.8	30	22.2	5+	5	0	23.9	85	433	101	77	20	3	0	0	2.2	25	13.4	SW	14	1	0	30	9.5	68
KWAJALEIN	2	1008.8	1009.5	30.6	25.0	27.6	-0.2	31.7	24+	21.7	6	0	0	23.9	80	284	8	55	24	1	0	0	2.6	9	14.3	6	6	1	4	26	9.0	
MAJURO	3	1009.8	1010.0	30.0	25.0	27.4	0.5	31.1	26+	21.1	23	0	0	23.3	79	385	0	113	19	2	0	0	1.3	8	13.0	E	13	0	6	25	8.6	55
MARCUS ISLAND	6			30.0	24.4	27.2	-0.5	31.1	7	22.2	20	0	0			22	- 69	6	19		0	0			16.5	SE	4					
PAGO PAGO	4	1011.5	1011.7	29.4	22.2	26.0		31.7	29+	21.1	23+	0	0	22.8	84	404		191	23	3	0	0	2.4	9	14.3	E	9	3	15	13	7.3	39
PONAPE R	37	1004.1	1009.4	31.1	22.2	26.6	0.1	33.3	7	21.1	27+	6	0	23.3	88	416	10	99	26	1	0	0	1.0	16	7.6	E	14	0	9	22	8.3	45
TAGUAC GUAM R	110			29.4	21.7	25.5	-0.8	30.6	26+	19.4	25	0	0			361	28	112	24		0	0			12.1	SE	31					43
TRUK MOEN ISLAND	2	1008.8	1009.0	30.6	23.9	27.2	0.2	31.7	25+	22.2	19	0	0	23.9	84	401	60	71	23	1	0	0	0.9	15	10.7	N	22	0	3	28	9.2	56
WAKE	3	1012.9	1013.2	30.6	25.0	27.9	0.4	32.2	28	22.8	20	1	0	23.9	79	79	- 55	45	19	0	0	0	7.2	8	13.0	E	15	2	19	10	6.4	
YAP R	19	1005.8	1007.6	30.6	24.4	27.4	-0.2	33.3	11	21.7	13	4	0	24.4	87	325	- 10	56	23	4	0	0	1.0	25	13.0	SW	14	0	6	25	9.0	40
PENNSYLVANIA																																
ALLENTOWN	118	1005.8	1019.8	17.2	3.9	10.6	-1.5	28.9	4	- 3.9	30	0	8	5.6	74	58	- 17	29	5	2	0	0	1.2	25	15.6	18	18	10	7	14	6.0	
ERIE	223	990.9	1017.7	16.1	7.2	11.7	0.3	27.8	4	0.6	29+	0	0	5.6	69	70	- 13	29	14	2	T	0	3.0	21	17.4	21	27	7	7	17	6.8	
HARRISBURG	103	1006.8	1019.8	17.8	6.1	11.8	-1.3	29.4	5	- 1.7	30+	0	2	6.7	72	80	5	34	9	1	0	0	0.8	25	14.3	NW	18	9	4	18	6.6	46
PHILADELPHIA	2	1019.0	1020.0	19.4	7.8	13.8	0.6	31.1	5	1.1	30	0	0	7.8	69	51	- 20	25	3	1	0	0	0.8	27	14.8	SW	18	9	7	15	5.9	59
PITTSBURGH	347	974.6	1018.9	17.2	5.6	11.4	-0.3	27.2	4+	- 5.6	29	0	5	5.0	69	52	- 12	16	11	1	T	0	1.5	22	13.4	25	27	7	6	18	6.7	41
READING U	81			18.3	7.8	12.9	-1.1	29.4	5+	- 1.1	30	0	1			80	8	40	5		0	0			23.2	S	18	9	10	12	5.8	50
SCRANTON	283	985.4	1019.9	15.6	5.6	10.7	0.1	26.7	4	- 3.9	30	0	2	5.6	73	66	- 23	25	7	1	T	0	1.5	21	13.9	SE	25	10	6	15	6.1	51
WILLIAMSPORT	160	1000.3	1019.6	16.7	5.0	11.0	-0.7	28.9	4	- 3.9	30	0	8	7.2	79	114	30	53	8	2	0	0	0.5	23	11.2	25	18	7	6	18	7.0	
RHODE ISLAND																																
BLOCK ISLAND	34			16.1	10.0	13.1	0.2	25.0	4	1.7	30	0	0			34	- 43	10	8		0	0						10	13	8	5.3	
PROVIDENCE	16	1016.9	1019.4	17.8	6.1	12.1	0.3	29.4	5	- 0.6	30	0	2	6.7	72	57	- 22	19	9	1	0	0	1.0	25	16.5	14	26	12	8	11	5.3	57
SOUTH CAROLINA																																
CHARLESTON	12	1017.6	1019.2	25.0	9.4	17.0	-2.0	30.6	6	- 0.6	29	0	1	11.1	73	13	- 59	7	4	1	0	0	0.8	5	24.1Y	W	18	14	10	7	4.0	70
CHARLESTON U	3			23.3	15.0	19.2	-0.9	29.4	5	8.9	19	0	0			18	- 52	11	3		0	0			12.5	NE	30+					
COLUMBIA	65	1011.5	1019.8	23.9	7.8	15.7	-2.5	30.6	6	- 1.7	29	0	2	9.4	75	16	- 45	11	5	1	0	0	0.3	35	8.9	25	18	16	9	6	3.7	71

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
GNVLE SPARTANBURG	292	985.1	1019.8	22.2	8.3	15.4	-1.5	30.0	5	0.6	29	0	0	8.3	68	60	- 26	30	5	1	0	0	0.6	3	8.9	W	25	14	9	8	4.7	60
SOUTH DAKOTA																																
ABERDEEN	395	967.8	1015.0	15.0	0.6	7.9	-1.1	27.8	1	- 8.9	27	0	17	1.1	65	17	- 14	8	5	0	36	25	1.1	30	13.4	31	24	10	5	16	6.5	
HURON	391	968.2	1015.1	16.7	1.1	9.0	-0.3	29.4	1	- 8.9	28+	0	15	0.6	60	7	- 22	7	3	1	T	T	1.0	28	16.1	NW	19	7	10	14	6.4	61
RAPID CITY	964	904.2	1015.6	17.8	2.2	10.1	0.1	30.6	3	- 6.1	27	0	15	- 3.3	43	7	- 13	3	4	0	0	0	2.4	32	25.5	NW	19	12	11	8	4.9	68
SIOUX FALLS	432	963.8	1015.5	16.7	0.6	8.4	-1.7	31.1	2	-10.6	28	0	16	0.6	63	10	- 22	7	5	0	13	T	1.0	30	11.6	31	19	9	8	14	6.0	
TENNESSEE																																
BRISTOL	459	965.5	1020.0	20.6	6.1	13.4	-1.1	26.7	16+	- 2.8	29	0	6	7.8	74	51	- 4	21	7	0	0	0	0.3	24	8.0	25	25+	10	13	8	5.1	
CHATTANOOGA	203	994.6	1019.2	22.2	8.3	15.2	-1.5	29.4	7+	0.0	28	0	1	8.9	72	125	48	44	10	3	0	0	0.5	22	13.4	NW	24	19	3	9	4.4	63
KNOXVILLE	299	983.7	1018.7	21.1	7.8	14.6	-1.5	28.3	6	- 1.1	29	0	2	8.3	73	59	- 7	26	9	2	0	0	0.3	30	15.6	NW	24	10	11	10	5.0	68
MEMPHIS	79	1008.1	1018.3	23.9	10.0	16.9	-0.4	31.7	6	2.2	28	0	0	8.3	59	60	- 9	43	6	1	0	0	1.7	19	13.0	W	24	15	9	7	4.4	76
NASHVILLE	180	996.6	1018.3	22.2	8.3	15.2	-1.2	29.4	15+	0.6	26+	0	0	7.2	64	40	- 19	21	6	1	0	0	1.6	20	13.4	S	24	12	10	9	4.3	73
OAK RIDGE R	276			21.1	7.2	14.3	-1.2	27.8	6	- 1.1	29+	0	3			92	24	28	10		0	0			17.4Y		18	13	8	10	5.0	
TEXAS																																
ABILENE	537	955.3	1016.3	23.9	11.1	17.6	-1.4	29.4	5	3.9	31	0	0	10.6	65	44	- 28	25	5	2	T	0	2.1	21	15.6	N	30	15	9	7	4.2	72
AMARILLO	1098	891.6	1014.0	[illegible]3.9	8.3	16.1	0.2	33.9	4	1.1	27	4	0	2.2	45	41	- 4	40	3	1	T	T	1.5	25	19.2	N	15	17	8	6	3.5	80
AUSTIN	182	995.6	1017.[illegible]	26.1	13.3	19.8	-1.7	30.6	10+	6.1	31	0	0	12.2	66	116	44	77	5	4	0	0	0.4	23	21.0	NW	29	12	11	8	4.2	71
BROWNSVILLE	6	1015.9	1016.6	27.8	17.8	22.7	-1.7	30.0	14+	11.1	31+	0	0	17.8	76	72	- 18	38	7	3	0	0	1.1	12	17.0	NE	3	9	17	5	5.0	71
CORPUS CHRISTI	12	1015.6	1017.2	27.2	16.1	21.7	-1.9	30.0	7+	6.1	31	0	0	16.7	76	73	3	60	7	4	0	0	1.2	11	18.8	NW	30	12	13	6	4.6	68
DALLAS	147	999.7	1016.8	25.6	13.3	19.3	-0.6	32.2	4	5.0	30	1	0	10.6	60	121	52	44	5	2	0	0	2.0	18	13.4	S	29	17	8	6	3.6	77
DEL RIO	313	980.7	1016.7	26.7	13.9	20.1	-1.8	30.0	9+	3.3	31	0	0	11.7	62	35	- 15	23	5	2	T	T	2.3	12	20.6	33	29	14	11	6	4.0	
EL PASO	1194	883.8	1014.8	26.1	8.9	17.6	-0.4	32.2	5	- 2.8	31	1	1	0.6	34	2	- 19	2	2	1	0	0	0.2	21	18.8	NE	29	21	5	5	2.8	92
FORT WORTH	164	996.6	1016.9	25.0	11.7	18.6	-1.4	31.7	4	5.0	30	0	0	11.1	66	106	41	44	5	3	0	0	1.6	21	14.8	20	29	20	4	7	3.5	
GALVESTON U	2			25.6	19.4	22.4	-0.7	28.9	10	9.4	31+	0	0			81	8	60	7		0	0			21.0	NW	30					66
HOUSTON	15	1015.6	1017.6	27.8	15.0	21.4	-0.5	31.7	7+	6.1	31	0	0	13.9	68	81	- 15	53	7	2	0	0	0.8	13	15.6	31	30	13	12	6	4.5	71
LUBBOCK	992	904.8	1015.4	24.4	7.2	15.8	-0.4	31.7	1	0.0	27	0	1	3.3	49	11	- 39	10	4	2	5	T	1.3	23	19.2	34	31	17	6	8	3.9	
MIDLAND	869	917.4	1015.0	26.1	9.4	17.8	-1.1	32.2	6	3.3	28	1	0	4.4	48	5	- 37	5	2	0	0	0	1.6	17	15.6	34	30+	20	4	7	3.4	
PORT ARTHUR	5	1017.3	1018.0	27.2	13.9	20.6	-0.7	31.7	3+	6.1	17	0	0	13.3	68	54	- 19	19	7	2	0	0	0.8	13	15.2	NW	30+	15	10	6	4.2	68
SAN ANGELO	580	949.9	1016.1	26.1	11.7	18.9	-1.2	31.7	3	3.9	25+	0	0	11.7	66	46	0	42	3	2	0	0	2.1	21	13.9	34	30	15	10	6	4.0	
SAN ANTONIO	240	989.8	1017.8	26.1	12.8	19.4	-2.1	30.0	14	3.9	31	0	0	12.2	67	51	- 13	25	6	2	0	0	0.4	17	17.4	NW	29	12	10	9	4.5	71
VICTORIA	32	1013.2	1017.2	27.8	15.6	21.6	-1.0	31.1	3	6.1	31	0	0	15.6	72	125	37	80	6	3	0	0	0.9	11	24.1Y	NNW	30	13	9	9	4.7	
WACO	153	999.0	1017.0	26.7	13.9	20.2	-0.6	32.8	4	7.2	31+	2	0	11.7	61	97	32	53	4	1	0	0	1.9	19	13.0	32	30+	16	8	7	3.8	
WICHITA FALLS	303	979.7	1015.9	26.7	10.0	18.4	-0.7	32.8	6+	0.6	30	6	0	8.3	57	50	- 23	34	4	2	T	0	1.6	20	21.5	32	7	13	10	8	4.5	
UTAH																																
MILFORD	1533	850.0		21.7	1.1	11.3	0.9	27.8	13	- 6.7	30	0	17			6	- 14	6	1		0	0						17	11	3	3.2	
SALT LAKE CITY	1286	875.4	1019.8	20.0	2.8	11.3	0.4	27.8	2	- 2.8	30+	0	11	- 0.6	49	17	- 12	9	6	1	0	0	0.9	17	18.3	NW	5	12	10	9	5.1	75
WENDOVER	1291			17.2	5.0	10.9	-0.8	28.3	2	- 1.1	30	0	2			7	- 5	6	2		0	0										
VERMONT																																
BURLINGTON	101	1005.1	1017.8	13.9	5.0	9.3	0.7	25.0	3	- 5.0	30	0	7	3.9	70	77	2	29	15	1	T	0	1.6	20	17.9	SW	19	4	6	21	7.4	62
VIRGINIA																																
LYNCHBURG	279	986.1		18.9	5.6	12.4	-2.2	28.9	4	- 2.2	20	0	3	6.1	69	46	- 21	16	6	1	0	0	0.4	31	10.3	S	25	13	7	11	4.9	59
NORFOLK	7	1019.0	1020.1	20.0	9.4	14.8	-1.8	30.0	5	2.2	30	0	0	8.9	69	24	- 51	13	5	1	0	0	0.8	6	16.5	SW	18	18	4	9	3.9	79
RICHMOND	50	1014.2	1020.3	21.7	6.1	14.0	-0.8	32.2	5	- 1.1	29+	1	3	8.9	76	25	- 51	9	5	1	0	0	0.3	17	13.0	SW	18	11	10	10	5.1	65
ROANOKE	350	977.7	1020.0	19.4	6.1	12.6	-1.9	28.9	5	- 3.3	29	0	4	5.6	65	61	- 20	22	8	0	0	0	0.7	27	14.3	32	18	11	10	10	5.2	
WALLOPS ISLAND	3	1020.7	1021.1	18.3	9.4	13.7		29.4	5	2.8	30+	0	0	10.0	80	27		10	7	2	0	0	0.2	7	20.1Y	SW	18	16	4	11	4.4	
WASHINGTON																																
OLYMPIA	59	1009.8	1017.0	16.1	6.7	11.4	0.6	22.8	8+	0.6	20	0	0	9.4	89	256	122	45	22	0	0	0	2.7	21	13.0	18	27	2	5	24	8.5	
QUILLAYUTE	55	1007.5	1014.9	14.4	7.8	11.1	0.3	20.6	17	2.8	26	0	0	10.0	92	631	364	81	29	3	0	0	1.8	17	12.5	SW	22	0	5	26	8.9	15
SEATTLE TACOMA	122	1000.3	1016.6	16.1	9.4	12.7	1.3	21.7	9	4.4	20	0	0	9.4	83	169	67	34	18	0	0	0	2.5	19	16.1	20	1	0	5	26	8.7	29
SPOKANE	718	932.3	1016.5	15.0	3.3	9.1	-0.4	22.8	8	- 2.8	24	0	7	2.2	67	30	- 10	9	12	0	T	0	2.9	20	17.0	SW	3	4	8	19	7.1	43
STAMPEDE PASS R	1206	879.8		7.8	2.2	4.9	-0.9	16.1	9	- 3.3	26	0	11			598	374	106	24		668	178						0	3	28	9.4	
WALLA WALLA U	289			19.4	8.3	13.7	0.9	25.6	18	2.8	24	0	0			22	- 17	17	8		0	0			15.2	W	22	4	6	21	7.6	47
YAKIMA	321	978.7	1017.3	18.9	3.3	11.0	0.7	23.9	9+	- 2.2	29	0	5	2.8	62	5	- 10	4	4	0	0	0	2.0	27	13.4	28	31+	5	9	17	6.9	
WEST INDIES																																
SAN JUAN P.R.	4	1011.9	1014.3	31.1	23.9	27.4	0.8	33.9	4	22.8	19+	4	0	21.1	71	114	- 35	25	16	11	0	0	1.8	10	13.0	SE	25	3	21	7	5.6	66

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s.							%
WEST INDIES																																
SWAN ISLAND	9			30.0	24.4	27.3	-0.3	31.7	13	21.7	17	0	0			148	- 98	40	19		0	0						0	10	21	7.8	
WEST VIRGINIA																																
BECKLEY	763	930.9	1019.7	16.7	5.6	11.1		24.4	4	- 3.9	29	0	7	5.0	71	61		28	10	0	T	T	1.6	19	13.0	16	16	10	9	12	5.9	
CHARLESTON	286	984.8	1018.9	20.0	6.7	13.3	-0.8	28.9	5	- 3.9	29	0	7	6.1	66	53	- 12	21	10	1	0	0	1.0	21	9.4	23	27+	10	10	11	5.7	
ELKINS	600	948.2	1020.0	17.8	2.8	10.2	-0.9	26.1	4	- 6.1	29	0	11	5.0	76	87	10	24	7	0	T	0	1.1	26	10.7	18	25	8	7	16	6.2	
HUNTINGTON	252	988.8	1019.1	19.4	6.1	12.9	-1.2	28.9	5+	- 2.8	29	0	6	6.7	71	58	11	14	11	3	0	0	1.1	21	10.3	26	27	6	13	12	6.1	
PARKERSBURG U	187			19.4	7.2	13.4	-0.4	28.3	5+	- 2.2	29	0	3			49	- 3	15	9		T	0			15.2	W	27					52
WISCONSIN																																
GREEN BAY	208	988.8	1014.6	13.3	3.3	8.2	-1.5	28.9	4	- 6.1	28	0	5	3.9	77	120	71	46	12	1	13	T	1.1	25	14.8	W	25+	7	7	17	6.6	44
LA CROSSE	198	990.2	1015.0	15.0	4.4	9.6	-1.0	28.3	2	- 3.3	28+	0	7	3.3	70	64	8	26	6	1	T	T	0.8	26	12.5	27	20	9	7	15	6.3	
MADISON	262	983.4	1015.1	14.4	3.3	8.9	-1.1	29.4	4	- 5.0	11	0	11	3.3	70	140	84	41	12	1	23	25	1.1	26	13.4	NW	24	7	5	19	7.0	49
MILWAUKEE	205	989.8	1015.3	15.0	5.6	10.2	0.2	29.4	4	- 3.3	12	0	4	5.0	71	69	15	25	12	1	20	T	1.3	25	16.1	W	24	7	7	17	6.9	45
WYOMING																																
CASPER	1627	838.5	1016.3	16.7	1.1	9.0	-0.1	25.0	3	- 9.4	29	0	15	- 3.3	49	35	13	11	11	2	109	51	4.0	24	17.0	22	3	9	11	11	5.6	
CHEYENNE	1867	813.8	1016.5	17.8	1.7	9.6	1.0	28.3	3	- 8.3	27	0	12	- 4.4	43	12	- 9	8	6	0	10	T	3.9	30	24.6	SW	28+	12	15	4	4.4	67
LANDER	1696	830.0	1016.3	17.2	1.1	8.9	0.6	23.9	5	- 6.1	30	0	15	- 3.3	46	5	- 25	3	5	1	36	25	1.3	25	22.8	NW	23	7	14	10	5.7	74
SHERIDAN	1208	878.8	1016.4	17.2	0.0	8.4	-0.3	26.7	11	- 7.2	27	0	18	- 1.7	51	22	- 6	7	12	2	5	T	1.4	31	17.4	NW	19	5	17	9	6.0	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

OCTOBER 1967

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	162	203	99
HUNTSVILLE	179	221	139
MOBILE	46	69	22
MONTGOMERY	108	138	68
ALASKA			
ANCHORAGE	901	1774	1908
ANNETTE	513	1145	1344
BARROW	1617	4537	4178
BARTER ISLAND	1678	4375	3979
BETHEL	1160	2423	2367
COLD BAY	823	2164	2196
FAIRBANKS	1239	2175	2348
JUNEAU	671	1758	1847
KING SALMON	1078	2262	2056
KOTZEBUE	1274	2740	2799
MC GRATH	1286	2451	2363
NOME	1171	2829	2764
ST. PAUL ISLAND	836	2402	2618
SHEMYA	735	2310	2337
YAKUTAT	764	2029	1875
ARIZONA			
FLAGSTAFF	461	712	873
PHOENIX	6	6	22
TUCSON	14	14	25
WINSLOW	252	263	251
YUMA	0	0	0
ARKANSAS			
FORT SMITH	158	190	139
LITTLE ROCK	162	201	136
TEXARKANA	83	107	78
CALIFORNIA			
BAKERSFIELD	5	5	37
BISHOP	174	183	290
BLUE CANYON	270	326	551
EUREKA U	243	919	1114
FRESNO	29	29	78
LONG BEACH	0	0	52
LOS ANGELES	3	4	133
LOS ANGELES U	0	0	37
MT SHASTA R	431	491	588
OAKLAND	64	164	275
RED BLUFF	33	33	53
SACRAMENTO	33	33	93
SAN DIEGO	3	3	58
SANDBERG R	153	190	232
SAN FRANCISCO	75	234	362
SAN FRANCISCO U	47	471	586
SANTA CATALINA	27	55	75
SANTA MARIA	97	187	434
STOCKTON	25	25	77
COLORADO			
ALAMOSA	663	1134	1092
COLORADO SPRINGS	397	593	622
DENVER	389	517	560
GRAND JUNCTION	320	348	343
PUEBLO	392	483	380
CONNECTICUT			
BRIDGEPORT	274	345	373
HARTFORD	380	502	477
NEW HAVEN	329	431	446
DELAWARE			
WILMINGTON	327	407	321
DIST.OF COLUMBIA			
WASH NATL AP	240	274	250
FLORIDA			
APALACHICOLA U	24	34	16
DAYTONA BEACH	6	6	0
FORT MYERS	0	0	0
JACKSONVILLE	18	21	12
KEY WEST	0	0	0
LAKELAND U	2	2	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	47	68	19
TALLAHASSEE	50	62	28
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	159	195	127
ATLANTA	193	245	145
AUGUSTA	128	149	78
COLUMBUS	114	143	87
MACON	141	174	71
ROME	210	260	185
SAVANNAH	82	94	47
IDAHO			
BOISE	434	483	547
LEWISTON	352	383	526
POCATELLO	545	676	665
ILLINOIS			
CAIRO U	177	216	200
CHICAGO O HARE	395	647	510
CHICAGO MIDWAY	381	527	407
MOLINE	424	614	443
PEORIA	394	547	419
ROCKFORD	439	666	529
SPRINGFIELD	337	484	363
INDIANA			
EVANSVILLE	264	348	286
FORT WAYNE	442	654	492
INDIANAPOLIS	327	422	406
SOUTH BEND	429	627	484
IOWA			
BURLINGTON	390	544	415
DES MOINES	440	581	471
DUBUQUE	502	751	649
SIOUX CITY	461	603	486
WATERLOO	574	904	597
KANSAS			
CONCORDIA	344	440	333
DODGE CITY	265	316	284
GOODLAND	367	476	468
TOPEKA	356	451	327
WICHITA	280	346	262
KENTUCKY			
COVINGTON	313	397	366
LEXINGTON	289	377	293
LOUISVILLE	259	327	302
LOUISIANA			
ALEXANDRIA	113	139	56
BATON ROUGE	65	88	31
LAKE CHARLES	39	49	19
NEW ORLEANS	56	76	19
SHREVEPORT	72	87	47
MAINE			
CARIBOU	636	981	1211
PORTLAND	467	664	768
MARYLAND			
BALTIMORE	318	393	312
MASSACHUSETTS			
BLUE HILL OBS R	384	548	511
BOSTON	347	461	385
NANTUCKET	324	500	459
PITTSFIELD	517	781	827
WORCESTER	422	605	637
MICHIGAN			
ALPENA	576	1079	1026
DETROIT	357	533	447
DETROIT M WAYNE CO	452	671	527
DETROIT WILLOW RUN	465	723	447
FLINT	486	820	593
GRAND RAPIDS	477	741	605
HOUGHTON LAKE	579	1052	940
LANSING	503	824	597
MARQUETTE U	598	1004	907
MUSKEGON	438	648	560
SAULT STE MARIE	664	1253	1060
MINNESOTA			
DULUTH	694	1187	1142
INTERNATIONAL FALLS	738	1201	1247
MINNEAPOLIS	577	844	747
ROCHESTER	584	921	717
ST CLOUD	625	938	849
MISSISSIPPI			
JACKSON	141	176	59
MERIDIAN	160	200	81
MISSOURI			
COLUMBIA	288	365	305
KANSAS CITY	255	306	259
ST JOSEPH	327	441	351
ST LOUIS	269	345	311
SPRINGFIELD	261	338	268
MONTANA			
BILLINGS	463	630	694
GLASGOW	571	738	956
GREAT FALLS	453	599	882
HAVRE	519	662	982
HELENA	539	670	985
KALISPELL	627	857	1124
MILES CITY	489	615	688
MISSOULA	630	752	1062
NEBRASKA			
GRAND ISLAND	389	501	495
LINCOLN U	372	466	382
NORFOLK	483	648	517
NORTH PLATTE	479	659	569
OMAHA	417	549	422
SCOTTSBLUFF	431	580	597
VALENTINE	466	659	679
NEVADA			
ELKO	459	515	829
ELY	530	753	897
LAS VEGAS	18	18	78
RENO	429	520	824
WINNEMUCCA	499	579	780
NEW HAMPSHIRE			
CONCORD	482	732	738
MT WASHINGTON OBS	1026	2706	2806
NEW JERSEY			
ATLANTIC CITY	399	549	290
ATLANTIC CITY U	226	275	259
NEWARK	285	344	315
TRENTON U	287	368	321
NEW MEXICO			
ALBUQUERQUE	220	233	241
CLAYTON	286	[illegible]	382
RATON	424	656	594
ROSWELL	205	216	220
SILVER CITY	182	207	189
NEW YORK			
ALBANY	429	601	597
BINGHAMTON	505	749	759
BUFFALO	403	603	637
NEW YORK U	264	323	[illegible]
J.F. KENNEDY	305	381	284
NEW YORK LA GUARDIA	262	319	250
ROCHESTER	401	618	581
SYRACUSE	407	620	581
NORTH CAROLINA			
ASHEVILLE	351	518	369
CAPE HATTERAS R	77	88	78
CHARLOTTE	177	217	130
GREENSBORO	218	267	225
RALEIGH	199	234	185
WILMINGTON	88	92	74
NORTH DAKOTA			
BISMARCK	614	876	861
FARGO	645	917	858
WILLISTON	605	827	936
OHIO			
AKRON	368	553	486
CINCINNATI OBS	317	414	302
CLEVELAND	351	528	481
COLUMBUS	406	600	437
DAYTON	336	467	394
MANSFIELD	421	611	542
TOLEDO	437	727	539
YOUNGSTOWN	445	741	557
OKLAHOMA			
OKLAHOMA CITY	155	182	179
TULSA	184	221	176
OREGON			
ASTORIA	269	690	961
BURNS U	574	674	774
EUGENE	322	356	563
MEACHAM	567	772	1076
MEDFORD	344	354	451
PENDLETON	306	330	461
PORTLAND	306	338	[illegible]
SALEM	323	383	517
SEXTON SUMMIT R	479	690	776
PENNSYLVANIA			
ALLENTOWN	431	597	443
ERIE	374	595	518
HARRISBURG	369	459	361
PHILADELPHIA	271	326	351
PITTSBURGH	391	560	489
PITTSBURGH U	345	487	410
READING U	314	399	311
SCRANTON	427	588	585
WILLIAMSPORT	406	532	495
RHODE ISLAND			
BLOCK ISLAND	294	420	401
PROVIDENCE	356	466	484
SOUTH CAROLINA			
CHARLESTON	112	127	59
CHARLESTON U	41	48	34
COLUMBIA	164	196	84
GNVLE-SPARTANBURG	181	222	139
SOUTH DAKOTA			
ABERDEEN	575	783	766
HURON	521	701	694
RAPID CITY	464	643	680
SIOUX FALLS	549	758	674
TENNESSEE			
BRISTOL	271	392	287
CHATTANOOGA	200	246	161
KNOXVILLE	229	293	201
MEMPHIS	144	178	148
NASHVILLE	216	277	188
OAK RIDGE R	243	315	231
TEXAS			
ABILENE	118	135	99
AMARILLO	185	209	[illegible]
AUSTIN	41	48	41
BROWNSVILLE	4	5	0
CORPUS CHRISTI	17	17	0
DALLAS	70	83	6
DEL RIO	36	37	31
EL PASO	106	138	84
FORT WORTH	80	93	65
GALVESTON U	12	15	0
HOUSTON	18	21	[illegible]
LUBBOCK	190	211	192
MIDLAND	95	104	87
PORT ARTHUR	33	43	22
SAN ANGELO	76	81	68
SAN ANTONIO	48	56	31
VICTORIA	15	19	6
WACO	46	52	43
WICHITA FALLS	93	107	99
UTAH			
MILFORD	390	478	[illegible]
SALT LAKE CITY	387	444	[illegible]
WENDOVER	411	440	[illegible]
VERMONT			
BURLINGTON	495	764	839
VIRGINIA			
LYNCHBURG	330	422	274
NORFOLK	211	247	136
RICHMOND	256	320	[illegible]
ROANOKE	321	426	280
WALLOPS ISLAND	263	343	
WASHINGTON			
OLYMPIA	372	537	759
QUILLAYUTE	396	765	990
SEATTLE TACOMA	310	370	671
SPOKANE	508	589	695
STAMPEDE PASS R	742	1346	1658
WALLA WALLA U	252	271	397
YAKIMA	401	494	606
WEST VIRGINIA			
BECKLEY	400	714	513
CHARLESTON	227	431	317
ELKINS	443	739	569
HUNTINGTON	326	448	320
PARKERSBURG U	282	414	324
WISCONSIN			
GREEN BAY	563	938	736
LA CROSSE	491	707	621
MADISON	535	955	713
MILWAUKEE	460	723	735
WYOMING			
CASPER	516	792	738
CHEYENNE	481	740	803
LANDER	515	681	784
SHERIDAN	546	767	814

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama	2	1	0	4	5					0	0	5	0													0	1	5	4
Alaska												?																	
Arizona *																													
Arkansas *																													
California *																													
Colorado *																													
Connecticut										0	0	4	0													0	0	4	0
Delaware	2	1	0	0	4																								
Florida	1	1	0	44	5	0	0	0	4	0	0	5	0																
Georgia *																													
Hawaii																										0	0	?	0
Idaho *																													
Illinois	1	1	0	0	3						2	°5	C																
Indiana	9	1	0	8	5					0	2	5	4																
Iowa														0	0	4	0	0	0	5	0								
Kansas										0	1	5	4	0	1	4	0									0	0	3	4
Kentucky										0	1	?	0	0	0	4	0												
Louisiana	2	1	0	16	5					0	0	4	0																
Maine										0	0	4	0																
Maryland										0	0	4	0																
Massachusetts										0	1	5	0																
Michigan	1	1	0	4	4					0	3	5	0					0	0	4	0								
Minnesota *																													
Mississippi	1	1	4	175	7	0	0	°4	C	0	9	°5	C													0	0	5	0
Missouri	8	1	0	8	5	0	0	4	0	0	0	4	0	0	0	4	0												
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire										0	0	4	0																
New Jersey	1	1	0	0	4																								
New Mexico *																													
New York												5				4											2	4	
North Carolina *																													
North Dakota	1	1	0	0	3																								
Ohio										0	1	4	0																
Oklahoma										0	0	4	0																
Oregon	1	1			4					1	10-15	6	6																
Pacific Area																										0	0	5	0
Pennsylvania	1	1	0	7	5					0	0	6	0	0	0	4	0												
Puerto Rico														1	0	0	0												
Rhode Island *																													
South Carolina *																													
South Dakota *																													
Tennessee						0	0	0	3	0	4	5	0	0	0	3	0												
Texas	2	2	0	0	3					1	3	5	0	1	1	0	0												
Utah *																													
Vermont										0	0	3	0																
U. S. Virgin Is.*																													
Virginia	1	1	0	0	4																								
Washington												4	4																
West Virginia *																													
Wisconsin *																													
Wyoming N																													

° Includes crop damage
C Crop damage
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

OCTOBER 1967

Elmer R. Nelson, Office of Hydrology

The remnants of the largest flood of record over the lower Nueces Basin in Texas continued into October. Flood damage due to the rainfall from Hurricane Beulah in September was extensive to residences and businesses in the towns and to farm homes, highways, and railroad beds throughout the area. Range and crop lands were heavily eroded and silted, and oil field installations were extensively damaged.

Record flooding also occurred on the upper Marais des Cygnes River in Kansas during October. Clark Creek in the upper Kansas River Valley at Junction City, Kans., crested 0.6 foot below the 1951 level. Lyon Creek in the lower Smoky Hill River Valley at Woodbine, Kans., crested 14.5 feet above flood stage or 3.3 feet below the 1951 high water mark.

ST. LAWRENCE DRAINAGE

Lake Erie.--Heavy rains during the evening of the 18th caused some local creek flooding in the Buffalo, N. Y., area. A partially repaired bridge, damaged during the September floods, was washed out again at Friendship, N. Y. Smokes Creek in Lackawanna, N. Y., overflowed two cofferdams causing a delay in flood control project construction. Locally heavy rains on the 26th caused some more flooding in the Buffalo, N. Y., area.

Lake Ontario.--Only minor damage resulted from the light flooding of Canaseraga Creek at Groveland, N. Y., and the Genesee River at Scio, N. Y., on the 19th. Route 258 across the Canaseraga Flats was closed for about 36 hours. Oatka Creek at Garbutt, N. Y., crested 0.2 foot below flood stage on the 20th.

MISSISSIPPI SYSTEM

Missouri Basin.--Heavy rains (2 to 6 inches) over much of the northeast quarter of Kansas during the night of the 6-7th caused flooding in the headwaters of the Marais des Cygnes and on several tributary streams in the lower Smoky Hill and upper Kansas River Valleys. A record crest of 26.8 ft., was reported on the upper Marais des Cygnes at Reading, Kans., on the 7th. This was 8.8 ft., above flood stage. The previous highest stage (during a short record since 1962) was 25.92 ft., in September 1965. Clark Creek in the upper Kansas River Valley at Junction City, Kans., crested at a stage of 18.9 ft., 0.6 foot below the 1951 level, on the 7th. Lyon Creek in the lower Smoky Hill River Valley at Woodbine, Kans., reached a crest of 31.5 ft., 14.5 ft., above flood stage on the 7th. The crest was 3.3 ft., below the 1951 high water mark. Minor flooding occurred on the lower Smoky Hill River and on the upper Kansas River. The record high stages on the upper Marais des Cygnes Basin flattened rapidly downstream to below flood stage at Quenemo, Kans. Comparatively heavy losses were reported on the outer Marais des Cygnes basin and locally on tributary streams.

General moderate to heavy rains over the northwest quadrant of Missouri from the 5th to the 8th caused minor flooding on the Blackwater, Little Blue, and Wakenda Rivers. The Missouri River crested just below bankfull at Waverly, Mo., during the night of the 9th and 10th. General moderate to heavy rains on the 29th-31st caused some flooding on the Grand and Chariton Rivers.

Ohio Basin.--Serious flooding occurred over the upper Allegheny River at Olean and Salamanca, N. Y., on September 28 to October 1. The crest of 17.1 ft., at Olean, N. Y., on September 29 was the 4th highest of record. At Salamanca, N. Y., the crest of 1374.0 ft. (above mean sea level) on the 29th was the 3d highest of record. This flooding was due to heavy precipitation on September 27 and 28. The total storm precipitation ranged from 1.5 to 6.5 inches. Unofficial reports of rainfall in excess of 8 inches was reported above Olean, N. Y.

Arkansas Basin.--Heavy rains from the 5th through the 7th caused flooding along the Little Arkansas, the upper Neosho, and the Cottonwood Rivers from the 7th through the 11th. Most of this flooding was minor, but some damage occurred to county roads and growing crops. The rainfall from October 30 to November 3 produced flooding on the Neosho at Commerce, Okla., and on the Poteau River at Panama, Okla. In the Poteau Basin, where the rainfall averaged 4.1 inches, the flooding was minor. There was some overflow on tributaries of the Poteau, along James Fork Creek, and Black Fork River.

Red Basin.--The Sulphur River at Hagansport, Tex., rose above flood stage twice during the month. The last flood near the end of the month continued into November. Elsewhere the river remained below flood stage. The rainfall during the first flood ranged from 2 to 4 inches and during the second overflow from 3 to 6 inches.

WEST GULF OF MEXICO DRAINAGE

Slight flooding occurred on the Trinity River at Rosser, Tex., on the 30th and 31st. It was approaching flood stage at Trinidad, Tex., on the 31st. Chambers Creek near Corsicana, Tex., crested about 4.5 feet above bankfull stage on October 31. This flooding was due to 5 to 6 inches of rain in the Trinity Basin south of Dallas, Tex., on the 29-30th. General rains on the 15-16th produced about 4 feet of flooding on Chambers Creek on the 16th. The storm that produced this flooding was almost identical to the one on the 29-30th with rainfall amounts of 5 to 6 inches.

Minor flooding occurred on the Navidad, Lavaca, and Guadalupe Rivers in Texas on the 16-19th. This flooding was due to rainfall of 3 to 5 inches on the 15-16th.

The record flooding which began along the Nueces River in Texas, during the latter part of September continued until October 10 at Calallen, Texas. This flooding was due to excessive rains accompanying Hurricane Beulah. Rainfall totals of over 20 inches were reported in many places with unofficial amounts as high as 30 inches. The Nueces River crested at record heights from Tilden, Tex., to its mouth on September 23-25. The Tilden, Tex., crest on September 24 was 26.6 ft., or 0.1 foot above the previous record stage of 26.46 ft., of October 1946. The Three Rivers crest of October 23 was 49.2 or 3.2 feet above the previous record stage of 46.0 ft., of September 1919 and the Calallen crest of October 10 was 16.4 ft., or 2.8 feet above the record crest of 13.65 feet of July 1942.

The Rio Grande River near Mercedes, Tex., continued in flood from September 24 to October 4. It crested on September 27 at a stage of 22.9 feet or 1.9 feet above flood stage.

PACIFIC SLOPE DRAINAGE

Minor flooding occurred in the Puget Sound drainage in Washington during the last week in October. There was some overflow of lowlands and low-lying roads in the Snohomish, Skagit, and Nooksack Valley flood plains. The Snohomish exceeded flood stage by about 2 feet,

the Skagit by 2.4 feet in the upper reaches and 1.7 feet in the lower reaches, and the Nooksack by 1.5 feet. Damage was minor. This flooding was due to 3 to 4 inches of rain in 24 hours on the 27-28th. Before the streams had receded to near base flow, an additional 1 to 2 inches of rain occurred on the 30th-31st causing a second, but smaller rise.

FLOOD STAGE DATA

(All dates in October unless otherwise specified)

OCTOBER 1967

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
ST. LAWRENCE DRAINAGE	*Ft.*			*Ft.*	
Lake Ontario					
Canaseraga Creek: Groveland, N.Y.	11	19	19	13.1	19
Genesee: Scio, N. Y.	8	19	19	8.4	19
MISSISSIPPI SYSTEM					
Missouri Basin					
Chapman Creek: Chapman (nr), Kans.	19	7	7	21.3	7
Lyon Creek: Woodbine (nr), Kans.	17	7	7	31.5	7
Junction City (nr), Kans.	22	7	7	22.15	7
Fancy Creek: Winkler, Kans.	11	7	7	14.1	7
Black Vermillion: Frankfort, Kans.	19	7	7	19.1	7
Mill Creek: Paxico, Kans	19	7	7	23.8	7
Clark Creek: Junction City (nr), Kans.	16	7	7	18.9	7
Kansas: Manhattan, Kans.	18	8	8	18.3	8
Lawrence (nr), Kans.	23	8	8	22.9	8
Little Blue: Lake City, Mo.	18	6 31	7 Nov. 1	18.6 19.2	6 31
Wakenda: Carrollton, Mo.	20	(5 (31	6 Nov. 1	21.25 21.8	6 31
Grand: Sumner, Mo.	26	30	Nov. 2	29.4	31
Brunswick, Mo.	12	31	Nov. 1	12.2	Nov. 1
Chariton: Prairie Hill, Mo.	15	30	31	17.1	31
Blackwater: Valley City, Mo.	20	5	7	24.55	6
Dragoon Creek: Burlingame, Kans.	15	15	15	#15.7	7
Marais Des Cygnes: Reading, Kans.	18	7	8	<u>26.8</u>	7
Melvern, Kans.	23	8	8	26.8	8
Ohio Basin					
Allegheny: Olean, N. Y.	10	Sep. 28	1	17.1	Sep. 29
Salamanca, N. Y.	1370	Sep. 28	1	1374.0	Sep. 29
Arkansas Basin					
Little Arkansas: Sedgwick, Kans.	18	8	9	20.1	8
MISSISSIPPI SYSTEM	*Ft.*			*Ft.*	
Neosho: Americus (nr), Kans.	26	7	8	28.0	8
Neosho Rapids, Kans.	22	8	10	25.4	9
Commerce, Okla.	15	31	Nov. 3	17.6	Nov. 2
Cottonwood: Cottonwood Falls, Kans.	9	10	10	9.4	10
Plymouth, Kans.	28	7	11	33.15	7
Poteau: Panama, Okla.	24	31	Nov. 1	27.5	31
Red Basin					
Sulphur: Hagansport, Tex.	38	16 29	19 Nov. 4	43.8 45.4	17 31
WEST GULF OF MEXICO DRAINAGE					
Trinity: Rosser, Tex.	26	30	31	26.3	31
Navidad: Ganado, Tex.	21	16	19	26.3	18
Lavaca: Edna, Tex.	21	16	18	23.85	17
Guadalupe: Victoria, Tex.	21	16	18	22.9	16
Nueces: Tilden (nr), Tex.	16	Sep. 19	8	<u>26.6</u>	Sep. 24
Three Rivers (nr), Tex.	25	Sep. 21	5	<u>49.2</u>	Sep. 23
Calallen, Tex.	7	Sep. 21	10	<u>16.4</u>	Sep. 25
Rio Grande: Mercedes (nr), Tex.	21	Sep. 24	4	22.9	Sep. 27
PACIFIC SLOPE DRAINAGE					
Puget Sound					
Skykomish: Gold Bar, Wash.	15	27	27	15.3	27
Snohomish: Snohomish, Wash.	25	28	28	26.45	28
Skagit: Concrete, Wash.	29	27	28	31.4	28
Mount Vernon, Wash.	21	28	29	22.0	28
Nooksack: Deming, Wash.	12	27	28	13.4	27

* Provisional
\# Highest stage observed
__ Highest stage of record

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

ALBANY, N. Y. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	86	6.8	4.7	21	1.6
1000	31	160	7.3	4.7	22	1.3
950	31	585	7.1	2.9	26	4.5
900	31	1,028	5.3	.5	27	6.3
850	31	1,494	3.9	-1.9	27	7.5
800	31	1,986	2.2	-5.6	27	8.1
750	31	2,508	.6	-10.7	26	8.9
700	31	3,059	-1.0	-14.5	26	10.8
650	31	3,645	-3.8	-17.0	26	12.8
600	31	4,276	-7.3	-20.7	26	14.1
550	31	4,947	-11.1	-25.7	25	15.5
500	31	5,676	-15.6	-29.3	25	17.1
450	31	6,460	-21.2	-34.2	25	18.0
400	31	7,323	-27.3	-39.4	25	19.3
350	30	8,270	-34.4	-44.1	25	19.2
300	30	9,332	-41.7	-48.9	25	20.9
250	30	10,547	-49.3		26	22.1
200	30	11,987	-55.4		27	21.7
175	30	12,835	-57.1		27	22.3
150	30	13,806	-59.3		26	20.0
125	30	14,943	-61.2		26	18.7
100	30	16,325	-61.8		26	15.7
80	30	17,712	-59.9		26	10.2
70	30	18,546	-59.4		26	8.1
60	30	19,514	-58.0		26	7.5
50	30	20,663	-57.8		27	7.1
40	29	22,074	-57.3		27	5.8
30	28	23,894	-56.0		28	6.3
25	28	25,057	-54.7		28	6.6
20	24	26,490	-53.2		28	6.2
15	22	28,354	-50.7		28	6.0
10	16	31,038	-46.5		27	12.0
7	12	33,404	-43.7			

ALBUQUERQUE, N. MEX. 841 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	8.7	-3.9	07	1.2
1000	31	156				
950	31	591				
900	31	1,047				
850	31	1,528				
800	31	2,034	11.2	-4.6	30	1.8
750	31	2,570	8.4	-6.7	31	4.7
700	31	3,137	4.9	-9.2	31	6.5
650	31	3,735	.8	-11.9	30	7.2
600	31	4,376	-3.4	-16.3	29	8.2
550	31	5,050	-7.4	-22.9	29	9.2
500	31	5,795	-12.0	-27.6	30	10.8
450	31	6,585	-17.7	-32.0	30	10.7
400	31	7,465	-24.2	-37.8	30	11.1
350	31	8,425	-31.6	-44.3	30	12.4
300	31	9,496	-40.3	-48.7	30	13.7
250	31	10,715	-49.0		30	16.7
200	31	12,151	-57.2		30	17.5
175	31	12,989	-60.5		30	17.5
150	31	13,941	-63.7		30	16.4
125	31	15,051	-67.2		30	14.3
100	31	16,386	-69.7		30	11.9
80	30	17,716	-68.0		31	7.0
70	29	18,521	-64.3		32	4.8
60	29	19,467	-62.1		30	2.9
50	29	20,600	-59.6		26	2.8
40	29	22,002	-57.2		25	3.0
30	29	23,829	-55.0		27	5.8
25	29	24,996	-53.5		27	7.8
20	27	26,437	-52.2		27	9.6
15	24	28,302	-50.5		27	10.9
10	13	30,961	-47.2			

AMARILLO, TEXAS 892 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	9.7	1.9	27	2.7
1000	31	135				
950	31	570				
900	31	1,027				
850	31	1,502	13.2	.6	28	5.6
800	31	2,011	11.4	-2.9	29	6.1
750	31	2,546	8.5	-5.7	29	6.0
700	31	3,114	4.9	-8.5	29	6.0
650	31	3,713	.9	-11.5	29	7.2
600	31	4,353	-3.4	-15.8	29	7.9
550	31	5,033	-7.6	-20.6	28	9.3
500	31	5,771	-12.6	-26.4	28	10.7
450	31	6,561	-18.3	-31.0	29	11.7
400	31	7,436	-24.7	-36.8	29	11.6
350	31	8,394	-32.2	-42.9	29	12.8
300	31	9,463	-40.5	-48.2	30	13.4
250	31	10,683	-49.1		29	16.5
200	31	12,119	-57.0		29	19.5
175	31	12,959	-59.9		29	19.3
150	31	13,914	-63.0		29	18.3
125	31	15,027	-66.3		29	15.7
100	29	16,371	-68.6		29	10.4
80	28	17,713	-66.2		29	6.4
70	27	18,521	-63.9		29	4.6
60	26	19,475	-61.1		27	2.9
50	26	20,613	-58.7		26	2.9
40	26	22,019	-56.9		25	4.2
30	26	23,847	-54.5		26	6.4
25	25	25,020	-53.1		27	8.0
20	23	26,464	-52.0		27	10.3
15	19	28,350	-48.9		27	10.5
10	8	31,034	-45.5			

ANCHORAGE, ALASKA 935 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	.6	-4.2	36	1.1
1000	31	2			35	1.8
950	31	419	1.8	-4.9	04	3.1
900	31	851	.2	-7.1	05	3.1
850	31	1,308	-2.4	-9.3	08	3.7
800	31	1,786	-5.5	-12.7	11	3.5
750	31	2,290	-8.5	-16.0	12	3.6
700	31	2,823	-11.7	-19.7	13	3.9
650	31	3,383	-15.2	-23.7	15	3.4
600	31	3,987	-19.1	-27.9	15	2.6
550	31	4,624	-23.5	-32.3	15	1.9
500	31	5,319	-28.3	-35.6	15	1.8
450	31	6,063	-33.9	-39.6	16	1.0
400	31	6,892	-39.7	-43.4	20	1.8
350	31	7,782	-46.1	-44.8	25	2.1
300	31	8,793	-52.1		28	3.4
250	31	9,963	-55.1		28	4.3
200	31	11,390	-54.3		28	5.2
175	31	12,246	-53.5		26	5.9
150	31	13,239	-53.3		26	6.9
125	31	14,414	-53.2		26	7.6
100	31	15,851	-53.3		25	8.7
80	31	17,286	-53.4		25	9.0
70	31	18,144	-53.6		25	10.6
60	31	19,136	-54.0		25	10.7
50	31	20,304	-54.5		25	12.0
40	31	21,732	-54.8		25	13.5
30	31	23,571	-54.8		26	14.7
25	30	24,745	-54.6		26	16.0
20	27	26,187	-54.5		26	17.0
15	25	28,043	-54.0		26	19.1
10	11	30,653	-53.3			

* ANNETTE, ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	8.2	5.2	14	3.4
1000	31	56			14	5.1
950	31	472	5.7	2.5	17	8.0
900	31	913	2.4	.3	18	9.6
850	31	1,373	-.6	-2.5	19	10.2
800	31	1,855	-3.7	-6.1	19	8.5
750	31	2,361	-7.0	-10.3	20	8.8
700	31	2,898	-10.3	-13.7	21	9.4
650	31	3,465	-13.8	-18.3	21	10.3
600	31	4,070	-17.8	-22.2	21	11.4
550	31	4,711	-22.1	-27.2	22	12.1
500	31	5,410	-27.0	-33.1	22	12.8
450	31	6,155	-32.4	-39.0	23	15.2
400	31	6,983	-38.1	-41.1	23	18.8
350	31	7,890	-44.0	-41.2	23	20.3
300	31	8,911	-49.7		24	21.6
250	31	10,095	-53.0		24	16.1
200	31	11,531	-53.4		26	14.3
175	31	12,391	-53.0		26	13.7
150	31	13,385	-53.1		25	12.8
125	31	14,557	-54.1		25	11.4
100	31	15,986	-54.4		26	11.0
80	30	17,413	-54.6		25	9.0
70	30	18,267	-54.6		25	10.0
60	29	19,252	-55.1		25	9.6
50	26	20,411	-55.6		25	9.3
40	27	21,830	-55.7		25	8.8
30	26	23,668	-55.0		26	8.5
25	25	24,841	-55.0		25	9.6
20	21	26,275	-54.4		26	11.2
15	18	28,107	-53.7		27	12.4
10	14	30,752	-52.0			
7	6	33,169	-49.3			

ATHENS, GEORGIA 991 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	9.7	7.4	02	.7
1000	31	170				
950	31	601	14.1	6.2	36	.3
900	31	1,056	12.1	2.3	24	1.6
850	31	1,533	10.1	-2.1	25	2.6
800	31	2,036	8.3	-5.4	26	4.0
750	31	2,562	5.9	-7.9	27	5.3
700	31	3,130	3.3	-12.3	27	6.7
650	31	3,724	.8	-15.9	27	7.8
600	31	4,368	-2.7	-19.4	26	9.2
550	31	5,045	-6.9	-23.6	26	10.1
500	31	5,790	-11.9	-27.7	26	10.5
450	31	6,580	-17.8	-32.5	26	11.0
400	31	7,460	-24.2	-37.4	26	11.0
350	31	8,421	-31.4	-43.2	26	12.8
300	31	9,494	-39.7	-48.8	26	14.1
250	31	10,716	-49.0		26	16.2
200	31	12,151	-57.2		26	18.5
175	31	12,989	-60.2		27	18.5
150	31	13,944	-63.0		27	18.0
125	31	15,056	-66.0		27	14.5
100	31	16,404	-67.3		26	10.9
80	31	17,756	-64.9		26	7.4
70	31	18,575	-61.9		26	5.4
60	31	19,533	-60.6		25	3.1
50	30	20,670	-58.7		27	.8
40	30	22,080	-56.7		08	.5
30	30	23,918	-53.3		33	1.1
25	30	25,094	-52.5		31	2.9
20	29	26,542	-50.7		29	6.4
15	27	28,429	-48.3		28	8.8
10	22	31,126	-43.4		27	12.7
7	11	33,565	-38.2			

* BARROW, ALASKA 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	-10.6	-12.3	09	2.2
1000	31	92	-10.0	-12.7	10	2.5
950	31	487	-10.7	-13.8	08	2.0
900	31	903	-10.9	-15.4	08	1.9
850	31	1,341	-11.5	-17.6	09	1.8
800	31	1,805	-12.6	-19.5	11	1.3
750	31	2,297	-14.7	-21.9	13	.6
700	31	2,816	-17.5	-24.3	06	.6
650	31	3,366	-20.5	-27.0	22	.8
600	31	3,957	-23.7	-31.1	22	1.2
550	31	4,585	-27.8	-35.2	23	1.2
500	31	5,267	-32.3	-38.7	23	2.0
450	31	6,001	-37.3	-40.3	23	3.1
400	31	6,808	-42.8	-43.3	24	3.7
350	31	7,699	-48.4		25	4.2
300	31	8,701	-54.0		26	4.8
250	31	9,859	-57.5		25	6.1
200	31	11,273	-55.9		25	6.2
175	31	12,124	-55.4		25	6.3
150	31	13,108	-55.3		25	6.3
125	31	14,270	-55.6		25	6.1
100	31	15,691	-56.1		25	7.0
80	31	17,106	-57.1		25	8.4
70	30	17,949	-57.8		25	9.1
60	30	18,919	-58.5		25	10.0
50	30	20,063	-59.3		25	11.7
40	26	21,476	-60.0		25	13.3
30	24	23,258	-60.9		26	16.0
25	21	24,426	-60.9		26	16.2
20	18	25,811	-60.9		26	19.9
15	13	27,522	-61.1		26	21.9
10	7	30,042	-61.3			

BARTER IS., ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	-11.4	-16.8	18	.3
1000	30	89	-10.4	-14.3	20	.3
950	30	486	-10.1	-13.7	03	.4
900	30	903	-9.1	-13.9	09	1.2
850	30	1,345	-9.5	-15.4	11	1.6
800	30	1,813	-10.6	-17.2	13	1.7
750	30	2,303	-12.6	-19.7	13	1.9
700	30	2,833	-14.9	-22.6	17	1.3
650	30	3,385	-18.2	-24.6	21	1.5
600	30	3,964	-22.0	-28.5	22	2.4
550	30	4,613	-26.2	-33.5	21	2.3
500	30	5,303	-30.6	-38.7	23	3.4
450	30	6,036	-35.6	-41.7	22	4.5
400	30	6,854	-41.6	-44.6	24	4.2
350	30	7,747	-48.1		25	4.1
300	30	8,750	-53.9		23	4.1
250	30	9,910	-57.1		23	5.7
200	30	11,325	-55.3		24	5.7
175	30	12,178	-55.0		24	5.8
150	30	13,163	-54.8		24	6.8
125	30	14,328	-55.0		24	6.9
100	30	15,753	-55.4		25	8.5
80	30	17,174	-56.2		25	9.2
70	30	18,020	-56.6		25	10.0
60	29	18,995	-57.1		25	11.0
50	29	20,147	-57.9		25	12.5
40	29	21,550	-58.8		25	14.3
30	28	23,363	-59.6		26	16.8
25	28	24,502	-59.8		26	18.6
20	27	25,897	-60.0		25	20.5
15	26	27,707	-59.4		26	21.6
10	12	30,280	-58.5			

BETHEL, ALASKA 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	-3.4	-5.0	02	2.8
1000	31	33			36	2.0
950	31	437	-3.1	-6.6	03	4.3
900	31	867	-4.5	-8.6	03	3.9
850	31	1,316	-6.1	-11.7	02	3.2
800	31	1,789	-8.3	-15.4	02	3.3
750	31	2,284	-10.9	-19.2	01	2.4
700	31	2,815	-13.7	-23.6	36	1.0
650	31	3,369	-16.9	-27.4	32	.5
600	31	3,972	-20.8	-31.3	22	1.1
550	31	4,602	-24.9	-35.0	25	1.4
500	31	5,297	-29.4	-39.5	25	2.0
450	31	6,036	-34.2	-42.2	24	3.7
400	31	6,859	-39.5	-42.8	25	3.9
350	31	7,763	-45.0	-43.2	26	4.5
300	31	8,780	-50.7		26	5.4
250	31	9,956	-54.6		27	5.7
200	31	11,383	-55.0		26	6.8
175	31	12,238	-54.4		26	6.8
150	31	13,227	-53.9		26	7.4
125	31	14,399	-53.8		26	7.6
100	31	15,833	-53.8		26	8.7
80	31	17,265	-53.9		26	8.9
70	31	18,121	-53.9		26	10.0
60	31	19,111	-54.1		26	9.8
50	30	20,271	-54.3		25	11.1
40	30	21,701	-54.4		25	12.4
30	30	23,542	-54.6		26	14.3
25	29	24,713	-54.7		26	15.4
20	27	26,141	-54.3		26	18.4
15	23	28,011	-53.8		26	20.9
10	13	30,741	-52.2			

BISMARCK, N. DAK. 955 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	505	3.0	-1.2	31	.8
1000	31	126				
950	31	543			32	1.7
900	31	985	5.4	-2.9	28	4.6
850	31	1,451	4.3	-5.9	29	5.8
800	31	1,943	2.2	-9.4	30	7.5
750	31	2,459	-.5	-12.4	30	10.1
700	31	3,011	-3.4	-14.5	30	11.3
650	31	3,590	-6.3	-17.2	30	12.9
600	31	4,217	-10.1	-20.7	30	13.9
550	31	4,879	-14.1	-25.5	29	15.8
500	31	5,601	-18.5	-30.2	29	17.1
450	31	6,378	-23.4	-34.6	29	20.1
400	31	7,232	-29.5	-39.3	29	21.0
350	31	8,171	-36.6	-43.0	28	23.2
300	31	9,222	-44.0		29	25.0
250	31	10,425	-51.4		29	26.2
200	31	11,855	-56.4		29	27.5
175	31	12,700	-57.3		29	25.7
150	31	13,672	-58.2		28	23.2
125	31	14,819	-58.6		29	18.9
100	31	16,217	-59.7		29	14.1
80	30	17,612	-59.4		29	10.0
70	30	18,448	-59.2		29	8.1
60	30	19,415	-58.9		30	6.2
50	30	20,559	-58.5		30	5.1
40	30	21,964	-57.7		30	4.1
30	29	23,787	-56.0		29	4.3
25	28	24,951	-55.1		30	3.5
20	26	26,380	-53.8		30	4.5
15	23	28,246	-51.8		30	5.4
10	18	30,887	-48.2		30	7.8
7	11	33,243	-45.2			

BOISE, IDAHO 920 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	868	6.3	.8	13	1.7
1000	31	174				
950	31	599				
900	31	1,046	9.9	-.7	13	.6
850	31	1,521	9.0	-4.0	27	2.8
800	31	2,021	6.1	-6.5	28	5.4
750	31	2,547	2.9	-8.6	28	7.9
700	31	3,103	-.5	-12.3	28	9.7
650	31	3,690	-3.4	-15.6	28	11.9
600	31	4,322	-6.9	-18.4	28	13.6
550	31	4,988	-11.0	-23.0	28	16.6
500	31	5,723	-15.7	-26.9	28	18.1
450	31	6,506	-20.7	-30.7	28	21.1
400	31	7,373	-26.5	-35.9	28	24.3
350	31	8,325	-33.4	-42.3	28	26.0
300	31	9,390	-41.4	-48.6	28	27.5
250	31	10,603	-50.5		29	29.7
200	31	12,032	-58.2		29	28.4
175	31	12,868	-60.5		29	26.4
150	31	13,826	-61.5		28	25.4
125	30	14,951	-63.2		28	22.2
100	28	16,317	-64.3		28	16.4
80	28	17,685	-62.9		28	12.1
70	26	18,505	-62.1		28	8.8
60	22	19,469	-61.1		28	6.2
50	19	20,606	-59.3		29	5.0
40	17	22,008	-58.2		29	4.1
30	15	23,825	-56.4		29	4.6
25	15	24,985	-55.2		29	5.3
20	13	26,407	-53.3		29	4.3
15	13	28,265	-52.0		29	5.8
10	7	30,928	-49.0			
7						
5						

* BOOTHVILLE, LA. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	18.9	16.0	03	2.0
1000	31	154	19.2	13.7	05	2.6
950	31	590	16.3	9.1	09	2.5
900	31	1,053	14.3	4.4	13	1.3
850	31	1,535	12.6	-.6	19	1.3
800	31	2,042	10.7	-5.5	23	.8
750	31	2,577	8.1	-8.7	22	1.3
700	31	3,144	5.1	-13.1	23	2.6
650	31	3,745	2.5	-16.5	25	3.7
600	31	4,389	-1.5	-21.0	26	4.8
550	31	5,068	-6.0	-25.0	26	6.2
500	30	5,818	-11.0	-29.3	26	7.1
450	30	6,611	-17.0	-33.9	25	7.9
400	30	7,492	-23.6	-37.1	26	9.1
350	30	8,455	-30.5	-43.2	27	11.3
300	29	9,531	-38.6	-49.9	27	15.0
250	29	10,760	-47.6		27	17.4
200	29	12,204	-56.3		28	21.1
175	28	13,045	-60.6		28	19.5
150	28	13,995	-65.0		28	17.9
125	28	15,096	-68.7		28	14.3
100	27	16,430	-70.2		28	10.5
80	27	17,763	-67.2		27	4.9
70	27	18,573	-64.4		26	1.8
60	27	19,519	-62.5		15	1.6
50	27	20,651	-59.8		09	1.9
40	27	22,055	-56.7		08	2.8
30	27	23,896	-52.5		08	3.5
25	27	25,079	-50.7		07	3.6
20	27	26,535	-49.6		05	2.6
15	24	28,426	-47.1		31	3.2
10	23	31,135	-42.7		27	8.7
7	21	33,546	-39.6		26	13.8
5	13	35,851	-36.4			

* BROWNSVILLE, TEXAS 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	7	19.2	17.3	04	.6
1000	29	142	21.6	16.9	01	1.2
950	29	586	18.5	14.3	08	1.7
900	29	1,049	15.9	10.1	09	2.1
850	29	1,534	13.4	5.4	09	1.3
800	29	2,043	11.4	-.8	08	.5
750	29	2,580	9.7	-5.6	28	.8
700	29	3,152	6.8	-7.9	28	2.6
650	28	3,759	3.5	-11.4	27	2.5
600	28	4,405	-1.5	-16.6	27	2.5
550	28	5,093	-5.0	-20.5	27	3.7
500	28	5,839	-9.6	-25.1	27	5.4
450	28	6,641	-14.8	-30.0	27	7.6
400	28	7,529	-21.2	-35.3	27	10.5
350	28	8,501	-28.4	-39.7	27	13.2
300	28	9,588	-36.4	-46.9	26	18.8
250	28	10,827	-46.0		27	23.1
200	28	12,277	-56.4		27	27.9
175	28	13,114	-62.1		27	28.6
150	28	14,054	-67.9		27	25.5
125	28	15,136	-72.4		27	16.9
100	25	16,435	-73.7		27	10.7
80	24	17,748	-71.0		26	3.6
70	24	18,546	-66.5		34	.4
60	23	19,493	-62.9		09	3.4
50	23	20,621	-60.7		10	5.8
40	23	22,018	-57.6		09	6.5
30	22	23,849	-53.4		08	8.6
25	22	25,029	-50.8		08	9.9
20	21	26,494	-48.1		08	9.2
15	19	28,403	-45.6		08	6.7
10	17	31,117	-41.5		32	.8
7	13	33,548	-40.9		24	5.4

BUFFALO, N. Y. 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	8.7	4.7	22	2.7
1000	31	147				
950	31	573	8.4	2.8	24	6.7
900	31	1,018	6.2	.6	26	8.3
850	31	1,485	3.8	-2.9	26	9.6
800	31	1,976	1.6	-5.8	26	10.5
750	31	2,500	.0	-8.9	26	11.3
700	31	3,047	-2.2	-12.9	26	12.1
650	31	3,633	-5.2	-16.1	26	12.8
600	31	4,258	-8.5	-20.1	26	14.5
550	31	4,928	-12.2	-25.5	26	15.7
500	31	5,652	-16.7	-29.1	26	16.8
450	31	6,436	-21.9	-33.6	26	16.6
400	31	7,295	-27.9	-39.5	26	18.4
350	31	8,241	-34.9	-44.4	26	19.5
300	31	9,300	-42.7	-46.0	26	22.7
250	30	10,515	-50.3		26	25.1
200	29	11,951	-55.8		27	23.9
175	29	12,798	-57.5		26	23.6
150	29	13,768	-58.9		26	20.2
125	29	14,906	-60.8		26	17.6
100	29	16,290	-61.8		26	13.7
80	29	17,676	-59.9		26	10.1
70	29	18,512	-58.8		26	9.1
60	29	19,480	-58.3		26	7.5
50	29	20,628	-57.8		26	7.1
40	28	22,035	-57.4		26	6.9
30	28	23,859	-56.0		27	6.5
25	28	25,020	-55.3		27	6.2
20	27	26,452	-53.3		27	6.5
15	25	28,321	-50.5		27	7.3
10	21	30,979	-46.4		27	12.1
7	9	33,373	-42.5			

* CAPE HATTERAS, N. C. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	16.6	12.8	01	2.5
1000	30	164	16.6	11.1	02	3.6
950	30	598	14.0	7.4	03	2.3
900	30	1,054	11.7	3.4	31	1.7
850	30	1,530	9.7	-1.3	27	2.7
800	30	2,033	7.9	-5.5	24	4.2
750	30	2,564	6.3	-9.8	25	5.0
700	30	3,128	4.3	-13.3	26	6.4
650	30	3,724	1.6	-16.8	26	7.9
600	30	4,368	-2.1	-19.9	26	8.9
550	30	5,046	-6.5	-23.2	26	9.5
500	30	5,792	-11.4	-27.6	25	10.4
450	29	6,583	-17.3	-32.5	26	11.0
400	29	7,462	-24.0	-38.6	26	11.4
350	29	8,423	-31.2	-44.2	26	12.6
300	29	9,498	-39.3	-50.0	26	14.0
250	29	10,723	-48.1		26	16.2
200	29	12,165	-56.4		26	18.3
175	29	13,006	-59.4		26	18.4
150	29	13,964	-62.5		25	17.3
125	29	15,079	-65.6		25	15.4
100	28	16,428	-66.3		25	12.5
80	27	17,787	-63.4		25	8.7
70	26	18,606	-61.7		25	5.0
60	25	19,562	-59.8		28	2.8
50	25	20,706	-58.0		30	1.0
40	25	22,119	-56.0		36	.9
30	25	23,955	-54.2		31	2.3
25	24	25,126	-52.7		29	3.2
20	21	26,574	-50.3		27	5.7
15	21	28,464	-47.3		27	8.3
10	19	31,172	-42.9		27	14.9
7	16	33,606	-38.9		28	17.4
5	5	35,965	-34.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

* CARIBOU, MAINE 994 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	191	4.8	3.0	24	1.6
1000	31	144			28	1.6
950	31	561	4.1	.8	26	3.7
900	31	1,002	3.0	-1.5	25	5.0
850	31	1,464	1.3	-3.9	25	6.3
800	31	1,950	-.2	-7.4	25	7.8
750	31	2,464	-1.6	-11.1	25	9.7
700	31	3,014	-3.5	-14.0	26	12.1
650	31	3,593	-6.1	-18.0	25	13.8
600	31	4,221	-9.1	-21.0	25	16.6
550	31	4,884	-13.2	-25.1	25	18.5
500	31	5,609	-17.8	-30.2	25	20.1
450	31	6,385	-23.2	-34.5	25	21.8
400	31	7,243	-29.0	-38.7	25	23.3
350	31	8,185	-35.7	-44.6	25	24.4
300	31	9,240	-43.3	-50.8	25	27.2
250	31	10,445	-50.9		26	28.6
200	30	11,888	-56.2		26	28.3
175	30	12,733	-57.5		26	27.0
150	30	13,703	-59.1		26	24.5
125	30	14,844	-59.5		26	21.7
100	29	16,238	-59.6		27	16.8
80	28	17,632	-59.1		26	11.3
70	28	18,470	-58.7		26	9.6
60	28	19,441	-57.9		26	9.2
50	28	20,590	-57.9		27	8.6
40	27	21,997	-57.4		27	8.3
30	26	23,818	-56.4		28	6.7
25	25	24,975	-54.9		28	5.8
20	25	26,407	-53.2		28	5.6
15	23	28,261	-51.7		29	6.8
10	22	30,905	-47.6		27	10.5
7	17	33,253	-45.0		26	17.8
5	5	35,473	-42.6			
4						
3						

CHARLESTON, S. C. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	13	10.7	9.3	35	1.5
1000	31	163	16.5	12.0	02	2.3
950	31	600	15.4	5.7	05	1.7
900	31	1,057	12.8	2.5	34	.8
850	31	1,535	11.0	-4.7	27	2.3
800	31	2,039	9.4	-7.6	27	4.1
750	31	2,571	7.5	-11.8	27	4.8
700	31	3,139	5.5	-15.4	26	5.7
650	31	3,736	2.0	-18.4	26	6.3
600	31	4,382	-1.8	-21.3	25	7.3
550	31	5,062	-6.2	-25.5	25	7.6
500	31	5,809	-11.1	-30.4	26	8.6
450	31	6,606	-16.8	-34.9	27	9.6
400	31	7,485	-23.6	-40.4	27	9.7
350	31	8,447	-30.9	-44.9	27	10.6
300	31	9,522	-39.2	-50.7	27	12.3
250	31	10,747	-48.3		27	13.1
200	31	12,185	-57.1		27	18.6
175	31	13,024	-60.0		27	17.7
150	31	13,978	-63.4		26	16.1
125	31	15,090	-66.4		26	13.6
100	31	16,436	-67.3		26	10.7
80	31	17,786	-65.1		25	6.6
70	31	18,603	-62.9		25	4.1
60	31	19,556	-60.8		26	1.5
50	31	20,696	-58.8		05	.8
40	31	22,104	-56.4		07	1.5
30	30	23,946	-53.1		02	1.4
25	30	25,124	-51.8		32	1.9
20	28	26,574	-49.7		29	4.8
15	26	28,467	-46.9		28	8.2
10	19	31,177	-42.6		28	11.7
7	6	33,594	-37.7			
5						
4						
3						

CHIHUAHUA, MEXICO 859 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,428	9.3	4.5	30	.4
1000	31	145				
950	31	572				
900	31	1,035				
850	31	1,518	11.4	4.3	28	.5
800	31	2,029	13.5	.1	25	1.0
750	31	2,564	10.1	-2.8	25	.6
700	31	3,139	6.4	-6.2	31	1.5
650	31	3,737	2.6	-9.7	31	1.2
600	31	4,385	-1.5	-13.7	27	1.7
550	31	5,065	-5.1	-20.8	25	2.5
500	31	5,815	-9.7	-25.6	27	2.5
450	31	6,612	-15.4	-30.6	29	4.5
400	31	7,498	-21.8	-35.9	29	6.7
350	31	8,466	-29.2	-42.9	29	7.3
300	31	9,547	-37.7	-50.4	28	10.3
250	31	10,780	-46.3		27	12.9
200	30	12,228	-56.0		27	16.6
175	30	13,066	-61.0		27	17.1
150	29	14,019	-66.1		27	16.4
125	28	15,105	-70.1		27	14.7
100	27	16,425	-72.9		29	10.0
80	25	17,739	-69.6		30	6.0
70	25	18,539	-66.5		31	3.5
60	24	19,478	-62.4		29	1.4
50	24	20,610	-59.5		14	.7
40	24	22,015	-56.8		14	1.5
30	22	23,848	-53.4		10	2.5
25	20	25,018	-51.3		08	2.9
20	18	26,470	-49.1		07	1.0
15	13	28,351	-48.2			
10	5	30,965	-46.7			
7						
5						
4						
3						

* COLD BAY, ALASKA 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	3.0	.0	32	1.1
1000	31	12			31	4.4
950	31	426	1.9	-2.1	34	4.1
900	31	863	-.7	-4.1	34	4.4
850	31	1,317	-3.5	-7.4	34	4.1
800	31	1,794	-6.3	-10.7	33	4.2
750	31	2,295	-8.7	-15.7	32	4.6
700	31	2,830	-11.2	-20.0	32	4.9
650	31	3,391	-14.3	-23.4	31	5.5
600	31	3,998	-17.8	-27.4	30	5.2
550	31	4,639	-21.8	-31.2	29	5.6
500	31	5,341	-26.4	-35.3	29	6.3
450	31	6,088	-31.8	-39.4	29	6.7
400	31	6,917	-37.4	-41.2	29	6.4
350	31	7,828	-43.6	-43.8	29	5.9
300	31	8,851	-49.8		27	6.1
250	31	10,031	-53.8		27	10.7
200	31	11,467	-53.2		27	11.8
175	31	12,329	-53.1		27	13.0
150	30	13,323	-52.7		26	13.0
125	30	14,500	-52.9		26	12.3
100	30	15,940	-52.8		26	13.7
80	30	17,378	-53.1		26	11.0
70	30	18,238	-53.1		26	11.5
60	30	19,230	-53.4		26	12.0
50	30	20,403	-53.5		26	10.9
40	30	21,836	-53.8		26	11.3
30	30	23,687	-53.0		26	12.5
25	27	24,854	-52.1		26	13.0
20	26	26,298	-51.9		26	14.7
15	25	28,165	-51.2		26	15.4
10	24	30,816	-49.6		26	18.5
7	24	33,160	-47.6		26	25.8
5	20	35,381	-45.6		27	28.4
4	13	36,821	-44.6			
3	7	38,665	-43.9			

COLUMBIA, MO. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	238	10.0	6.1	20	1.1
1000	31	134				
950	31	562	10.7	4.7	24	3.8
900	31	1,013	9.9	2.3	26	7.0
850	31	1,487	8.0	-1.2	27	8.1
800	31	1,986	6.1	-5.7	27	8.5
750	31	2,514	3.7	-8.7	28	9.1
700	31	3,071	1.1	-12.0	27	9.8
650	31	3,661	-1.9	-14.6	27	10.7
600	31	4,297	-5.4	-17.4	27	11.1
550	31	4,970	-9.4	-23.4	27	12.4
500	31	5,706	-14.2	-30.6	27	14.0
450	31	6,490	-19.7	-34.9	27	15.5
400	31	7,361	-26.1	-40.3	27	16.6
350	31	8,314	-33.3	-44.3	27	17.3
300	31	9,379	-41.5	-47.7	28	18.1
250	31	10,593	-50.3		28	18.8
200	31	12,025	-56.8		27	20.6
175	31	12,866	-59.5		27	21.4
150	31	13,826	-61.2		27	18.8
125	30	14,943	-63.2		28	16.1
100	29	16,306	-64.3		27	11.1
80	26	17,675	-63.2		27	8.0
70	26	18,499	-61.5		27	6.9
60	26	19,458	-59.8		27	6.2
50	26	20,601	-58.4		26	6.2
40	26	22,009	-57.0		26	6.2
30	26	23,833	-55.9		27	7.8
25	25	24,997	-54.7		27	7.8
20	24	26,432	-52.7		27	8.4
15	20	28,298	-50.1		27	10.9
10	12	30,973	-45.5			
7						
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4						
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DAYTON, OHIO 983 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	297	8.1	5.3	19	1.7
1000	31	155				
950	31	580	10.0	4.0	22	6.4
900	31	1,030	8.3	.6	25	8.2
850	31	1,500	6.0	-2.4	25	8.6
800	31	1,995	4.0	-6.7	26	9.1
750	31	2,515	2.1	-10.6	26	9.8
700	31	3,074	-.2	-14.0	26	11.1
650	31	3,659	-3.4	-17.6	26	11.9
600	31	4,293	-6.7	-21.6	25	13.9
550	31	4,963	-10.8	-24.9	26	14.8
500	31	5,695	-15.2	-29.5	26	16.1
450	31	6,479	-20.6	-33.8	26	17.9
400	31	7,344	-26.7	-39.1	26	20.1
350	31	8,294	-33.8	-44.7	26	20.5
300	31	9,356	-41.9	-47.3	27	22.3
250	31	10,567	-50.2		26	23.4
200	31	12,001	-56.9		26	23.4
175	31	12,842	-58.7		26	22.8
150	31	13,806	-60.8		27	21.1
125	31	14,934	-63.1		27	16.6
100	31	16,302	-63.8		26	13.0
80	31	17,677	-61.8		26	9.9
70	31	18,505	-60.4		26	7.3
60	31	19,468	-58.9		25	6.6
50	31	20,615	-57.8		25	5.8
40	31	22,027	-56.5		26	5.8
30	30	23,856	-55.4		27	7.1
25	29	25,020	-54.4		27	8.4
20	28	26,461	-52.1		28	9.2
15	21	28,337	-49.5		28	9.5
10	9	31,027	-44.3			
7						
5						

DEL RIO, TEXAS 981 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	314	15.5	11.4	10	2.1
1000	31	147				
950	31	585	17.3	10.2	16	5.0
900	31	1,046	15.4	7.0	17	5.0
850	31	1,529	13.5	2.2	20	3.5
800	31	2,039	12.0	-4.2	23	2.2
750	31	2,578	9.7	-7.9	26	2.9
700	31	3,147	6.1	-11.0	29	4.1
650	31	3,749	2.4	-14.2	30	4.9
600	31	4,394	-1.2	-19.1	26	5.6
550	31	5,078	-5.4	-22.7	28	6.3
500	31	5,824	-10.3	-26.5	28	7.0
450	31	6,623	-16.1	-32.2	28	8.0
400	31	7,506	-22.5	-37.8	28	9.6
350	31	8,472	-29.8	-42.9	28	10.7
300	31	9,553	-38.0	-49.4	28	13.0
250	31	10,785	-46.9		28	15.1
200	31	12,234	-55.9		28	20.0
175	31	13,074	-60.4		28	20.5
150	31	14,025	-64.8		27	17.9
125	31	15,124	-69.6		28	14.0
100	30	16,443	-72.0		28	10.7
80	30	17,763	-69.3		28	6.3
70	29	18,566	-65.9		28	3.3
60	29	19,509	-62.2		24	1.5
50	27	20,641	-59.8		15	1.1
40	27	22,044	-56.7		14	1.7
30	27	23,881	-53.7		06	2.6
25	26	25,049	-51.7		08	1.9
20	25	26,503	-49.8		04	1.6
15	24	28,391	-47.7		30	4.1
10	20	31,088	-43.7		27	8.4
7	15	33,504	-40.2		25	11.8
5	10	35,818	-36.3			

DENVER, COLO. 839 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,611	5.1	-1.8	21	2.0
1000	31	150				
950	31	579				
900	31	1,028				
850	31	1,502				
800	31	2,003	10.4	-3.4	28	3.3
750	31	2,534	7.3	-6.4	31	4.9
700	31	3,103	3.6	-9.4	31	6.8
650	31	3,695	-.7	-12.4	31	8.4
600	31	4,334	-5.0	-16.2	31	10.7
550	31	5,007	-9.3	-21.1	31	12.4
500	31	5,744	-13.9	-25.6	30	13.0
450	31	6,527	-19.1	-31.6	30	14.2
400	31	7,403	-25.4	-38.0	30	15.7
350	31	8,357	-32.9	-43.8	30	16.1
300	31	9,422	-41.5	-50.5	30	16.4
250	31	10,634	-50.2		30	18.5
200	30	12,068	-57.4		30	20.3
175	30	12,906	-60.2		30	19.5
150	30	13,861	-62.6		30	18.9
125	30	14,979	-64.7		30	17.1
100	30	16,337	-65.7		29	12.5
80	30	17,694	-64.4		30	7.7
70	30	18,513	-62.7		30	5.5
60	30	19,466	-61.2		29	4.5
50	29	20,601	-59.7		29	4.3
40	29	22,003	-57.8		28	4.5
30	29	23,827	-55.8		28	5.7
25	28	24,997	-54.7		28	6.3
20	28	26,431	-52.8		28	7.7
15	24	28,296	-50.8		28	8.8
10	13	30,977	-48.3			
7						
5						

DODGE CITY, KANS. 925 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	791	8.7	.3	31	.8
1000	31	134				
950	31	563				
900	31	1,014	11.3	.6	31	1.6
850	31	1,493	12.1	-3.4	30	4.3
800	31	1,999	10.0	-5.7	32	5.7
750	31	2,530	7.3	-9.1	30	6.2
700	31	3,098	3.8	-11.4	30	6.9
650	31	3,692	-.2	-14.4	30	7.8
600	31	4,331	-4.5	-18.3	29	8.2
550	31	5,005	-8.8	-23.3	29	9.6
500	31	5,743	-13.7	-28.0	29	10.7
450	31	6,529	-19.2	-34.2	29	12.4
400	31	7,401	-25.7	-38.9	29	13.3
350	31	8,355	-33.0	-44.7	29	14.8
300	31	9,421	-41.2	-51.0	29	14.4
250	31	10,635	-50.1		29	16.5
200	31	12,067	-57.4		29	18.0
175	31	12,906	-59.9		29	18.6
150	31	13,864	-62.0		29	17.8
125	31	14,984	-64.8		29	15.3
100	31	16,337	-66.8		29	11.3
80	30	17,691	-65.1		29	6.9
70	30	18,508	-63.1		28	5.5
60	29	19,457	-61.2		27	4.9
50	28	20,595	-59.1		28	4.4
40	28	21,999	-57.4		26	5.2
30	28	23,627	-55.1		26	7.7
25	26	24,998	-53.9		27	8.4
20	25	26,441	-52.1		27	9.2
15	24	28,310	-49.9		28	10.9
10	20	30,997	-46.1		28	15.7
7	12	33,356	-42.8		28	21.1
5	11	35,642	-39.9			

EL PASO, TEXAS 884 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,193	10.9	.5	19	.5
1000	31	146				
950	31	584				
900	31	1,040				
850	31	1,524	16.3	-.2	21	1.7
800	31	2,037	13.5	-2.4	26	2.6
750	31	2,575	9.9	-5.1	27	2.8
700	31	3,147	5.9	-8.2	30	3.4
650	31	3,744	1.7	-11.3	29	4.7
600	31	4,391	-2.4	-15.7	30	4.5
550	30	5,071	-6.6	-21.8	30	5.5
500	30	5,815	-11.0	-26.3	30	6.7
450	30	6,610	-16.9	-31.2	30	8.0
400	30	7,491	-23.5	-37.3	30	9.0
350	30	8,453	-30.8	-43.5	30	9.7
300	30	9,529	-39.1	-48.0	30	11.6
250	30	10,754	-47.9		29	14.4
200	30	12,196	-56.6		29	16.3
175	30	13,035	-60.6		29	16.5
150	30	13,984	-64.7		28	16.0
125	30	15,086	-68.7		29	12.8
100	30	16,411	-71.1		29	10.4
80	30	17,734	-69.3		30	6.5
70	30	18,537	-66.1		32	3.5
60	30	19,478	-62.9		30	1.8
50	30	20,609	-59.8		21	2.1
40	30	22,013	-57.3		22	1.1
30	30	23,845	-53.9		26	1.1
25	30	25,019	-52.3		28	2.1
20	30	26,468	-50.7		28	3.3
15	30	28,344	-49.6		28	7.7
10	24	31,031	-44.7		28	11.7
7	14	33,447	-41.7			
5						

ELY, NEV. 813 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,908	.2	-8.1	18	3.7
1000	31	209				
950	31	628				
900	31	1,074				
850	31	1,544				
800	31	2,035	7.5	-4.3	19	2.7
750	31	2,565	7.3	-6.9	25	1.5
700	31	3,133	4.1	-9.7	28	4.0
650	31	3,724	.5	-13.1	28	7.0
600	31	4,371	-3.3	-17.3	29	9.7
550	31	5,044	-7.2	-21.8	29	12.2
500	31	5,791	-12.0	-25.9	30	13.3
450	31	6,583	-17.6	-30.7	29	14.6
400	31	7,462	-24.2	-36.8	30	16.0
350	31	8,422	-31.9	-43.2	30	16.2
300	31	9,492	-40.5	-47.7	30	17.1
250	31	10,709	-49.8		31	19.7
200	31	12,140	-58.3		30	19.1
175	31	12,974	-61.5		30	19.6
150	31	13,922	-64.4		29	19.5
125	31	15,029	-66.8		29	18.1
100	30	16,371	-67.6		29	13.4
80	29	17,718	-65.9		30	8.3
70	29	18,532	-64.2		31	7.1
60	29	19,478	-62.3		31	4.6
50	29	20,609	-60.4		31	4.1
40	29	22,006	-58.5		31	4.1
30	29	23,826	-55.7		30	4.4
25	28	24,986	-54.4		31	5.2
20	28	26,421	-52.4		29	6.7
15	28	28,291	-50.2		28	7.9
10	23	30,969	-47.4		28	8.2
7	15	33,350	-44.7		29	11.8
5	7	35,554	-44.2			

EMPALME, MEXICO 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	21.5	14.3	02	1.2
1000	31	115	24.2	14.5	02	1.5
950	31	562	24.4	10.3	04	2.3
900	31	1,037	21.9	6.4	08	1.6
850	31	1,530	18.8	3.9	12	1.7
800	31	2,047	15.1	.9	15	2.6
750	31	2,587	11.3	-2.7	15	3.4
700	31	3,163	7.6	-6.4	17	3.1
650	31	3,766	4.3	-11.7	18	2.0
600	31	4,417	.4	-17.5	26	.2
550	31	5,104	-4.1	-22.6	01	.8
500	31	5,854	-8.7	-27.1	35	2.0
450	31	6,659	-14.2	-31.4	32	3.6
400	31	7,544	-20.9	-37.5	31	5.1
350	30	8,516	-28.3	-43.7	31	7.2
300	30	9,602	-36.9	-51.2	30	8.3
250	30	10,839	-45.7		28	10.8
200	30	12,289	-56.1		28	12.1
175	30	13,128	-61.2		28	12.8
150	30	14,073	-66.0		28	13.5
125	30	15,166	-70.3		28	10.3
100	28	16,475	-73.4		30	8.4
80	28	17,787	-70.4		34	4.7
70	28	18,586	-66.9		35	3.2
60	28	19,523	-63.2		34	1.1
50	28	20,653	-59.8		11	2.0
40	28	22,057	-56.6		13	1.9
30	27	23,894	-52.8		09	3.8
25	27	25,075	-51.0		10	3.7
20	26	26,533	-48.8		08	4.0
15	21	28,425	-47.6		01	.9
10	6	31,083	-45.3			
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* FAIRBANKS, ALASKA 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	-5.3	-8.4	01	2.0
1000	30	39				
950	30	444	-4.4	-9.1	07	2.9
900	30	868	-5.8	-10.2	11	3.3
850	30	1,317	-6.1	-11.5	12	2.3
800	30	1,790	-7.5	-13.6	14	1.6
750	30	2,292	-10.0	-17.1	18	1.9
700	30	2,820	-13.3	-21.6	18	2.0
650	30	3,380	-16.9	-25.2	20	2.2
600	30	3,977	-20.8	-29.1	21	2.2
550	30	4,612	-25.0	-33.7	21	3.0
500	30	5,302	-29.7	-38.0	22	2.8
450	30	6,042	-35.0	-41.5	20	3.4
400	30	6,859	-40.9	-43.6	21	3.6
350	30	7,754	-47.5	-44.2	22	3.7
300	30	8,758	-53.6		24	3.6
250	30	9,922	-56.1		27	5.0
200	30	11,342	-55.1		26	5.3
175	30	12,196	-54.6		26	5.7
150	30	13,184	-54.1		25	6.2
125	30	14,354	-54.2		25	7.2
100	30	15,784	-54.2		25	8.2
80	29	17,221	-54.8		25	9.6
70	28	18,065	-55.3		25	10.9
60	28	19,048	-55.7		25	11.8
50	28	20,208	-56.2		25	13.0
40	28	21,624	-56.7		25	14.7
30	28	23,445	-57.1		26	17.5
25	28	24,599	-57.1		26	19.0
20	28	26,011	-57.0		26	21.9
15	28	27,835	-56.0		26	24.9
10	26	30,418	-55.0		26	29.3
7	21	32,696	-54.2		27	31.6
5	6	35,076	-50.7			

FLINT, MICH. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	234	7.1	2.6	20	2.3
1000	31	134				
950	31	557	7.7	2.9	23	6.3
900	31	1,002	6.1	-.7	24	8.4
850	31	1,469	3.9	-2.6	25	9.2
800	31	1,961	2.0	-6.6	26	10.2
750	31	2,483	.2	-10.5	25	10.8
700	31	3,032	-2.1	-14.1	26	11.2
650	31	3,617	-5.5	-16.8	26	12.4
600	31	4,241	-9.3	-19.9	26	13.5
550	31	4,905	-13.0	-24.5	26	14.1
500	31	5,630	-17.3	-29.0	26	16.5
450	31	6,406	-22.3	-33.7	26	18.1
400	31	7,269	-28.2	-39.5	26	18.6
350	31	8,214	-34.7	-44.8	26	19.6
300	41	9,274	-42.0	-46.4	26	23.2
250	31	10,487	-49.6		26	25.2
200	31	11,927	-54.8		26	25.6
175	31	12,777	-56.8		26	23.1
150	31	13,750	-58.1		27	21.5
125	31	14,893	-60.0		26	18.7
100	31	16,282	-60.9		27	12.5
80	31	17,672	-59.7		26	10.1
70	31	18,507	-59.0		26	8.0
60	31	19,476	-57.8		26	6.9
50	31	20,627	-57.1		26	6.9
40	30	22,044	-56.2		26	6.4
30	28	23,877	-55.2		27	6.3
25	28	25,043	-53.9		28	5.8
20	26	26,479	-52.1		28	5.6
15	23	28,348	-48.9		28	5.9
10	20	31,040	-44.9		28	8.7
7	14	33,431	-41.2			
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FORT WORTH, TEXAS 997 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	180	14.1	11.1	21	1.4
1000	31	149			32	1.4
950	31	588	15.9	7.7	22	6.1
900	31	1,044	14.3	4.6	23	6.6
850	31	1,526	12.9	-.5	24	5.4
800	31	2,034	10.3	-3.5	26	5.1
750	31	2,571	7.7	-7.1	27	5.1
700	31	3,134	4.4	-10.9	28	5.7
650	31	3,733	.9	-15.9	29	6.1
600	31	4,373	-3.0	-20.1	28	6.0
550	31	5,050	-7.0	-24.6	28	7.7
500	31	5,794	-11.9	-29.5	28	9.1
450	31	6,585	-17.6	-33.7	27	9.8
400	31	7,464	-24.1	-38.2	27	10.4
350	31	8,425	-31.3	-43.5	27	11.5
300	31	9,499	-39.6	-48.2	28	12.8
250	31	10,723	-48.5		28	16.3
200	31	12,164	-56.9		28	20.5
175	30	13,004	-60.2		28	20.0
150	29	13,957	-63.7		28	18.0
125	29	15,066	-67.1		28	15.2
100	28	16,407	-69.5		28	10.8
80	28	17,745	-67.0		27	5.6
70	28	18,556	-64.1		26	4.0
60	28	19,508	-61.0		24	2.5
50	28	20,646	-59.0		23	2.5
40	28	22,052	-57.0		23	1.0
30	28	23,885	-53.7		26	1.5
25	28	25,062	-52.2		28	3.4
20	28	26,510	-51.0		28	5.8
15	23	28,393	-49.0		27	9.5
10	20	31,078	-45.0		28	12.9
7	7	33,446	-41.8			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

GLASGOW, MONT. 932 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	696	4.3	.2	08	.5
1000	31	112				
950	31	532				
900	31	977	7.4	-1.4	28	4.0
850	31	1,447	6.0	-3.9	29	9.3
800	31	1,942	3.2	-6.0	29	12.0
750	31	2,460	-.1	-8.5	29	12.9
700	31	3,011	-3.3	-10.9	29	13.7
650	31	3,590	-6.5	-14.3	29	14.5
600	31	4,217	-10.1	-18.4	29	15.7
550	31	4,877	-14.2	-22.9	29	18.7
500	31	5,600	-18.8	-27.1	29	19.0
450	31	6,370	-24.2	-32.8	29	20.5
400	31	7,225	-30.3	-36.6	29	22.6
350	31	8,162	-37.1	-43.5	28	24.2
300	31	9,211	-44.2		29	25.0
250	31	10,414	-51.1		29	27.9
200	31	11,845	-56.5		29	28.1
175	31	12,689	-57.6		29	27.5
150	30	13,663	-57.8		29	24.2
125	30	14,812	-57.9		29	20.1
100	30	16,212	-59.0		29	15.0
80	30	17,612	-58.9		29	11.4
70	30	18,449	-58.9		29	9.1
60	30	19,415	-58.6		29	6.6
50	30	20,561	-58.6		29	5.1
40	29	21,966	-57.6		29	4.5
30	29	23,787	-56.5		30	4.4
25	28	24,952	-55.6		31	4.2
20	26	26,382	-54.3		31	4.2
15	20	28,236	-52.5		31	4.7
10	13	30,684	-49.6			
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* GRAND JUNCTION, COLO. 855 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,474	7.9	-4.0	13	2.3
1000	31	161				
950	31	593				
900	31	1,050				
850	31	1,523			13	2.7
800	31	2,028	10.2	-5.3	15	2.0
750	31	2,559	6.9	-7.5	26	2.4
700	31	3,125	3.1	-9.6	28	5.4
650	31	3,719	-.8	-12.8	29	7.2
600	31	4,357	-4.5	-17.0	29	9.4
550	31	5,031	-8.4	-21.8	30	11.4
500	31	5,770	-13.0	-26.6	30	13.0
450	31	6,558	-18.6	-31.5	30	14.4
400	31	7,432	-25.1	-37.5	30	15.1
350	31	8,388	-32.6	-44.0	30	16.2
300	31	9,455	-40.9	-49.8	30	17.2
250	31	10,671	-49.9		30	18.8
200	29	12,114	-57.9		30	20.4
175	29	12,950	-60.6		30	20.7
150	29	13,904	-63.2		29	18.8
125	28	15,015	-65.8		29	16.2
100	28	16,362	-67.6		29	12.3
80	27	17,716	-65.7		30	8.9
70	24	18,533	-63.4		31	5.8
60	24	19,482	-62.0		30	3.4
50	23	20,617	-59.9		30	3.9
40	23	22,015	-58.0		28	4.7
30	23	23,835	-56.1		28	4.9
25	23	24,997	-54.7		28	6.0
20	21	26,430	-52.6		28	7.0
15	18	28,301	-50.3		28	8.1
10	15	30,975	-46.6		28	11.5
7	9	33,373	-42.9			
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* GREAT FALLS, MONT. 886 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,123	7.5	-1.8	22	6.2
1000	31	113				
950	31	543				
900	31	995				
850	31	1,465	7.9	-5.5	24	11.5
800	31	1,963	4.5	-7.6	26	11.3
750	31	2,485	.8	-9.8	28	12.2
700	31	3,036	-2.7	-12.6	28	14.3
650	31	3,619	-6.1	-15.4	28	15.7
600	31	4,242	-9.9	-20.0	28	16.9
550	31	4,906	-14.0	-23.7	29	19.4
500	31	5,627	-18.6	-28.2	28	20.6
450	31	6,403	-24.0	-34.0	29	21.8
400	31	7,256	-29.8	-40.2	29	24.6
350	31	8,195	-36.6	-44.2	29	26.4
300	31	9,247	-43.6		28	29.8
250	31	10,453	-50.8		29	32.2
200	31	11,886	-56.6		29	28.4
175	31	12,728	-58.8		28	26.5
150	31	13,694	-59.1		28	26.5
125	31	14,837	-58.7		28	22.0
100	30	16,234	-59.9		28	14.4
80	30	17,627	-59.4		28	11.8
70	28	18,461	-59.4		28	9.6
60	26	19,423	-58.9		28	7.1
50	26	20,567	-58.7		29	6.9
40	26	21,971	-57.7		30	5.4
30	24	23,797	-56.2		31	4.7
25	23	24,959	-55.6		31	4.3
20	18	26,388	-54.1		32	4.1
15	18	28,244	-51.7		31	4.9
10	14	30,898	-48.4		28	6.8
7	11	33,279	-44.6			
5	7	35,545	-41.1			

GREEN BAY, WIS. 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	5.5	3.5	25	1.1
1000	31	115				
950	31	536	6.1	2.0	26	4.2
900	31	978	4.7	-.2	27	6.2
850	31	1,443	2.8	-3.3	28	6.5
800	31	1,933	1.3	-7.8	27	7.9
750	31	2,447	-.5	-11.7	27	9.4
700	31	3,000	-3.1	-13.6	26	11.2
650	31	3,581	-6.1	-16.6	26	12.3
600	31	4,207	-9.7	-19.6	27	13.5
550	31	4,869	-13.5	-23.3	27	15.1
500	31	5,594	-18.0	-28.3	27	17.0
450	31	6,369	-23.0	-34.4	27	19.0
400	31	7,229	-28.8	-39.7	27	21.2
350	31	8,171	-35.8	-44.6	27	23.3
300	31	9,225	-43.6		27	24.4
250	31	10,432	-50.6		27	26.3
200	31	11,868	-55.8		27	25.0
175	31	12,716	-56.6		27	22.4
150	31	13,691	-57.7		27	20.7
125	31	14,837	-59.6		27	16.6
100	31	16,231	-59.9		27	12.6
80	31	17,625	-59.5		28	9.1
70	31	18,462	-58.7		27	7.1
60	30	19,431	-58.3		27	6.5
50	30	20,579	-57.9		26	5.0
40	30	21,987	-57.2		26	5.5
30	29	23,812	-55.9		27	5.4
25	29	24,973	-54.9		28	5.0
20	29	26,404	-53.3		28	5.4
15	28	28,269	-50.6		29	6.1
10	25	30,928	-46.5		29	7.2
7	15	33,329	-42.2			
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GREENSBORO, N. C. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	273	9.2	8.5	36	.5
1000	31	174				
950	31	603	12.7	5.6	26	1.4
900	31	1,056	10.7	2.3	27	2.7
850	31	1,531	8.3	-.6	26	4.2
800	31	2,031	6.9	-5.5	26	5.8
750	31	2,558	5.5	-10.6	26	6.7
700	31	3,122	3.1	-13.3	26	7.7
650	31	3,719	.2	-16.8	26	8.6
600	31	4,357	-3.5	-19.3	26	9.8
550	31	5,032	-7.7	-22.9	26	10.7
500	31	5,775	-12.6	-28.3	26	12.3
450	31	6,565	-18.2	-34.2	26	13.0
400	31	7,440	-24.6	-39.6	27	13.6
350	31	8,399	-31.8	-45.5	26	14.2
300	31	9,470	-40.1	-51.9	27	15.3
250	31	10,690	-49.4		27	16.8
200	31	12,124	-57.6		27	18.1
175	31	12,961	-60.1		27	18.3
150	31	13,917	-62.6		27	16.8
125	31	15,034	-65.3		27	13.7
100	31	16,389	-65.8		26	10.3
80	31	17,749	-63.3		26	8.0
70	31	18,574	-61.3		26	5.8
60	31	19,534	-59.5		26	4.2
50	30	20,675	-58.4		27	2.5
40	30	22,083	-56.9		29	2.4
30	30	23,912	-54.8		29	3.8
25	29	25,083	-53.3		29	5.3
20	29	26,525	-51.5		28	6.9
15	26	28,404	-48.6		28	9.9
10	7	31,062	-47.1			
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GUAM, MARIANA IS. 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	24.3	23.4	10	2.6
1000	31	90				
950	31	539	23.5	21.3	10	6.7
900	31	1,013	20.9	17.3	10	6.5
850	31	1,507	18.5	13.7	10	5.7
800	31	2,025	15.8	10.0	10	5.6
750	31	2,568	13.0	6.7	10	6.1
700	31	3,149	9.9	3.0	10	6.1
650	31	3,759	6.4	-1.0	09	6.3
600	31	4,415	2.6	-5.2	10	7.1
550	31	5,112	-1.5	-10.7	09	7.1
500	31	5,867	-5.9	-15.1	09	7.8
450	31	6,682	-10.5	-21.0	09	7.5
400	31	7,583	-16.1	-27.2	09	5.9
350	31	8,575	-23.1	-32.9	09	5.0
300	31	9,685	-31.5	-41.4	10	4.3
250	31	10,948	-41.7		12	3.0
200	31	12,420	-54.2		13	2.8
175	31	13,263	-61.3		13	2.5
150	31	14,202	-68.6		08	3.8
125	30	15,274	-76.0		07	8.5
100	27	16,546	-80.2		08	12.4
80	23	17,816	-77.4		09	12.7
70	22	18,589	-73.3		09	10.8
60	22	19,502	-69.1		09	10.4
50	22	20,604	-64.4		10	10.5
40	22	21,982	-60.4		09	13.6
30	22	23,791	-56.7		09	19.2
25	22	24,953	-54.2		09	24.7
20	22	26,393	-51.1		09	29.9
15	22	28,289	-45.5		09	34.0
10	18	31,033	-40.6		09	29.7
7	14	33,485	-36.7		09	20.2
5	8	35,804	-34.1			

HILO, HAWAII 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	21.5	18.4	23	2.5
1000	31	136	23.0	19.2	24	2.1
950	31	583	19.9	17.2	11	1.9
900	31	1,048	16.7	14.3	10	2.9
850	31	1,534	13.8	11.3	08	3.5
800	31	2,044	11.4	6.2	07	3.3
750	31	2,586	9.9	-.6	07	4.0
700	31	3,154	7.4	-10.0	09	3.3
650	31	3,760	4.6	-13.1	10	3.5
600	31	4,409	.7	-16.0	11	2.7
550	31	5,100	-3.7	-20.0	11	2.3
500	31	5,850	-8.0	-25.1	12	.8
450	31	6,656	-13.7	-29.0	27	.8
400	31	7,546	-20.4	-34.1	27	2.6
350	31	8,520	-27.9	-41.5	26	4.3
300	31	9,609	-36.1	-48.3	26	7.4
250	31	10,851	-45.3		26	12.7
200	31	12,306	-55.9		27	14.3
175	31	13,145	-61.4		27	14.0
150	31	14,088	-66.9		27	10.4
125	31	15,176	-71.7		27	6.2
100	30	16,482	-75.0		30	1.3
80	29	17,782	-73.0		09	3.1
70	27	18,571	-69.2		09	5.9
60	26	19,498	-66.0		09	8.0
50	26	20,613	-62.3		09	10.0
40	26	22,002	-58.7		09	11.5
30	26	23,824	-54.9		09	15.4
25	26	24,997	-51.9		09	16.5
20	25	26,452	-48.7		09	18.0
15	23	28,355	-46.4		09	18.6
10	21	31,059	-43.2		09	17.3
7	15	33,470	-39.7		08	18.2
5	7	35,774	-37.1			

HUNTINGTON W. VA. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	7.7	5.1	18	1.1
1000	31	166				
950	31	591	11.2	4.2	23	4.3
900	31	1,043	8.8	1.5	26	6.7
850	31	1,515	6.5	-1.9	26	7.0
800	31	2,012	5.1	-4.8	25	7.8
750	31	2,535	3.3	-9.5	26	8.3
700	31	3,095	.7	-13.5	26	8.5
650	31	3,688	-2.0	-17.0	26	9.7
600	31	4,321	-5.3	-21.2	26	11.3
550	31	4,995	-9.3	-26.0	26	12.5
500	31	5,731	-13.8	-30.5	26	14.5
450	31	6,522	-19.4	-34.9	26	15.8
400	31	7,389	-25.5	-38.8	26	17.0
350	31	8,345	-32.7	-44.6	26	18.4
300	31	9,412	-41.1	-49.6	26	19.4
250	31	10,628	-49.8		26	20.4
200	31	12,063	-57.1		27	19.6
175	31	12,904	-59.1		27	19.6
150	31	13,866	-61.2		27	18.9
125	31	14,992	-63.4		26	14.3
100	31	16,357	-65.0		26	11.4
80	31	17,729	-62.0		26	8.9
70	30	18,555	-60.5		26	7.1
60	30	19,520	-58.6		26	6.3
50	30	20,669	-57.7		26	4.3
40	30	22,080	-56.9		26	4.2
30	30	23,910	-55.0		27	6.1
25	29	25,081	-53.5		28	7.3
20	29	26,523	-51.9		27	8.1
15	28	28,395	-49.2		27	9.6
10	19	31,043	-45.4		27	13.3
7	7	33,465	-42.4			
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* INTERNATIONAL FALLS, MINN. 971 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	360	2.1	-1.6	24	1.1
1000	31	116				
950	31	530	2.7	-1.7	26	1.9
900	31	968	1.2	-3.3	27	4.4
850	31	1,427	-.4	-6.7	29	5.9
800	31	1,911	-1.8	-9.9	30	7.3
750	31	2,419	-3.6	-13.0	30	8.1
700	31	2,966	-5.9	-17.2	29	9.2
650	31	3,538	-8.7	-18.8	29	10.0
600	31	4,160	-12.0	-21.4	28	11.8
550	31	4,812	-16.0	-25.1	28	13.8
500	31	5,534	-20.6	-29.2	28	15.5
450	31	6,296	-25.4	-34.7	28	16.2
400	31	7,152	-31.2	-39.4	28	17.7
350	31	8,086	-38.1	-44.1	28	19.4
300	31	9,133	-44.6		28	21.4
250	31	10,336	-51.1		28	24.1
200	31	11,773	-54.6		28	25.1
175	31	12,627	-55.2		28	20.2
150	31	13,608	-56.1		28	18.3
125	31	14,765	-56.7		28	16.4
100	30	16,171	-57.1		28	11.9
80	30	17,580	-57.8		28	10.0
70	29	18,417	-57.5		28	8.5
60	29	19,392	-57.4		28	7.9
50	28	20,542	-57.8		28	6.2
40	28	21,950	-57.2		29	4.7
30	28	23,776	-55.5		29	4.7
25	28	24,942	-54.3		28	4.7
20	26	26,369	-53.1		29	4.9
15	25	28,233	-51.1		29	3.8
10	22	30,906	-46.7		29	7.6
7	17	33,267	-44.0		28	12.0
5	6	35,531	-39.8			

JACKSON, MISS. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	94	11.2	9.6	18	.5
1000	31	159	14.5	9.5	19	.7
950	31	596	15.6	5.6	22	1.6
900	31	1,053	13.8	2.1	24	2.1
850	31	1,533	11.2	-1.2	25	3.1
800	31	2,038	9.7	-6.5	26	4.4
750	31	2,568	7.2	-10.2	27	5.1
700	31	3,137	4.2	-13.8	26	5.3
650	31	3,734	1.1	-16.8	26	5.8
600	31	4,376	-2.6	-21.3	26	7.5
550	31	5,055	-6.9	-25.1	26	9.0
500	31	5,799	-12.0	-29.4	26	10.0
450	31	6,591	-17.8	-33.6	26	11.1
400	31	7,468	-24.5	-38.1	26	12.0
350	31	8,427	-31.7	-44.1	27	13.0
300	31	9,498	-40.0	-49.9	27	14.4
250	31	10,718	-48.7		27	16.7
200	31	12,155	-57.0		27	19.3
175	31	12,992	-60.6		27	20.5
150	31	13,944	-64.4		27	18.6
125	31	15,048	-67.6		28	14.9
100	31	16,384	-69.2		27	9.8
80	31	17,724	-66.2		26	5.6
70	31	18,539	-63.0		25	4.0
60	30	19,492	-61.0		23	2.4
50	30	20,629	-59.2		22	1.3
40	30	22,034	-56.5		13	.5
30	30	23,874	-52.9		36	1.0
25	28	25,052	-51.8		30	2.3
20	28	26,501	-50.4		29	5.8
15	26	28,393	-47.8		28	9.9
10	24	31,090	-43.0		27	10.8
7	11	33,529	-39.6			
5						

* JACKSONVILLE, FLA. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	15.2	13.4	34	2.3
1000	31	163	18.5	13.2	01	3.6
950	31	600	16.8	9.5	04	2.9
900	31	1,062	14.0	5.5	10	.7
850	31	1,543	12.3	-.4	23	1.1
800	31	2,050	10.6	-4.9	26	2.6
750	31	2,581	8.5	-10.0	26	3.6
700	31	3,153	5.7	-13.3	26	4.5
650	31	3,750	2.6	-16.0	25	4.5
600	31	4,399	-1.1	-19.8	27	5.0
550	31	5,073	-5.6	-23.6	27	6.1
500	31	5,828	-10.6	-27.3	27	6.5
450	31	6,622	-16.4	-31.4	27	6.9
400	31	7,506	-23.0	-35.5	27	8.5
350	30	8,471	-30.2	-42.1	27	9.7
300	30	9,550	-38.4	-48.1	27	13.0
250	30	10,780	-47.6		27	15.9
200	30	12,224	-56.6		27	20.5
175	30	13,064	-60.3		27	20.6
150	29	14,012	-64.5		27	18.3
125	28	15,118	-68.0		27	14.0
100	28	16,453	-69.3		26	10.7
80	28	17,791	-66.5		26	5.9
70	28	18,603	-63.9		24	2.7
60	28	19,551	-61.8		21	.4
50	28	20,684	-59.6		09	1.5
40	26	22,090	-56.6		08	2.2
30	26	23,928	-53.1		06	1.9
25	26	25,107	-51.5		04	2.2
20	26	26,560	-49.8		31	1.4
15	26	28,453	-47.1		30	5.1
10	23	31,163	-42.6		27	8.8
7	14	33,580	-38.6		26	10.1
5						

JOHN F. KENNEDY INT. AP NY 1020 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	10.9	5.5	30	2.1
1000	31	170	10.8	5.2	31	2.6
950	31	600	8.9	2.7	29	4.1
900	31	1,044	6.9	-1.2	28	5.6
850	31	1,513	5.6	-4.5	27	7.2
800	31	2,008	3.9	-8.5	27	8.3
750	31	2,534	2.1	-12.2	26	9.7
700	31	3,087	.3	-15.4	26	11.7
650	31	3,682	-2.3	-19.1	26	13.1
600	31	4,310	-5.8	-21.7	25	13.3
550	31	4,989	-9.7	-25.5	26	14.9
500	31	5,717	-14.4	-29.7	25	16.7
450	31	6,506	-20.0	-35.1	25	18.2
400	31	7,372	-26.4	-40.4	25	18.0
350	31	8,325	-33.1	-45.8	25	20.1
300	31	9,394	-40.9	-47.7	25	22.0
250	31	10,612	-49.5		26	22.3
200	31	12,050	-56.3		27	22.7
175	31	12,894	-58.2		27	22.0
150	31	13,860	-60.5		26	20.1
125	30	14,987	-62.4		26	18.0
100	30	16,361	-63.0		26	14.1
80	30	17,740	-60.9		26	10.7
70	30	18,572	-59.7		26	8.6
60	30	19,538	-58.8		27	6.4
50	30	20,685	-57.7		27	4.9
40	30	22,095	-56.9		28	5.2
30	30	23,923	-55.3		28	4.7
25	29	25,089	-53.6		28	5.1
20	29	26,531	-51.5		28	6.4
15	25	28,403	-48.3		27	7.7
10	18	31,111	-43.6		27	9.6
7						
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JOHNSTON IS., PACIFIC AREA 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	26.3	22.7	09	6.9
1000	31	116	25.4	22.0	09	7.7
950	31	564	21.7	19.5	09	8.4
900	31	1,035	19.0	15.4	09	8.8
850	31	1,526	16.4	11.3	09	8.1
800	31	2,040	13.7	6.8	09	6.5
750	31	2,584	11.3	.5	10	4.9
700	31	3,156	8.3	-3.5	10	4.2
650	31	3,762	5.2	-9.7	10	3.9
600	31	4,414	1.5	-13.6	09	4.0
550	31	5,104	-2.7	-17.9	08	3.5
500	31	5,859	-7.1	-22.7	07	3.1
450	31	6,669	-12.2	-27.0	06	2.5
400	31	7,564	-18.4	-32.0	03	2.2
350	31	8,546	-25.6	-37.8	33	4.0
300	31	9,645	-33.9	-45.0	30	7.6
250	31	10,896	-43.8		28	11.4
200	31	12,359	-55.0		27	13.7
175	31	13,200	-61.2		28	13.4
150	31	14,142	-67.6		28	11.3
125	29	15,219	-73.3		30	6.0
100	29	16,514	-76.4		36	2.3
80	25	17,806	-74.2		06	4.9
70	25	18,588	-70.8		08	6.7
60	25	19,510	-66.9		09	8.6
50	25	20,621	-63.3		09	10.0
40	24	22,002	-59.9		09	13.3
30	24	23,816	-55.4		09	17.6
25	23	24,987	-52.8		09	20.7
20	22	26,439	-49.0		09	24.1
15	22	28,341	-45.6		09	26.5
10	17	31,054	-42.5		09	26.1
7	13	33,476	-39.3			
5	7	35,796	-35.7			

KEY WEST, FLA. 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	19	3	24.3	19.6	04	2.5
1000	19	137	23.4	19.3	05	4.0
950	19	584	20.4	18.0	07	4.8
900	19	1,052	18.0	14.4	07	2.9
850	19	1,540	15.4	10.4	11	1.3
800	19	2,053	12.6	6.9	17	1.0
750	19	2,593	10.0	2.3	20	1.3
700	19	3,165	6.9	-.8	23	2.6
650	19	3,768	3.6	-4.5	24	3.6
600	19	4,417	-.1	-8.2	24	4.3
550	19	5,105	-3.9	-13.5	25	6.0
500	19	5,855	-8.8	-19.1	26	6.6
450	19	6,658	-14.1	-25.0	27	7.9
400	19	7,549	-20.0	-29.9	26	10.7
350	19	8,525	-27.4	-36.3	26	13.2
300	19	9,617	-35.8	-44.3	26	17.9
250	19	10,859	-45.5		26	19.9
200	19	12,313	-56.5		26	21.3
175	19	13,149	-62.3		27	23.9
150	19	14,090	-67.3		27	19.0
125	19	15,177	-72.2		27	12.3
100	18	16,480	-73.6		28	7.7
80	18	17,799	-69.8		05	2.4
70	18	18,597	-67.8		09	4.8
60	18	19,531	-64.9		09	5.8
50	18	20,655	-61.0		08	6.5
40	17	22,052	-57.3		09	8.7
30	17	23,892	-53.1		09	12.1
25	17	25,076	-50.3		08	12.8
20	14	26,529	-48.6		08	10.9
15	7	28,427	-46.6			
10						
7						
5						

KING SALMON, ALASKA 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-2.6	-6.1	02	2.1
1000	31	0			36	2.5
950	31	409	-.2	-5.6	03	3.6
900	31	842	-2.3	-7.5	05	2.3
850	31	1,295	-4.2	-10.2	05	1.3
800	31	1,771	-6.7	-13.3	01	.6
750	31	2,272	-9.2	-17.8	28	.7
700	31	2,804	-12.3	-21.4	27	.3
650	31	3,364	-15.7	-24.3	19	.3
600	31	3,966	-19.6	-28.7	18	.8
550	31	4,604	-23.7	-33.8	22	1.2
500	31	5,298	-28.2	-37.8	21	1.6
450	31	6,045	-33.2	-40.9	22	2.0
400	31	6,867	-38.6	-44.5	24	2.0
350	31	7,772	-44.7	-43.6	26	2.8
300	31	8,790	-50.7		28	4.5
250	31	9,966	-54.4		28	5.8
200	31	11,396	-53.8		27	6.9
175	31	12,254	-53.7		27	7.7
150	31	13,246	-53.1		26	8.5
125	31	14,421	-53.2		26	8.4
100	31	15,859	-53.1		26	10.1
80	31	17,296	-53.3		26	10.0
70	31	18,156	-53.3		25	10.8
60	31	19,148	-53.4		25	11.0
50	31	20,321	-53.6		25	10.8
40	31	21,754	-54.0		25	10.7
30	31	23,601	-53.8		26	13.1
25	30	24,772	-53.5		26	14.0
20	29	26,197	-53.5		26	15.7
15	29	28,050	-52.8		26	17.9
10	27	30,666	-51.8		26	23.4
7	16	32,933	-51.3		26	33.5
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

+ KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.9	24.4	26	2.2
1000	31	87	27.2	23.6	27	2.7
950	31	534	23.5	19.1	26	4.9
900	31	1,011	20.5	14.5	27	6.1
850	31	1,504	17.9	10.9	27	5.9
800	31	2,021	15.3	7.4	27	5.5
750	31	2,565	12.6	4.2	28	4.7
700	31	3,143	9.6	.7	27	3.4
650	31	3,754	6.4	-3.6	25	2.2
600	31	4,409	2.6	-7.7	24	1.7
550	31	5,104	-1.2	-12.5	16	1.8
500	31	5,863	-5.5	-17.5	17	2.4
450	31	6,679	-10.1	-23.1	15	1.8
400	31	7,584	-15.6	-28.9	12	2.4
350	31	8,578	-22.6	-36.8	09	3.9
300	31	9,690	-31.1	-44.9	09	4.8
250	31	10,954	-41.4	-51.9	08	6.5
200	31	12,427	-54.0		08	9.5
175	31	13,271	-61.3		07	9.6
150	30	14,208	-68.9		07	11.0
125	30	15,278	-76.2		07	14.4
100	29	16,550	-78.8		08	11.1
80	29	17,827	-75.6		08	5.6
70	29	18,608	-71.2		06	2.1
60	29	19,528	-67.0		06	2.1
50	29	20,637	-63.8		09	3.4
40	29	22,015	-60.9		09	6.9
30	29	23,815	-57.7		09	16.9
25	28	24,975	-53.7		09	28.1
20	26	26,424	-49.4		09	35.3
15	23	28,327	-45.1		09	39.5
10	14	31,060	-39.5		09	39.7
7	6	33,532	-32.7			

KOTZEBUE, ALASKA 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-4.7	-8.2	09	3.9
1000	31	55			09	4.4
950	31	460	-5.7	-9.7	11	3.2
900	31	881	-7.6	-11.2	13	1.8
850	31	1,324	-9.7	-13.7	13	1.8
800	31	1,791	-11.1	-17.0	15	1.6
750	31	2,285	-13.1	-20.8	16	2.0
700	31	2,808	-16.0	-23.6	15	1.6
650	31	3,364	-19.1	-27.4	17	2.2
600	31	3,954	-22.7	-31.1	19	2.6
550	31	4,588	-26.8	-34.6	20	3.1
500	31	5,270	-31.0	-39.4	21	3.6
450	31	6,008	-35.9	-40.3	21	5.0
400	31	6,819	-41.3	-41.5	22	6.0
350	31	7,715	-47.1		23	7.0
300	31	8,722	-52.7		23	7.2
250	31	9,888	-56.0		25	7.0
200	31	11,307	-55.4		25	7.2
175	31	12,160	-54.9		25	6.9
150	31	13,146	-54.5		25	6.7
125	30	14,318	-54.7		25	6.6
100	30	15,743	-55.1		25	7.5
80	30	17,166	-55.8		25	8.2
70	30	18,013	-56.2		25	9.0
60	30	18,994	-56.5		25	10.2
50	30	20,149	-57.0		26	11.6
40	29	21,548	-57.8		26	13.3
30	28	23,365	-58.1		26	16.5
25	26	24,510	-58.3		26	18.1
20	24	25,914	-58.1		25	21.2
15	19	27,736	-56.8		26	24.7
10	5	30,277	-51.9			

KWAJALEIN, MARSHALL IS. 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	27.0	23.5	08	2.8
1000	31	93	26.6	22.9	09	3.2
950	31	545	23.4	20.7	09	3.8
900	31	1,016	20.6	17.4	06	4.2
850	31	1,511	17.9	14.5	08	4.7
800	31	2,029	15.2	11.4	08	5.1
750	31	2,576	12.8	7.5	08	5.3
700	31	3,152	9.8	4.2	08	5.7
650	31	3,761	6.3	.2	08	6.1
600	31	4,417	2.4	-2.5	09	6.2
550	31	5,116	-1.2	-7.9	09	6.4
500	31	5,873	-5.4	-13.1	09	6.3
450	30	6,694	-10.2	-18.8	09	5.8
400	30	7,591	-16.1	-23.9	08	4.4
350	30	8,577	-22.9	-31.6	09	3.8
300	30	9,695	-31.4	-41.5	08	3.1
250	30	10,958	-41.8	-50.7	09	2.9
200	30	12,429	-54.3	-61.7	07	2.4
175	30	13,264	-61.4		02	2.0
150	30	14,210	-69.0		33	2.0
125	30	15,277	-76.3		32	.9
100	29	16,551	-79.3		08	5.2
80	26	17,825	-76.1		09	5.5
70	25	18,604	-72.3		10	3.4
60	24	19,522	-68.1		08	3.5
50	24	20,626	-65.1		08	5.0
40	24	21,995	-61.4		08	9.8
30	23	23,800	-57.7		09	17.9
25	23	24,954	-55.7		09	26.2
20	21	26,391	-51.7		09	32.9
15	18	28,288	-45.9		09	39.4
10	18	31,030	-39.2		09	35.1
7	13	33,498	-34.6		09	15.9

LAKE CHARLES, LA. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	14.4	12.8	05	1.7
1000	31	155	18.1	12.8	10	2.3
950	31	594	16.6	8.5	18	2.3
900	31	1,053	14.3	3.3	20	2.6
850	31	1,535	12.6	-1.0	23	2.3
800	31	2,042	10.3	-4.9	25	2.4
750	31	2,574	7.8	-8.1	26	3.0
700	31	3,143	5.0	-11.9	27	3.4
650	31	3,744	1.9	-15.8	27	4.4
600	31	4,386	-1.7	-19.1	26	5.1
550	31	5,066	-6.0	-22.7	26	6.1
500	31	5,813	-10.8	-27.9	26	7.5
450	31	6,608	-16.6	-32.1	26	8.9
400	31	7,489	-23.3	-36.5	26	9.8
350	31	8,452	-30.5	-43.1	27	11.6
300	31	9,529	-38.7	-49.2	27	14.6
250	31	10,757	-47.6		28	17.5
200	31	12,199	-56.7		28	21.3
175	31	13,037	-60.8		28	21.7
150	31	13,987	-64.7		28	19.5
125	31	15,089	-68.3		27	15.9
100	30	16,423	-70.0		28	10.7
80	30	17,756	-67.5		27	5.0
70	30	18,567	-63.7		24	3.1
60	30	19,518	-61.6		22	1.3
50	30	20,652	-59.4		10	.9
40	30	22,056	-56.5		08	1.9
30	29	23,895	-52.3		07	1.8
25	29	25,078	-50.5		06	1.5
20	27	26,534	-49.7		31	1.0
15	27	28,423	-47.8		29	5.5
10	27	31,124	-43.3		28	8.7
7	13	33,554	-38.6			

LANDER, WYO. 830 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,696	4.6	-4.1	24	1.5
1000	31	147				
950	31	575				
900	31	1,024				
850	31	1,498				
800	31	1,997	7.7	-6.2	26	1.8
750	31	2,524	5.0	-8.7	28	5.6
700	31	3,086	1.6	-11.4	29	9.1
650	31	3,672	-2.3	-13.9	29	12.9
600	31	4,311	-6.3	-16.7	29	15.4
550	31	4,979	-10.5	-21.0	29	17.2
500	31	5,715	-15.5	-27.1	29	18.4
450	31	6,494	-20.9	-33.0	29	19.5
400	31	7,364	-26.9	-38.6	29	21.7
350	31	8,313	-34.1	-44.9	29	22.9
300	31	9,374	-42.4	-50.1	30	24.3
250	31	10,582	-50.8		30	23.4
200	31	12,010	-58.0		29	24.8
175	31	12,847	-60.5		29	25.7
150	31	13,805	-61.6		29	23.5
125	31	14,930	-63.2		29	18.7
100	31	16,300	-63.7		28	12.8
80	31	17,668	-63.5		29	8.8
70	31	18,489	-62.5		30	7.2
60	31	19,444	-61.1		30	5.7
50	30	20,578	-59.7		30	3.2
40	30	21,977	-58.3		31	2.7
30	30	23,796	-56.3		30	4.2
25	30	24,957	-54.7		31	3.6
20	28	26,388	-52.9		30	3.4
15	26	28,251	-50.7		29	4.5
10	14	30,900	-48.6			

* LIHUE KAUAI, HAWAII 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	23.5	20.3	05	3.0
1000	31	144	23.7	20.5	05	4.2
950	31	590	20.6	18.8	06	6.2
900	31	1,059	17.2	15.6	08	6.6
850	31	1,546	14.5	11.0	08	6.3
800	31	2,057	12.4	4.4	09	5.6
750	31	2,595	10.1	-3.2	09	5.0
700	31	3,169	8.0	-10.6	09	3.8
650	31	3,774	4.8	-14.8	08	3.6
600	31	4,425	.8	-18.3	06	3.9
550	31	5,111	-3.4	-22.9	07	3.5
500	31	5,866	-8.1	-25.9	06	3.6
450	31	6,678	-13.7	-31.0	04	4.1
400	31	7,561	-20.2	-36.5	02	4.3
350	31	8,536	-27.7	-43.1	01	4.8
300	31	9,626	-36.2	-50.4	34	5.1
250	31	10,867	-45.6		31	6.4
200	31	12,320	-55.9		29	8.2
175	31	13,159	-61.2		29	9.0
150	31	14,104	-66.2		30	6.3
125	31	15,196	-71.0		31	3.5
100	29	16,503	-74.3		32	2.3
80	29	17,805	-72.2		08	2.0
70	29	18,595	-69.3		08	4.5
60	29	19,522	-66.2		08	6.6
50	29	20,637	-61.9		10	8.8
40	29	22,029	-58.5		09	10.3
30	28	23,849	-54.9		09	12.9
25	27	25,019	-52.1		09	13.8
20	26	26,470	-49.6		09	14.0
15	25	28,372	-46.2		09	14.0
10	25	31,081	-43.7		10	10.4
7	22	33,497	-39.7		08	6.5
5	19	35,804	-37.0		05	1.7
4	9	37,315	-35.7			
3	8	39,331	-34.5			
2	7	42,189	-31.1			

LITTLE ROCK, ARK. 1008 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	10.9	8.2	21	.7
1000	31	147	12.8	7.7	22	1.1
950	31	580	14.2	6.3	24	5.2
900	31	1,036	12.4	3.9	24	5.9
850	31	1,514	10.8	-.4	25	5.9
800	31	2,018	8.7	-5.0	26	5.7
750	31	2,546	6.1	-8.6	26	6.5
700	31	3,113	3.4	-11.4	27	7.3
650	31	3,710	.2	-15.9	27	8.9
600	31	4,349	-3.6	-19.5	27	9.4
550	31	5,026	-7.8	-23.2	27	10.8
500	31	5,767	-12.5	-27.6	27	11.2
450	31	6,555	-18.3	-32.4	27	11.6
400	31	7,433	-24.8	-37.7	27	13.2
350	31	8,390	-32.0	-43.6	27	11.2
300	31	9,461	-40.2	-48.8	27	11.9
250	31	10,681	-49.4		28	13.2
200	31	12,116	-57.3		28	15.6
175	30	12,954	-59.8		29	16.9
150	30	13,910	-62.8		28	16.3
125	29	15,022	-65.5		29	13.5
100	27	16,370	-67.0		29	10.4
80	26	17,723	-64.8		29	5.9
70	26	18,543	-62.4		28	4.4
60	26	19,500	[illegible]		26	3.6
50	26	20,643	-58.1		26	3.8
40	26	22,052	-56.6		26	2.6
30	26	23,881	-53.7		27	4.0
25	26	25,064	-52.4		29	6.0
20	25	26,508	-51.4		28	7.7
15	22	28,387	-46.9		28	11.0
10	17	31,072	-44.3		28	11.9

MCGRATH, ALASKA 992 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	103	-6.0	-8.6	32	1.5
1000	31	37				
950	31	442	-4.8	-8.1	04	3.1
900	31	865	-5.8	-8.2	06	3.7
850	31	1,313	-5.4	-9.3	07	3.6
800	31	1,788	-6.7	-13.0	07	3.3
750	31	2,287	-9.6	-16.7	07	1.8
700	31	2,819	-12.8	-20.0	11	1.1
650	31	3,380	-16.3	-23.8	18	1.9
600	31	3,979	-20.0	-28.4	19	2.5
550	31	4,614	-24.5	-33.0	20	3.1
500	31	5,306	-29.1	-37.1	19	3.5
450	31	6,047	-34.3	-40.6	21	4.2
400	31	6,865	-40.1	-42.8	22	4.5
350	31	7,764	-46.1	-44.4	24	5.2
300	31	8,775	-52.0		25	6.2
250	31	9,948	-54.8		27	6.5
200	31	11,374	-54.5		27	6.8
175	31	12,230	-54.3		26	6.2
150	31	13,218	-54.0		26	6.9
125	31	14,389	-53.7		25	7.1
100	31	15,824	-53.6		25	8.4
80	31	17,257	-53.9		25	9.0
70	31	18,114	-54.1		25	9.9
60	31	19,103	-54.2		25	10.4
50	31	20,271	-54.7		25	10.9
40	31	21,697	-55.0		25	14.7
30	29	23,533	-55.0		25	16.9
25	29	24,698	-54.9		26	18.5
20	29	26,124	-54.8		26	19.9
15	26	27,958	-54.3		26	24.0
10	21	30,546	-52.9		26	29.4
7	5	32,948	-49.0			

+ MAJURO, MARSHALL IS. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	29.0	24.5	10	1.6
1000	31	99	27.5	21.9	11	1.8
950	31	547	23.5	18.3	12	3.0
900	31	1,023	20.6	14.7	11	3.5
850	31	1,516	18.0	10.7	10	3.7
800	31	2,034	15.5	7.7	10	4.1
750	31	2,578	12.8	3.9	10	4.2
700	31	3,157	9.5	.9	09	4.5
650	31	3,766	6.2	-2.5	09	5.6
600	31	4,422	2.5	-6.8	09	6.5
550	30	5,113	-1.3	-12.1	09	5.8
500	30	5,875	-5.3	-17.0	09	6.0
450	30	6,694	-9.9	-23.0	09	4.6
400	30	7,597	-15.3	-28.7	08	3.6
350	30	8,594	-22.1	-36.0	08	4.3
300	30	9,709	-30.4	-44.0	08	4.0
250	30	10,980	-40.8	-52.4	09	3.5
200	30	12,459	-53.3		09	1.1
175	30	13,306	-60.3		34	.7
150	30	14,251	-67.7		28	2.7
125	29	15,330	-74.4		27	2.3
100	29	16,613	-77.9		08	4.0
80	26	17,897	-74.8		07	3.5
70	25	18,681	-71.0		07	2.0
60	23	19,602	-66.9		22	.3
50	22	20,712	-64.1		14	.5
40	22	22,087	-60.7		09	6.9
30	20	23,904	-55.9		09	16.8
25	18	25,077	-53.2		09	24.7
20	16	26,529	-48.5		09	33.4
15	12	28,434	-42.5		09	35.8
10	5	31,205	-36.0			

+ MARCUS IS., N. PACIFIC 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	9	29.0	24.3	10	5.0
1000	31	127	26.4	21.2	10	6.0
950	31	579	22.1	16.8	11	7.6
900	31	1,047	19.6	12.9	12	7.6
850	31	1,538	17.0	8.6	12	7.2
800	31	2,053	14.8	3.6	12	7.3
750	31	2,597	12.3	-2.0	12	6.8
700	31	3,174	9.6	-6.6	12	6.4
650	31	3,786	6.3	-10.8	12	5.9
600	31	4,438	2.5	-14.9	12	6.6
550	31	5,132	-1.7	-19.3	12	5.8
500	31	5,889	-6.0	-23.8	12	5.4
450	31	6,703	-11.1	-29.7	12	5.7
400	31	7,602	-16.9	-34.5	11	4.9
350	31	8,591	-23.6	-41.4	09	5.9
300	31	9,700	-31.8	-48.2	08	5.8
250	31	10,962	-41.9	-53.7	05	5.4
200	31	12,435	-53.4		03	6.7
175	31	13,282	-59.5		04	6.9
150	31	14,233	-65.9		04	6.3
125	31	15,320	-72.6		06	6.7
100	31	16,612	-77.5		06	7.0
80	31	17,896	-75.6		08	8.1
70	31	18,675	-71.8		09	8.3
60	30	19,594	-66.7		09	9.1
50	30	20,710	-62.0		09	9.9
40	28	22,106	-57.1		09	10.8
30	26	23,951	-52.1		10	12.0
25	24	25,140	-49.3		10	12.2
20	23	26,616	-45.8		09	10.9
15	20	28,534	-43.9		09	11.8
10	12	31,279	-40.8			
7	6	33,724	-38.5			

* MEDFORD, OREG. 973 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	6.8	4.3	31	.4
1000	31	175				
950	31	604	9.3	5.8	29	.5
900	31	1,049	10.3	2.7	18	1.8
850	31	1,525	9.3	-2.4	21	3.2
800	31	2,026	6.8	-6.1	24	5.4
750	31	2,556	4.2	-9.8	26	7.6
700	31	3,113	1.9	-13.1	26	10.0
650	31	3,707	-1.1	-16.7	26	12.8
600	31	4,342	-4.6	-20.5	27	15.3
550	31	5,019	-8.8	-23.5	27	17.1
500	31	5,755	-13.8	-27.5	27	18.5
450	31	6,544	-19.2	-31.8	27	21.8
400	31	7,414	-25.3	-36.9	27	23.8
350	31	8,370	-32.5	-42.7	27	25.9
300	31	9,439	-40.7	-48.2	27	27.9
250	31	10,657	-49.7		28	30.0
200	31	12,090	-57.5		28	29.2
175	31	12,928	-60.2		28	27.6
150	31	13,883	-62.9		28	27.0
125	31	15,000	-64.8		28	23.2
100	31	16,357	-65.6		28	18.1
80	30	17,722	-63.8		26	12.5
70	30	18,540	-63.2		28	9.8
60	29	19,491	-61.7		29	7.3
50	29	20,625	-60.3		30	6.0
40	29	22,022	-58.7		30	5.3
30	27	23,837	-56.5		31	5.0
25	26	25,000	-55.0		32	5.3
20	25	26,432	-53.2		31	5.9
15	25	28,294	-51.1		31	6.6
10	23	30,946	-48.0		29	8.1
7	15	33,320	-45.0		29	10.5
5	5	35,604	-42.0			

* MIAMI, FLA. 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	21.9	20.5	02	1.9
1000	31	137	23.1	20.3	04	3.3
950	31	590	20.6	17.7	07	5.1
900	31	1,051	17.8	13.6	08	4.2
850	31	1,538	15.0	9.7	10	2.8
800	31	2,050	12.3	4.8	16	1.3
750	31	2,594	9.5	-.6	20	1.6
700	31	3,159	6.3	-6.6	24	2.3
650	31	3,764	3.2	-11.3	24	2.2
600	31	4,409	-.3	-17.4	26	3.0
550	31	5,097	-4.1	-20.8	26	3.2
500	30	5,847	-9.0	-25.7	27	5.2
450	30	6,654	-14.6	-29.8	27	7.3
400	30	7,536	-20.6	-35.0	27	9.2
350	30	8,511	-27.8	-40.5	27	12.5
300	30	9,601	-36.1	-47.1	27	16.4
250	30	10,841	-46.0		27	21.1
200	30	12,290	-56.9		27	23.9
175	30	13,126	-62.2		28	23.5
150	29	14,064	-67.3		27	21.4
125	29	15,150	-71.9		27	15.4
100	29	16,458	-73.2		27	8.8
80	29	17,772	-70.2		30	2.5
70	29	18,568	-67.9		08	2.1
60	29	19,502	-64.9		10	3.4
50	29	20,623	-61.5		09	4.5
40	29	22,019	-57.9		09	6.7
30	28	23,851	-53.5		09	7.7
25	26	25,029	-51.8		08	8.2
20	27	26,484	-49.2		08	8.1
15	26	28,384	-46.1		08	4.8
10	23	31,096	-47.6		35	1.4
7	15	33,504	-39.5			

* MIDLAND, TEXAS 917 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	11.1	5.3	20	1.3
1000	31	143				
950	31	576				
900	31	1,033	14.1	5.0	21	3.0
850	31	1,518	15.6	-1.2	24	3.7
800	31	2,030	13.4	-5.4	28	2.6
750	31	2,565	9.9	-7.8	31	3.5
700	31	3,139	6.1	-11.5	32	4.4
650	31	3,736	1.9	-14.5	31	4.4
600	31	4,383	-1.9	-18.5	29	5.6
550	31	5,060	-6.3	-22.6	29	7.1
500	31	5,808	-11.0	-27.2	29	7.6
450	31	6,598	-16.8	-32.0	29	8.8
400	31	7,482	-23.6	-36.8	29	9.9
350	31	8,444	-30.9	-43.3	29	11.0
300	31	9,520	-38.8	-48.4	29	13.6
250	31	10,747	-47.8		29	16.8
200	31	12,192	-56.3		29	19.6
175	31	13,031	-60.7		28	18.6
150	31	13,982	-64.5		28	18.5
125	31	15,085	-68.4		28	14.7
100	31	16,415	-70.6		29	11.1
80	31	17,745	-67.8		30	6.0
70	31	18,553	-65.1		28	2.8
60	31	19,498	-61.8		27	1.9
50	31	20,632	-59.5		22	1.8
40	31	22,037	-57.1		23	1.8
30	29	23,870	-54.0		25	.8
25	29	25,044	-52.4		28	1.8
20	29	26,492	-50.7		28	4.1
15	29	28,374	-49.2		28	8.1
10	25	31,055	-44.6		28	11.4
7	24	33,457	-40.1		26	13.9
5	14	35,759	-36.1		26	19.6

MONTERREY, MEXICO 971 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	22	423	15.1	14.2	32	2.3
1000	22	171				
950	22	611	17.2	14.3	36	1.5
900	22	1,069	15.6	10.4	06	1.2
850	22	1,553	13.4	6.6	13	1.8
800	22	2,062	11.2	-.1	16	.6
750	22	2,597	9.2	-4.0	29	1.6
700	22	3,169	6.1	-6.7	30	2.5
650	22	3,771	2.6	-11.9	29	2.3
600	22	4,417	-.6	-14.8	29	2.3
550	22	5,103	-4.8	-20.3	28	2.9
500	22	5,854	-9.3	-24.7	28	4.2
450	22	6,657	-12.5	-27.5	27	5.0
400	22	7,546	-20.9	-36.5	26	7.5
350	22	8,518	-28.0	-41.6	26	10.5
300	22	9,607	-36.2	-48.5	26	14.4
250	22	10,847	-45.8		25	18.0
200	22	12,300	-55.8		26	22.9
175	22	13,139	-61.7		26	22.9
150	22	14,081	-67.2		26	19.4
125	22	15,167	-71.9		27	12.8
100	22	16,473	-74.1		27	8.4
80	22	17,781	-71.1		28	4.2
70	22	18,582	-66.1		30	1.9
60	22	19,523	-62.9		10	3.9
50	22	20,654	-60.3		10	4.9
40	22	22,054	-57.1		09	4.8
30	22	23,891	-53.1		07	7.9
25	22	25,071	-51.1		07	8.4
20	22	26,529	-48.8		07	9.3
15	22	28,432	-45.9		08	6.4
10	20	31,143	-42.9		27	.9
7	11	33,562	-40.5			
5	5	35,844	-39.3			

MONTGOMERY, ALA. 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	11.2	9.8	01	.5
1000	31	167	14.1	10.1	05	.8
950	31	602	15.0	7.4	13	.6
900	31	1,060	13.0	3.9	28	1.2
850	31	1,539	11.4	-.9	28	2.0
800	31	2,045	9.8	-5.6	27	3.0
750	31	2,577	7.5	-8.4	28	4.3
700	31	3,145	4.9	-11.6	27	5.2
650	31	3,741	1.6	-15.5	27	6.3
600	31	4,388	-2.0	-19.1	27	8.1
550	31	5,066	-6.4	-23.1	27	8.5
500	31	5,813	-11.3	-26.6	26	10.2
450	31	6,608	-17.2	-31.4	26	10.8
400	31	7,486	-23.7	-37.0	26	11.7
350	31	8,447	-31.0	-43.7	26	12.8
300	31	9,522	-39.4	-49.7	26	13.6
250	31	10,746	-48.3		26	15.6
200	31	12,186	-56.8		27	17.9
175	31	13,026	-60.3		27	18.0
150	31	13,978	-63.9		27	17.4
125	31	15,086	-67.2		27	14.0
100	31	16,426	-68.7		27	10.6
80	31	17,770	-66.0		26	6.8
70	31	18,585	-63.1		25	4.4
60	30	19,540	-61.1		24	3.3
50	30	20,677	-59.3		25	.8
40	30	22,083	-56.7		11	.6
30	29	23,926	-52.7		03	.7
25	29	25,106	-51.8		31	2.7
20	28	26,552	-50.3		28	4.7
15	27	28,437	-48.1		28	8.7
10	22	31,149	-42.9		27	12.4
7	6	33,643	-38.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

Columns: Standard pressure surface (mb); No. of observations; Dynamic height; Temperature; Dew Point; Resultant Wind: Direction, Speed M.p.s

* NANTUCKET, MASS. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	14	11.0	8.5	28	.8
1000	31	171	11.7	7.8	25	2.2
950	31	599	9.1	4.4	26	4.2
900	31	1,046	7.4	-.3	26	5.7
850	31	1,516	5.7	-5.2	25	7.0
800	31	2,011	5.2	-10.9	25	9.0
750	31	2,537	3.5	-13.9	25	10.4
700	30	3,095	1.4	-16.4	25	11.2
650	30	3,684	-1.6	-18.6	25	12.0
600	30	4,322	-5.4	-21.3	24	13.3
550	30	4,992	-9.5	-26.2	25	14.3
500	30	5,729	-14.2	-31.3	25	15.5
450	30	6,512	-20.0	-35.9	25	17.8
400	30	7,383	-26.4	-40.0	24	18.9
350	30	8,335	-33.4	-45.9	25	18.7
300	30	9,401	-41.2	-51.0	25	19.5
250	30	10,616	-50.2		25	21.1
200	30	12,049	-57.1		26	20.2
175	30	12,890	-59.2		26	20.7
150	30	13,853	-61.0		26	18.8
125	30	14,979	-62.8		26	16.9
100	30	16,352	-63.3		26	13.3
80	30	17,729	-61.3		26	9.0
70	30	18,559	-60.2		26	7.8
60	30	19,524	-59.2		26	6.9
50	29	20,668	-58.2		26	6.8
40	27	22,074	-57.0		28	6.3
30	25	23,895	-56.2		28	5.8
25	25	25,057	-54.8		28	5.6
20	22	26,492	-52.6		28	6.0
15	20	28,369	-49.4		27	7.7
10	19	31,053	-45.0		27	12.6
7	16	33,459	-40.9		26	18.7
5						
4						

* NASHVILLE, TENN. 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	180	10.4	8.1	17	1.0
1000	31	162			08	1.1
950	31	594	13.1	4.6	21	4.7
900	31	1,047	10.9	2.6	24	5.5
850	31	1,522	8.7	.5	25	6.1
800	31	2,022	6.7	-4.6	26	7.3
750	31	2,551	4.2	-7.6	26	8.2
700	31	3,111	2.1	-12.6	26	9.1
650	31	3,702	-.8	-16.6	26	9.2
600	31	4,342	-4.3	-21.2	26	10.3
550	31	5,021	-8.2	-24.1	27	11.8
500	31	5,758	-13.0	-28.1	27	13.4
450	31	6,548	-18.7	-32.3	27	13.8
400	31	7,421	-25.3	-37.8	27	14.6
350	31	8,378	-32.4	-43.3	26	16.1
300	31	9,446	-40.7	-47.2	26	16.9
250	31	10,664	-49.5		26	18.4
200	31	12,099	-57.0		26	19.1
175	31	12,939	-59.5		26	18.7
150	31	13,898	-62.1		27	18.2
125	31	15,016	-65.0		27	14.5
100	31	16,371	-65.9		27	11.0
80	31	17,731	-63.8		26	8.3
70	31	18,552	-61.8		26	6.1
60	31	19,511	-59.1		25	4.4
50	31	20,658	-57.7		25	3.7
40	31	22,069	-56.6		26	3.9
30	31	23,900	-54.8		28	4.6
25	31	25,070	-53.2		28	6.4
20	30	26,512	-51.8		27	8.2
15	29	28,391	-49.0		27	9.8
10	28	31,077	-44.2		27	12.7
7	21	33,482	-40.0		27	16.4
5	11	35,756	-36.5			

NOME, ALASKA 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	30	5	-3.5	-8.9	04	1.9
1000	30	42			02	1.9
950	30	450	-3.6	-8.2	04	2.0
900	30	875	-5.8	-10.6	04	.6
850	30	1,321	-7.8	-14.0	36	.3
800	30	1,791	-10.1	-17.4	29	.8
750	30	2,289	-12.4	-20.9	30	1.4
700	30	2,811	-15.1	-24.9	28	1.6
650	30	3,369	-18.5	-28.6	28	2.1
600	30	3,962	-22.1	-31.4	27	3.1
550	30	4,592	-26.1	-35.3	26	3.4
500	30	5,281	-30.0	-39.3	25	4.0
450	30	6,019	-34.7	-40.6	25	4.5
400	30	6,839	-39.9	-43.9	25	4.9
350	30	7,740	-45.6		25	5.4
300	30	8,756	-50.9		25	6.2
250	30	9,932	-54.7		25	6.6
200	30	11,356	-54.8		28	7.1
175	30	12,211	-54.2		28	6.5
150	30	13,199	-54.1		27	5.6
125	30	14,370	-53.9		26	5.7
100	30	15,802	-54.2		26	7.3
80	30	17,231	-54.5		25	7.9
70	30	18,084	-54.9		26	9.5
60	30	19,070	-55.2		25	9.4
50	29	20,226	-55.5		25	11.4
40	29	21,647	-55.8		26	13.5
30	28	23,485	-56.0		26	16.7
25	28	24,644	-55.9		26	19.1
20	27	26,065	-56.0		26	22.2
15	24	27,909	-55.0		26	25.6
10	6	30,449	-55.9			

* NORTH PLATTE, NEBR. 918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	848	[illegible]	[illegible]	35	1.1
1000	31	[illegible]				
950	31	568				
900	31	1,010	7.6	-.7	34	3.1
850	31	1,483	9.6	-3.4	33	5.5
800	31	1,985	7.5	-6.0	33	7.6
750	31	2,509	4.6	-8.4	31	9.2
700	31	3,073	1.4	-11.1	31	10.7
650	31	3,663	-2.3	-13.6	31	11.7
600	31	4,298	-6.2	-18.3	30	12.0
550	31	4,969	-10.5	-22.5	30	12.8
500	31	5,700	-15.5	-27.5	30	13.2
450	31	6,483	-20.6	-33.1	29	14.2
400	31	7,350	-26.6	-39.9	30	15.0
350	31	8,301	-33.8	-45.5	29	15.8
300	31	9,363	-41.9	-48.5	29	16.5
250	31	10,576	-50.4		29	18.5
200	31	12,005	-57.4		30	20.6
175	31	12,846	-59.0		29	19.0
150	31	13,808	-61.0		29	19.1
125	31	14,935	-63.2		29	16.1
100	31	16,303	-64.1		29	12.9
80	31	17,672	-63.0		30	7.9
70	31	18,496	-61.8		29	5.8
60	31	19,454	-60.4		29	4.8
50	31	20,592	-59.4		28	4.5
40	31	21,994	-57.8		28	4.4
30	30	23,822	-55.5		28	5.0
25	29	24,987	-54.6		28	5.9
20	27	26,423	-53.0		28	6.8
15	27	28,290	-50.2		28	6.6
10	24	30,948	-46.1		26	7.9
7	18	33,359	-41.5		28	12.8
5	6	35,637	-37.7			

* OAKLAND, CALIF. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	[illegible]	13.5	[illegible]	34	.1
1000	31	149	15.2	8.8	35	.3
950	31	589	16.6	3.9	35	3.2
900	31	1,045	16.1	[illegible]	35	3.5
850	31	1,529	14.4	-6.2	32	3.5
800	31	2,038	12.2	-9.5	30	3.4
750	31	2,577	9.8	-11.2	29	3.1
700	31	3,146	6.4	-12.6	29	4.4
650	31	3,746	3.1	-15.9	29	6.5
600	31	4,393	-.8	-19.8	28	8.5
550	31	5,073	-5.4	-23.5	28	9.5
500	31	5,823	-10.5	-27.4	28	11.0
450	31	6,619	-16.4	-32.1	28	13.4
400	31	7,500	-23.2	-36.7	28	15.2
350	31	8,463	-30.5	-43.2	28	16.7
300	30	9,540	-39.2	-48.8	29	16.8
250	31	10,765	-48.4		29	18.9
200	31	12,201	-57.6		30	21.6
175	30	13,035	-61.7		29	21.9
150	30	13,982	-64.6		29	20.0
125	30	15,087	-67.8		29	16.9
100	[illegible]	16,420	-68.9		29	14.4
80	30	17,759	-67.1		29	9.3
70	29	18,564	-65.5		30	6.6
60	29	[illegible]	-63.2		31	4.2
50	29	20,632	-61.2		33	3.3
40	29	22,025	-58.6		33	3.3
30	27	23,841	-56.1		31	3.6
25	27	25,005	-54.5		31	4.8
20	27	26,440	-52.9		30	6.2
15	25	28,304	-50.1		29	7.5
10	22	30,967	-46.6		29	10.9
7	16	33,350	-43.4		29	11.8
5	10	35,650	-38.9			
4	5	37,182	-36.1			

OMAHA, NEBR. 968 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	403	6.9	3.2	28	.5
1000	31	131				
950	31	552	8.8	3.1	30	1.6
900	31	1,004	9.3	-.2	30	5.0
850	31	1,477	7.5	-3.7	31	6.2
800	31	1,975	5.4	-6.4	30	7.3
750	31	2,496	3.2	-9.0	30	8.8
700	31	3,057	.4	-11.7	30	10.4
650	31	3,641	-2.7	-15.4	30	11.4
600	31	4,280	-6.4	-18.0	29	12.5
550	31	4,947	-10.4	-21.8	29	15.2
500	31	5,684	-14.9	-26.5	28	15.7
450	31	6,465	-20.4	-32.5	28	15.0
400	31	7,336	-26.7	-37.9	28	16.5
350	31	8,286	-33.8	-43.9	28	17.1
300	31	9,349	-41.9	-49.1	27	18.6
250	31	10,559	-50.5		27	20.9
200	31	11,988	-57.5		28	22.5
175	31	12,830	-58.6		28	22.5
150	31	13,793	-60.7		28	20.8
125	31	14,924	-61.9		28	16.4
100	30	16,303	-62.8		28	13.4
80	30	17,677	-62.4		28	8.9
70	30	18,503	-61.0		27	7.5
60	29	19,462	-60.0		27	5.6
50	29	20,603	-58.6		27	5.0
40	28	22,013	-57.3		26	5.6
30	27	23,837	-56.1		27	6.7
25	26	25,000	-55.1		27	7.1
20	25	26,432	-53.1		28	7.4
15	23	28,294	-50.7		28	8.8
10	21	30,932	-47.8		28	12.4
7	8	33,335	-43.2			
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+ PAGO PAGO, AMERICAN SAMOA 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	5	27.9	23.1	09	3.7
1000	31	109	26.2	20.7	08	4.1
950	31	566	22.1	16.7	07	4.6
900	31	1,028	19.1	13.2	06	4.5
850	31	1,518	16.7	9.7	06	4.6
800	31	2,033	14.2	5.7	05	4.0
750	31	2,581	11.6	1.5	04	2.2
700	31	3,150	8.8	-3.2	02	1.8
650	31	3,759	5.4	-7.4	34	1.7
600	31	4,410	2.0	-12.0	32	2.5
550	31	5,101	-1.9	-17.2	30	3.5
500	31	5,859	-6.2	-21.7	30	5.5
450	31	6,674	-11.2	-27.1	29	6.9
400	31	7,571	-16.9	-32.4	29	8.0
350	31	8,559	-24.0	-38.7	28	9.5
300	31	9,663	-32.7	-46.5	26	11.3
250	31	10,918	-42.9		25	15.9
200	31	12,382	-54.7		25	19.4
175	31	13,223	-61.3		25	19.8
150	31	14,163	-67.9		26	18.0
125	31	15,239	-74.8		26	16.4
100	31	16,525	-76.6		28	11.9
80	31	17,817	-73.6		28	8.9
70	30	18,601	-70.7		28	4.9
60	29	19,525	-66.4		28	.5
50	28	20,645	-61.2		09	3.7
40	26	22,046	-56.8		08	7.6
30	23	23,882	-53.5		08	10.9
25	18	25,062	-51.7		09	12.8
20	13	26,519	-48.3		09	13.0

* PEORIA, ILL. 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	200	7.8	4.1	20	.8
1000	31	136				
950	31	560	8.9	3.3	25	4.6
900	31	1,008	7.8	.7	26	7.2
850	31	1,478	5.7	-2.3	27	8.5
800	31	1,974	4.2	-8.4	27	8.6
750	31	2,496	2.0	-10.2	27	9.2
700	31	3,051	-.9	-12.4	26	10.7
650	31	3,636	-3.5	-16.3	27	11.9
600	31	4,270	-7.0	-19.8	27	12.4
550	31	4,939	-10.9	-24.8	27	12.9
500	31	5,672	-15.7	-29.3	27	13.5
450	31	6,453	-21.1	-33.8	28	16.3
400	31	7,318	-27.2	-40.1	28	18.6
350	31	8,266	-34.3	-45.0	27	18.6
300	31	9,328	-42.1	-48.4	27	20.1
250	31	10,539	-50.5		27	22.4
200	31	11,969	-57.1		27	23.3
175	30	12,809	-59.2		27	22.4
150	30	13,773	-60.0		27	19.9
125	30	14,904	-62.8		27	14.8
100	30	16,275	-63.0		27	12.2
80	30	17,651	-61.8		27	8.5
70	30	18,478	-60.7		27	7.0
60	30	19,441	-59.3		27	5.8
50	29	20,588	-57.7		25	6.1
40	29	21,999	-56.9		26	7.2
30	29	23,826	-55.6		27	8.0
25	29	24,989	-54.7		27	7.5
20	28	26,422	-53.0		27	7.0
15	27	28,291	-49.8		28	8.0
10	26	30,972	-45.1		27	10.3
7	21	33,391	-41.0		27	14.6
5	9	35,627	-37.9			

* PITTSBURGH, PA. 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	359	7.2	4.2	22	1.5
1000	31	159				
950	31	587	9.3	3.4	23	4.3
900	31	1,031	7.7	.1	25	6.6
850	31	1,501	5.6	-4.8	26	7.0
800	31	1,995	3.7	-7.3	26	8.4
750	31	2,515	1.9	-11.2	26	9.7
700	31	3,072	-.5	-13.3	26	10.8
650	31	3,659	-3.5	-16.7	26	10.2
600	31	4,290	-6.8	-21.4	26	11.5
550	31	4,961	-10.8	-25.6	26	13.5
500	31	5,691	-15.3	-29.9	26	15.1
450	31	6,474	-20.5	-33.4	26	16.6
400	31	7,341	-26.5	-39.1	27	17.2
350	31	8,292	-33.6	-43.9	27	19.4
300	31	9,354	-41.7	-49.3	27	21.3
250	31	10,568	-49.7		27	22.1
200	31	12,004	-56.0		27	21.9
175	31	12,849	-58.2		27	20.8
150	31	13,814	-60.4		27	19.3
125	30	14,943	-62.2		27	16.0
100	30	16,318	-62.8		26	12.1
80	30	17,699	-60.8		26	9.9
70	30	18,530	-59.7		25	8.0
60	30	19,495	-58.6		26	6.7
50	30	20,643	-57.7		25	7.0
40	30	22,051	-57.1		26	6.8
30	29	23,878	-55.7		27	6.8
25	29	25,041	-54.5		27	6.5
20	29	26,475	-52.6		28	6.1
15	28	28,348	-49.3		27	6.6
10	28	31,031	-44.9		27	8.8
7	22	33,441	-41.2		27	12.6
5	11	35,699	-38.6			

+ PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	39	28.7	24.1	06	.7
1000	31	83	28.0	23.1	08	.5
950	31	529	24.1	18.6	17	1.1
900	31	1,009	21.0	15.5	15	2.0
850	31	1,503	18.3	11.8	14	2.1
800	31	2,021	15.7	8.3	12	2.0
750	31	2,565	13.0	4.7	11	2.7
700	31	3,145	9.9	1.1	10	3.6
650	31	3,754	6.5	-3.1	10	4.4
600	31	4,412	2.7	-7.0	09	4.8
550	31	5,107	-1.1	-11.7	09	4.7
500	31	5,867	-5.1	-15.7	09	5.1
450	31	6,688	-9.8	-20.8	08	5.7
400	31	7,590	-15.3	-27.5	08	5.7
350	31	8,586	-22.0	-34.7	08	5.8
300	31	9,702	-30.5	-43.3	07	5.0
250	31	10,971	-40.8	-50.8	06	5.7
200	31	12,450	-53.2		04	6.5
175	31	13,297	-60.2		05	5.9
150	31	14,242	-67.6		06	5.1
125	31	15,320	-74.6		06	5.5
100	31	16,600	-78.4		07	5.6
80	30	17,883	-74.4		08	5.1
70	30	18,668	-70.2		08	1.8
60	30	19,591	-66.4		20	.5
50	27	20,701	-63.9		10	.9
40	26	22,079	-60.7		08	6.0
30	23	23,888	-56.6		09	17.2
25	23	25,051	-53.8		09	26.0
20	23	26,496	-50.0		09	32.8
15	20	28,395	-45.3		09	39.4
10	10	31,153	-38.5			
7	5	33,624	-33.0			

PORTLAND, MAINE 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	20	6.8	4.2	26	1.3
1000	31	155	8.4	4.4	27	2.2
950	31	577	7.8	2.4	26	4.9
900	31	1,024	5.7	-.5	26	5.3
850	31	1,491	4.1	-4.6	26	6.5
800	31	1,982	2.5	-9.1	26	8.8
750	31	2,499	1.2	-11.8	25	9.8
700	31	3,056	-1.4	-15.2	25	11.3
650	31	3,639	-3.7	-19.9	25	14.0
600	31	4,273	-7.2	-22.6	25	15.1
550	31	4,938	-11.2	-25.3	25	15.8
500	31	5,672	-15.6	-29.3	25	18.3
450	31	6,451	-21.0	-33.5	25	19.2
400	31	7,319	-27.1	-38.7	25	20.5
350	31	8,267	-33.9	-45.0	25	23.3
300	31	9,330	-41.8	-49.4	25	23.8
250	31	10,540	-50.7		26	24.3
200	31	11,973	-56.1		26	23.9
175	31	12,818	-58.0		26	22.8
150	31	13,784	-59.8		26	23.8
125	31	14,919	-61.3		26	19.1
100	31	16,301	-61.6		26	14.9
80	31	17,687	-60.2		26	11.4
70	31	18,521	-59.3		25	8.4
60	31	19,488	-58.7		25	7.7
50	31	20,636	-58.1		26	7.0
40	31	22,042	-57.5		27	5.9
30	31	23,862	-56.7		28	5.8
25	31	25,021	-55.0		29	5.1
20	31	26,455	-52.5		27	5.4
15	30	28,324	-49.9		27	5.7
10	27	31,001	-46.0		26	9.6
7	21	33,423	-41.1		26	14.5
5	8	35,732	-37.5			

* QUILLAYUTE, WASH. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	58	10.1	9.5	15	2.0
1000	31	119			17	2.5
950	31	543	8.7	5.8	19	7.9
900	31	991	6.2	2.8	21	9.9
850	31	1,458	3.8	-.9	22	10.4
800	31	1,949	1.2	-5.7	23	11.5
750	31	2,465	-1.1	-10.9	23	12.9
700	31	3,014	-3.9	-14.1	23	14.2
650	31	3,595	-6.7	-15.8	24	16.7
600	31	4,217	-10.3	-20.2	24	19.2
550	31	4,878	-14.2	-24.2	25	20.5
500	31	5,599	-18.7	-28.2	25	21.8
450	31	6,370	-23.6	-32.9	25	22.9
400	31	7,229	-29.5	-38.5	25	23.9
350	31	8,169	-36.5	-42.3	25	26.4
300	31	9,220	-44.2	-45.7	26	29.0
250	31	10,423	-51.3		25	30.4
200	30	11,857	-56.8		25	29.5
175	29	12,691	-58.7		25	28.4
150	29	13,658	-58.7		25	26.5
125	28	14,800	-59.5		25	21.1
100	26	16,183	-58.6		26	15.8
80	24	17,583	-58.9		26	11.7
70	23	18,421	-58.9		26	10.0
60	21	19,390	-57.8		26	10.4
50	21	20,542	-57.5		27	8.9
40	19	21,948	-57.3		27	5.3
30	19	23,771	-56.1		28	5.8
25	19	24,932	-55.5		28	5.2
20	18	26,353	-54.5		28	5.2
15	17	28,201	-53.0		28	5.7
10	14	30,840	-49.1		30	8.4
7	8	33,193	-47.6			

RAPID CITY, S. DAK. 904 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	966	5.9	-3.4	30	1.5
1000	31	130				
950	31	555				
900	31	1,002			31	1.9
850	31	1,473	8.2	-3.6	30	7.2
800	31	1,972	5.9	-6.0	30	9.4
750	31	2,492	2.6	-8.3	30	11.1
700	31	3,053	-.5	-11.6	30	13.2
650	31	3,635	-3.7	-15.4	30	13.1
600	31	4,270	-7.5	-18.7	30	14.3
550	31	4,935	-11.8	-22.2	30	16.4
500	31	5,666	-16.6	-26.8	29	16.7
450	31	6,439	-22.3	-32.0	29	18.0
400	31	7,305	-28.2	-38.6	29	19.8
350	31	8,249	-35.6	-43.4	29	21.0
300	31	9,305	-43.2		29	21.1
250	31	10,511	-51.3		29	22.8
200	31	11,937	-57.5		29	24.1
175	31	12,778	-59.5		29	23.0
150	31	13,740	-60.7		29	21.3
125	31	14,870	-61.8		29	17.2
100	31	16,249	-62.1		29	13.8
80	31	17,628	-62.5		29	10.5
70	30	18,452	-60.9		29	6.3
60	30	19,410	-60.9		30	4.3
50	29	20,541	-59.9		30	4.9
40	29	21,938	-58.8		29	4.0
30	29	23,753	-56.8		30	4.6
25	26	24,913	-55.5		30	4.3
20	25	26,344	-54.1		29	4.9
15	22	28,183	-52.3		29	5.9
10	14	30,838	-48.2		29	11.2
7	6	33,217	-45.9			

ST CLOUD, MINN. 976 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	316	3.3	.1	29	1.1
1000	31	121				
950	31	544	5.6	.1	30	2.0
900	31	981	4.3	-2.4	30	4.4
850	31	1,445	3.1	-6.3	31	6.4
800	31	1,935	1.5	-10.1	30	7.7
750	31	2,450	-.9	-12.4	30	9.4
700	31	3,002	-3.3	-15.0	30	10.8
650	31	3,580	-6.4	-16.8	29	12.0
600	31	4,208	-10.0	-20.1	29	13.7
550	31	4,868	-14.0	-25.1	29	16.0
500	31	5,592	-18.3	-29.7	29	17.0
450	31	6,364	-23.5	-35.0	29	18.7
400	31	7,224	-29.1	-39.6	29	21.7
350	31	8,165	-36.1	-44.7	28	22.8
300	31	9,219	-43.5		28	25.5
250	31	10,424	-51.2		28	26.2
200	31	11,857	-55.7		28	24.3
175	31	12,705	-56.8		28	23.3
150	31	13,680	-57.8		28	20.8
125	31	14,826	-59.0		28	17.5
100	31	16,225	-59.6		28	12.7
80	31	17,619	-59.5		28	9.9
70	31	18,455	-59.2		29	7.2
60	31	19,422	-58.4		29	5.8
50	31	20,569	-58.1		29	5.0
40	31	21,975	-57.6		28	4.8
30	30	23,797	-55.9		28	4.7
25	29	24,961	-54.4		28	5.2
20	29	26,394	-52.9		28	4.7
15	29	28,258	-50.7		29	6.6
10	26	30,920	-47.1		28	8.2
7	17	33,321	-43.4		27	14.0
5	6	35,544	-42.2			

ST PAUL IS., ALASKA 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	25	10	2.2	-2.5	03	2.5
1000	25	38			33	3.3
950	25	452	-.3	-3.2	03	3.2
900	25	882	-3.1	-6.3	03	2.6
850	25	1,333	-5.9	-9.2	03	[illegible]
800	25	1,806	-8.9	-15.0	36	1.9
750	25	2,305	-11.3	-20.2	34	3.0
700	25	2,831	-13.9	-24.3	33	3.2
650	25	3,390	-16.8	-26.6	32	4.1
600	25	3,990	-20.0	-30.3	32	5.4
550	25	4,628	-23.7	-34.6	[illegible]	[illegible]
500	25	5,322	-27.9	-37.7	31	7.0
450	25	6,068	-33.1	-40.2	31	8.4
400	25	6,892	-38.8	-43.9	30	8.8
350	25	7,797	-45.1		30	9.7
300	25	8,811	-51.6		29	9.1
250	25	9,983	-55.3		29	9.8
200	25	[illegible]	-54.3		29	11.3
175	25	12,264	-53.8		28	10.7
150	25	13,255	-53.3		28	11.3
125	25	14,428	-53.5		28	11.6
100	25	15,864	-53.3		27	11.3
80	25	[illegible]	-53.0		27	11.4
70	25	18,162	-52.9		27	11.3
60	25	19,155	-53.3		27	12.4
50	25	20,327	-53.9		26	12.0
40	25	21,759	-54.1		27	13.8
30	25	23,607	-53.5		26	14.0
25	25	24,780	-53.1		27	15.9
20	24	[illegible]	-53.1		26	16.4
15	19	28,073	-52.2		26	19.4
10	14	30,709	-51.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

SALEM, OREG. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	8.8	7.2	18	2.8
1000	31	151			19	2.8
950	31	580	10.7	5.6	21	6.3
900	31	1,028	8.8	2.3	22	7.8
850	31	1,500	6.8	-1.2	23	9.4
800	31	1,996	4.4	-4.5	24	10.5
750	31	2,517	1.9	-8.5	25	11.6
700	31	3,072	-1.1	-11.2	25	13.5
650	31	3,657	-4.1	-17.2	26	15.3
600	31	4,287	-7.6	-20.3	27	17.5
550	30	4,956	-11.5	-24.4	27	19.2
500	30	5,687	-15.9	-28.2	27	21.6
450	30	6,463	-21.6	-31.5	27	24.2
400	30	7,330	-27.5	-38.4	27	27.4
350	30	8,277	-34.2	-42.9	27	30.1
300	30	9,338	-42.2	-48.9	27	30.3
250	30	10,548	-50.4		27	30.6
200	29	11,971	-57.3		27	30.2
175	29	12,810	-60.1		27	27.5
150	29	13,768	-61.7		27	28.0
125	29	14,892	-63.1		27	25.4
100	29	16,263	-63.3		27	18.4
80	28	17,641	-61.8		27	14.3
70	26	18,471	-60.9		27	10.1
60	26	19,430	-60.2		27	9.2
50	25	20,570	-59.3		29	6.7
40	25	21,969	-58.4		29	5.4
30	24	23,789	-56.6		30	4.2
25	23	24,945	-55.9		31	4.4
20	22	26,375	-54.1		32	4.9
15	21	28,230	-51.5		31	6.0
10	12	30,911	-47.9		30	8.2
7						
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SALT LAKE CITY, UTAH 875 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	6.2	-1.0	15	2.0
1000	31	176				
950	31	602				
900	31	1,058				
850	31	1,528	10.8	-2.2	16	2.4
800	31	2,033	9.0	-5.0	22	2.1
750	31	2,562	5.6	-7.9	26	4.0
700	31	3,125	2.2	-10.9	28	7.4
650	31	3,718	-1.3	-12.7	28	10.1
600	31	4,354	-5.1	-16.0	29	11.6
550	31	5,027	-9.7	-20.6	29	13.5
500	31	5,761	-14.1	-27.0	29	14.5
450	31	6,550	-19.5	-31.2	29	17.9
400	31	7,420	-25.1	-36.5	30	19.4
350	31	8,375	-32.7	-42.8	30	21.3
300	31	9,441	-41.3	-47.4	30	22.7
250	31	10,655	-50.4		30	23.7
200	31	12,083	-58.0		30	21.5
175	31	12,919	-60.9		29	21.1
150	31	13,872	-62.9		29	20.7
125	31	14,987	-65.3		29	18.7
100	30	16,335	-66.5		29	14.0
80	30	17,690	-65.0		29	9.8
70	29	18,511	-63.7		30	7.0
60	28	19,462	-62.2		30	4.8
50	28	20,594	-60.6		31	4.0
40	28	21,990	-58.2		30	4.1
30	27	23,807	-56.2		30	4.6
25	27	24,969	-54.5		30	4.6
20	27	26,402	-52.8		30	6.2
15	23	28,264	-50.5		29	7.8
10	13	30,896	-48.2			
7	6	33,281	-44.8			
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SAN DIEGO, CALIF. 1000 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	15.0	9.5	03	.8
1000	31	119			03	1.3
950	31	560	19.5	5.8	04	1.3
900	31	1,026	20.2	-.5	02	1.7
850	31	1,517	18.3	-4.0	04	1.5
800	31	2,033	15.6	-6.3	03	.7
750	31	2,574	12.6	-8.9	29	.1
700	31	3,153	9.5	-12.0	36	.3
650	31	3,760	5.9	-16.1	35	2.3
600	31	4,415	1.9	-19.7	34	4.3
550	31	5,100	-3.0	-22.9	34	5.3
500	31	5,860	-8.3	-27.3	33	6.7
450	31	6,661	-14.4	-31.7	33	7.7
400	31	7,551	-21.4	-37.7	33	8.3
350	31	8,521	-29.2	-43.3	32	9.7
300	31	9,602	-38.0	-50.2	32	10.9
250	31	10,833	-47.4		32	12.8
200	31	12,278	-56.6		32	14.0
175	31	13,116	-60.9		31	14.3
150	31	14,065	-64.8		31	13.2
125	31	15,166	-68.8		30	12.1
100	31	16,491	-72.0		31	8.5
80	31	17,807	-69.8		32	6.5
70	30	18,608	-67.7		34	5.0
60	30	19,542	-64.1		01	3.1
50	30	20,666	-61.1		36	1.8
40	30	22,065	-57.1		31	.6
30	30	23,898	-53.7		26	2.6
25	29	25,073	-51.5		28	5.2
20	29	26,526	-50.1		28	7.2
15	29	28,411	-48.6		27	7.7
10	25	31,095	-46.2		29	9.9
7	11	33,474	-42.5			
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* SAN JUAN, P. R. 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	25.0	20.8	18	1.5
1000	31	126	24.8	20.4	13	3.3
950	31	575	22.3	17.8	10	4.0
900	31	1,045	19.7	14.1	10	5.2
850	31	1,536	16.9	10.7	10	5.0
800	31	2,051	14.1	7.3	10	4.1
750	31	2,586	11.5	2.4	10	3.9
700	31	3,168	8.5	-3.2	10	3.2
650	31	3,767	4.8	-8.4	10	3.4
600	31	4,425	1.0	-13.7	09	3.1
550	31	5,111	-3.2	-17.5	09	2.3
500	31	5,867	-7.7	-22.8	09	2.8
450	31	6,673	-12.6	-28.0	07	2.5
400	31	7,569	-18.4	-34.0	06	2.4
350	31	8,551	-25.6	-40.7	03	2.9
300	31	9,650	-34.1	-48.3	35	3.2
250	31	10,899	-44.1		35	3.4
200	30	12,358	-55.6		33	4.4
175	30	13,196	-62.0		32	6.7
150	30	14,134	-68.2		32	8.1
125	30	15,214	-73.2		32	6.8
100	30	16,509	-75.6		33	3.3
80	29	17,809	-72.1		05	2.6
70	29	18,598	-69.4		08	3.9
60	29	19,527	-65.4		07	6.4
50	29	20,645	-61.9		08	9.8
40	29	22,037	-58.6		09	12.6
30	28	23,863	-54.0		09	16.5
25	27	25,038	-51.5		09	19.3
20	27	26,496	-48.3		09	22.6
15	26	28,409	-43.9		09	21.6
10	20	31,140	-40.7		08	22.7
7	14	33,562	-38.8		09	19.7
5	7	35,878	-33.2			

* SAULT STE MARIE, MICH. 987 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	221	3.8	2.5	12	.8
1000	31	117				
950	31	533	4.2	.8	21	2.2
900	31	975	2.6	-.4	25	5.3
850	31	1,436	.9	-2.6	26	6.7
800	31	1,923	-.2	-6.4	26	8.1
750	31	2,436	-1.8	-10.5	26	8.6
700	31	2,985	-4.3	-12.8	25	10.0
650	31	3,564	-7.2	-16.6	25	12.0
600	31	4,187	-10.9	-19.7	25	12.3
550	31	4,845	-14.8	-23.7	26	14.0
500	31	5,566	-19.2	-28.6	26	15.6
450	31	6,336	-24.1	-34.2	26	17.1
400	31	7,193	-29.9	-39.3	27	18.0
350	31	8,132	-36.3	-44.4	26	20.0
300	31	9,184	-43.6		26	22.7
250	31	10,390	-50.4		26	24.7
200	31	11,829	-54.9		27	24.1
175	31	12,681	-55.4		27	23.0
150	31	13,661	-56.4		27	19.3
125	31	14,816	-57.2		27	16.0
100	31	16,223	-58.1		27	12.3
80	31	17,627	-58.1		27	9.0
70	30	18,467	-58.0		27	7.2
60	30	19,439	-57.4		27	6.5
50	30	20,592	-57.0		27	6.8
40	30	22,005	-56.3		27	5.7
30	30	23,836	-55.1		27	5.6
25	30	25,002	-54.1		27	5.3
20	29	26,440	-52.9		28	4.8
15	29	28,304	-50.8		28	4.9
10	26	30,976	-47.0		28	6.4
7	15	33,346	-44.1		26	11.2
5	7	35,657	-38.2			

SHEMYA, ALASKA 1001 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	38	4.9	2.8	21	1.8
1000	30	46			19	1.2
950	30	463	1.9	-.5	31	1.9
900	30	896	-.8	-3.3	30	2.3
850	30	1,351	-3.2	-7.4	28	3.1
800	30	1,829	-5.5	-11.3	28	4.1
750	30	2,331	-8.1	-15.0	29	4.7
700	30	2,866	-11.2	-19.8	28	5.3
650	30	3,429	-14.4	-24.4	28	5.2
600	30	4,035	-18.2	-28.0	28	6.4
550	30	4,676	-22.5	-31.9	28	7.3
500	30	5,372	-27.4	-37.8	28	7.7
450	30	6,119	-32.6	-43.4	29	9.9
400	30	6,943	-38.2	-46.7	29	11.9
350	30	7,851	-43.8	-46.0	29	13.7
300	30	8,874	-49.4		29	13.0
250	30	10,059	-52.5		28	15.1
200	30	11,499	-53.2		28	19.5
175	30	12,359	-53.1		28	19.1
150	30	13,351	-53.5		27	17.6
125	30	14,521	-54.2		28	18.0
100	30	15,950	-54.3		27	17.2
80	30	17,380	-54.5		28	16.3
70	30	18,233	-54.6		27	15.4
60	30	19,221	-54.8		27	14.7
50	30	20,385	-55.1		27	15.0
40	29	21,808	-55.1		27	13.7
30	26	23,671	-54.6		27	12.8
25	26	24,839	-54.1		26	13.5
20	25	26,267	-53.2		27	14.1
15	23	28,114	-51.9		27	15.4
10	19	30,763	-49.6		27	18.4
7	9	33,113	-47.9			
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* SHREVEPORT, LA. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	12.4	9.5	18	1.5
1000	31	150	14.5	9.5	19	2.1
950	31	590	15.5	6.5	21	4.5
900	31	1,044	13.8	2.7	22	4.1
850	31	1,524	11.8	-1.6	25	4.2
800	31	2,029	9.5	-6.4	26	4.8
750	31	2,564	6.8	-10.4	27	5.7
700	31	3,127	4.0	-13.5	28	5.9
650	31	3,726	.7	-16.8	27	6.1
600	31	4,365	-3.0	-21.1	27	7.1
550	31	5,046	-7.2	-24.6	27	8.7
500	31	5,786	-11.9	-29.0	27	9.4
450	31	6,579	-17.7	-33.5	27	10.2
400	31	7,456	-24.4	-39.2	26	10.7
350	31	8,415	-31.5	-45.0	28	11.3
300	31	9,488	-39.6	-50.0	28	11.6
250	31	10,711	-48.6		28	15.6
200	31	12,148	-57.3		28	20.3
175	31	12,986	-60.4		28	20.9
150	31	13,938	-63.6		28	19.9
125	31	15,047	-67.2		28	14.6
100	31	16,384	-69.2		28	11.1
80	31	17,722	-66.6		27	6.3
70	30	18,532	-63.2		27	4.3
60	29	19,484	-60.9		26	2.6
50	28	20,623	-58.5		25	2.0
40	28	22,033	-56.3		21	1.1
30	27	23,873	-53.2		25	.5
25	27	25,052	-51.7		30	1.1
20	27	26,501	-50.8		29	5.1
15	27	28,383	-48.7		28	9.1
10	25	31,078	-43.6		27	11.1
7	20	33,516	-39.2		27	14.9
5	7	35,834	-36.2			

SPOKANE, WASH. 933 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	717	5.5	1.9	18	2.7
1000	31	142				
950	31	566				
900	31	1,011	8.1	.1	21	6.2
850	31	1,482	6.1	-3.7	23	7.8
800	31	1,976	3.1	-6.6	24	8.9
750	31	2,497	-.1	-8.4	25	10.4
700	31	3,045	-3.5	-11.5	26	11.8
650	31	3,623	-6.8	-14.6	26	13.4
600	31	4,249	-10.1	-18.7	26	15.5
550	31	4,910	-14.0	-22.8	26	18.2
500	31	5,632	-18.5	-26.8	27	20.3
450	31	6,402	-23.7	-32.0	27	23.1
400	31	7,261	-29.6	-37.1	27	25.7
350	31	8,200	-36.2	-41.8	27	29.3
300	31	9,253	-43.5		28	30.7
250	31	10,458	-51.1		28	33.7
200	31	11,889	-56.8		28	32.4
175	31	12,732	-58.1		28	30.7
150	31	13,702	-58.6		28	27.0
125	31	14,845	-59.6		28	22.7
100	29	16,235	-59.7		27	18.7
80	29	17,630	-59.5		27	12.6
70	29	18,465	-59.1		28	10.5
60	28	19,433	-58.7		27	7.9
50	27	20,582	-58.1		28	6.0
40	25	21,989	-57.4		28	5.8
30	24	23,809	-56.3		29	5.3
25	24	24,972	-54.6		31	5.5
20	22	26,402	-53.6		30	5.6
15	20	28,263	-52.1		30	4.5
10	15	30,913	-48.7		29	6.9
7	7	33,280	-46.8			
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SWAN ISLAND, W. I. 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	26.1	23.4	06	3.3
1000	31	109	25.6	22.8	06	3.9
950	31	564	22.6	20.2	08	5.2
900	31	1,031	19.9	16.1	09	5.6
850	31	1,523	17.1	12.6	10	5.8
800	31	2,040	14.3	8.7	10	5.6
750	31	2,589	11.5	3.5	10	5.4
700	31	3,158	8.6	-1.3	10	5.0
650	31	3,771	5.6	-5.9	10	4.7
600	31	4,419	1.8	-9.8	10	5.0
550	31	5,109	-2.3	-14.4	11	4.5
500	31	5,867	-6.8	-18.9	11	3.5
450	31	6,683	-11.8	-23.4	12	2.4
400	31	7,576	-17.6	-29.0	16	.2
350	31	8,562	-24.4	-35.3	29	1.3
300	31	9,667	-32.7	-43.4	29	3.3
250	31	10,923	-43.0		28	6.1
200	31	12,387	-55.3		28	7.6
175	31	13,226	-62.1		28	8.1
150	31	14,163	-69.1		28	7.8
125	31	15,235	-74.9		29	6.1
100	30	16,519	-77.5		31	2.1
80	30	17,809	-73.6		08	2.9
70	30	18,596	-70.0		09	5.0
60	30	19,523	-66.0		09	6.4
50	30	20,638	-62.4		09	8.8
40	29	22,032	-57.7		09	12.0
30	27	23,860	-54.4		09	17.2
25	27	25,034	-51.8		09	19.9
20	24	26,495	-48.4		09	23.6
15	23	28,407	-44.9		09	26.1
10	21	31,127	-41.9		09	27.1
7	13	33,568	-38.7		09	31.8
5	6	35,890	-34.7			

TAMPA, FLA. 1017 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	18.3	15.8	04	3.1
1000	31	151	20.0	15.6	05	4.7
950	31	594	18.7	12.8	07	4.4
900	31	1,057	16.0	8.9	10	1.2
850	31	1,542	13.9	4.1	19	1.5
800	31	2,052	11.9	-1.4	22	1.8
750	31	2,592	9.3	-6.4	24	1.7
700	31	3,160	6.8	-11.4	25	2.4
650	31	3,764	3.6	-14.4	26	2.8
600	31	4,411	-.3	-17.5	27	3.0
550	31	5,097	-4.7	-21.6	26	3.3
500	31	5,846	-9.7	-26.1	27	4.6
450	31	6,651	-15.4	-31.2	27	6.7
400	31	7,532	-21.9	-35.2	27	9.4
350	30	8,501	-28.8	-41.8	27	11.8
300	30	9,586	-37.0	-47.8	27	15.5
250	30	10,823	-46.1		27	19.0
200	30	12,274	-56.3		27	22.5
175	30	13,113	-60.9		27	24.5
150	30	14,060	-65.3		27	21.3
125	30	15,158	-69.6		27	16.1
100	30	16,481	-70.7		26	10.5
80	30	17,809	-68.4		26	4.4
70	30	18,614	-66.1		23	1.1
60	30	19,555	-63.1		11	1.6
50	30	20,686	-59.7		08	3.7
40	30	22,091	-56.8		09	4.5
30	30	23,929	-52.9		08	5.7
25	30	25,111	-50.8		07	5.5
20	30	26,573	-48.6		06	4.4
15	28	28,474	-46.0		03	2.0
10	25	31,200	-41.5		28	4.9
7	8	33,634	-38.9			
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TOPEKA, KANS. 984 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	269	8.8	5.7	35	.1
1000	31	135				
950	31	560	10.5	4.4	22	2.3
900	31	1,014	10.7	2.1	27	4.7
850	31	1,489	9.2	-1.4	29	5.5
800	31	1,990	6.9	-4.0	29	7.2
750	31	2,519	4.7	-6.9	28	8.0
700	31	3,079	1.5	-10.8	28	8.6
650	31	3,667	-1.7	-13.8	28	9.4
600	31	4,306	-5.4	-17.3	28	10.9
550	31	4,980	-9.2	-22.4	28	12.0
500	31	5,716	-13.9	-26.3	28	13.5
450	31	6,504	-19.6	-31.7	28	13.7
400	31	7,374	-26.1	-37.4	28	15.0
350	31	8,326	-33.5	-44.3	27	16.4
300	31	9,390	-42.0	-50.7	27	16.5
250	31	10,599	-51.0		27	16.8
200	31	12,027	-57.8		27	17.3
175	31	12,865	-59.9		28	18.9
150	31	13,825	-61.5		28	17.2
125	31	14,948	-63.7		28	14.6
100	31	16,310	-65.0		29	10.8
80	31	17,674	-63.5		28	5.9
70	31	18,496	-61.7		28	5.2
60	31	19,457	-59.7		27	5.1
50	31	20,602	-58.1		26	4.8
40	31	22,013	-56.4		27	5.4
30	30	23,844	-55.0		26	6.3
25	28	25,008	-54.1		27	7.8
20	27	26,443	-52.4		27	8.4
15	26	28,312	-49.8		28	10.0
10	21	30,976	-46.6		28	13.4
7	7	33,340	-44.6			
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\+ TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	2	28.6	24.6	17	1.1
1000	31	92	27.4	22.9	17	1.4
950	31	542	23.2	18.0	16	2.0
900	31	1,015	20.2	14.8	16	2.5
850	31	1,508	17.4	10.8	15	2.9
800	31	2,024	14.8	7.3	14	2.7
750	31	2,571	12.2	2.9	13	2.7
700	31	3,145	9.2	-1.1	12	2.9
650	31	3,756	5.7	-5.0	11	3.7
600	31	4,408	2.1	-8.2	11	4.6
550	31	5,102	-1.6	-13.2	10	4.8
500	31	5,861	-5.7	-17.5	10	5.1
450	31	6,681	-10.5	-23.0	09	5.5
400	31	7,580	-16.0	-29.4	09	5.6
350	31	8,574	-22.7	-36.3	09	5.5
300	31	9,687	-31.0	-44.8	08	5.7
250	31	10,954	-41.2		08	4.8
200	31	12,431	-53.7		06	6.3
175	31	13,276	-60.8		06	6.6
150	31	14,219	-68.3		06	7.2
125	31	15,293	-75.7		07	7.1
100	31	16,568	-78.9		08	7.9
80	31	17,848	-75.0		08	6.0
70	31	18,630	-70.6		08	3.0
60	31	19,552	-67.0		11	1.2
50	30	20,662	-63.8		10	2.2
40	30	22,040	-60.2		08	6.8
30	30	23,851	-56.5		09	16.6
25	29	25,018	-53.3		09	25.8
20	25	26,465	-49.1		09	32.7
15	19	28,373	-43.9		09	38.0
10	10	31,123	-37.7		09	37.8
7	5	33,555	-34.9			
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* TUCSON, ARIZ. 925 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	789	15.7	4.0	13	3.8
1000	31	123				
950	31	565				
900	31	1,027	20.2	3.7	13	3.4
850	31	1,518	17.9	.8	10	1.6
800	31	2,033	14.4	-2.0	17	.9
750	31	2,574	10.8	-5.7	22	1.4
700	31	3,147	7.2	-9.1	26	1.3
650	31	3,748	3.4	-13.6	29	1.2
600	31	4,397	-.4	-18.3	30	2.5
550	31	5,078	-5.0	-22.1	32	4.3
500	31	5,830	-10.1	-27.0	32	5.7
450	31	6,629	-15.9	-31.5	32	7.3
400	31	7,511	-22.8	-36.8	32	7.7
350	31	8,475	-30.5	-43.2	32	8.6
300	31	9,551	-38.9	-50.1	31	10.0
250	31	10,778	-47.7		31	12.2
200	31	12,221	-56.7		30	14.5
175	31	13,059	-60.8		30	13.6
150	30	14,012	-64.9		29	13.4
125	30	15,112	-68.8		29	12.0
100	30	16,435	-71.9		30	9.9
80	30	17,756	-69.4		32	6.6
70	30	18,558	-66.5		32	4.3
60	29	19,498	-62.8		32	2.1
50	29	20,629	-59.8		30	1.2
40	29	22,033	-56.9		26	2.5
30	29	23,870	-53.5		25	2.8
25	29	25,048	-51.6		27	3.4
20	29	26,502	-50.0		28	5.1
15	29	28,384	-49.5		27	7.7
10	28	31,062	-45.5		29	8.5
7	24	33,445	-41.1		27	9.5
5	15	35,754	-37.2		25	16.2

* VANDENBERG AFB, CALIF. 1004 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	100	12.7	8.0	09	.8
1000	30	133	13.8	8.1	08	.8
950	30	575	19.5	2.7	01	3.3
900	30	1,036	19.6	-1.9	01	2.8
850	30	1,525	17.2	-5.4	35	1.6
800	30	2,040	14.7	-8.1	33	1.8
750	30	2,579	12.0	-10.5	30	1.4
700	30	3,157	9.0	-12.7	29	3.1
650	30	3,762	5.7	-16.1	28	4.1
600	30	4,416	1.5	-19.3	29	5.7
550	30	5,103	-3.2	-23.3	29	6.9
500	30	5,858	-8.7	-28.0	29	8.2
450	30	6,661	-14.9	-32.1	29	10.0
400	30	7,547	-21.8	-38.4	29	11.1
350	30	8,515	-29.5	-44.3	29	12.6
300	30	9,595	-38.4	-51.2	30	12.5
250	30	10,823	-47.9		29	14.8
200	30	12,263	-57.3		29	16.2
175	30	13,098	-61.6		30	15.8
150	30	14,044	-65.6		29	15.6
125	30	15,143	-69.0		29	14.2
100	29	16,469	-71.4		29	10.7
80	29	17,792	-69.2		29	8.0
70	29	18,593	-67.1		31	5.5
60	29	19,528	-64.4		34	4.6
50	29	20,650	-61.6		02	2.7
40	28	22,045	-58.3		36	2.3
30	27	23,871	-54.6		31	2.7
25	27	25,043	-52.4		29	4.5
20	27	26,490	-51.2		28	5.9
15	27	28,365	-49.5		28	7.7
10	25	31,045	-46.1		29	9.3
7	23	33,434	-42.4		28	9.5
5	9	35,718	-38.0			

VICTORIA, TEXAS 1013 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	33	17.0	14.9	03	2.1
1000	31	145	19.1	14.1	04	1.7
950	31	583	17.2	10.9	16	1.5
900	31	1,047	14.9	5.9	18	2.0
850	31	1,530	13.0	1.2	18	2.3
800	31	2,038	10.9	-3.4	21	1.7
750	31	2,569	8.2	-6.3	24	.8
700	31	3,141	5.6	-11.7	27	2.2
650	31	3,737	2.6	-16.1	29	3.1
600	31	4,387	-1.3	-19.2	28	3.6
550	31	5,070	-5.7	-23.1	27	5.2
500	31	5,816	-10.5	-27.5	27	7.0
450	31	6,614	-16.1	-32.2	27	8.3
400	31	7,496	-22.3	-37.2	27	9.7
350	30	8,465	-29.4	-42.9	27	11.9
300	30	9,548	-37.6	-48.5	27	15.4
250	30	10,783	-46.6		27	19.2
200	30	12,231	-56.6		28	24.4
175	30	13,069	-61.4		28	23.5
150	30	14,014	-66.1		27	22.1
125	29	15,102	-70.2		28	16.0
100	28	16,416	-71.7		28	10.9
80	26	17,737	-68.3		28	6.0
70	26	18,543	-65.0		26	2.8
60	26	19,488	-62.5		16	1.5
50	26	20,619	-60.0		14	2.5
40	25	22,026	-56.7		11	2.8
30	25	23,862	-53.4		06	3.1
25	24	25,042	-51.3		07	3.7
20	24	26,496	-49.7		07	2.6
15	23	28,393	-47.3		32	2.5
10	21	31,093	-43.7		28	6.6
7	8	33,471	-40.9			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1967

* WAKE IS., PACIFIC AREA 1014 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	27.1	24.2	09	7.0
1000	31	127	26.2	23.2	09	8.0
950	31	576	22.7	20.0	09	9.0
900	31	1,050	20.0	16.4	09	9.8
850	31	1,542	17.6	12.2	09	9.8
800	31	2,059	15.1	7.8	09	9.2
750	31	2,603	12.5	2.5	09	8.3
700	31	3,182	9.7	-3.1	09	8.7
650	31	3,790	6.2	-7.0	09	8.7
600	31	4,446	2.4	-12.5	09	8.9
550	31	5,139	-1.7	-17.3	09	8.5
500	31	5,897	-6.5	-21.4	09	8.4
450	31	6,708	-11.7	-26.4	09	8.6
400	31	7,606	-17.5	-32.7	09	7.2
350	31	8,593	-24.2	-38.4	08	5.0
300	31	9,698	-32.8	-45.6	07	2.8
250	31	10,954	-42.8		32	.5
200	31	12,422	-54.3		27	3.1
175	31	13,265	-60.8		30	2.3
150	31	14,209	-67.2		04	3.4
125	31	15,292	-73.0		07	7.3
100	26	16,586	-77.4		08	9.0
80	23	17,869	-76.4		08	8.8
70	20	18,641	-71.6		08	7.8
60	19	19,556	-67.7		07	10.0
50	18	20,662	-63.9		09	11.3
40	17	22,043	-59.8		09	14.1
30	17	23,862	-54.1		09	15.3
25	17	25,038	-51.8		09	16.3
20	15	26,487	-49.0		09	19.6
15	13	28,396	-45.4		09	19.9
10	11	31,128	-40.4		08	17.4
7	7	33,588	-37.5			
5	5	35,934	-33.0			

* WALLOPS IS., VA. NASA 1021 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	11.3	8.8	36	.6
1000	31	177	13.4	6.9	02	.8
950	31	607	11.4	4.0	27	1.7
900	31	1,059	9.2	1.5	27	3.0
850	31	1,531	7.4	-3.2	27	4.4
800	31	2,029	5.6	-6.7	26	5.4
750	31	2,555	4.0	-11.6	26	7.2
700	31	3,115	1.7	-14.5	26	8.3
650	31	3,706	-1.2	-17.5	26	9.2
600	31	4,344	-4.2	-20.4	26	10.8
550	31	5,018	-8.5	-25.3	26	11.7
500	31	5,757	-13.3	-30.0	26	12.8
450	31	6,542	-19.0	-35.0	26	14.5
400	31	7,417	-25.6	-39.6	26	15.1
350	31	8,372	-32.8	-45.5	27	15.4
300	31	9,439	-40.8	-49.6	27	15.5
250	31	10,657	-49.6		27	16.7
200	30	12,097	-57.1		27	18.1
175	30	12,937	-59.4		26	18.4
150	30	13,897	-62.1		26	16.7
125	30	15,016	-64.8		25	14.8
100	28	16,370	-65.3		25	12.9
80	28	17,736	-63.0		26	8.6
70	28	18,559	-61.9		26	7.0
60	28	19,516	-60.3		27	5.4
50	28	20,656	-59.2		27	5.0
40	27	22,058	-57.6		28	4.9
30	27	23,682	-55.5		28	5.6
25	27	25,047	-54.1		28	6.8
20	25	26,483	-51.9		28	7.8
15	23	28,356	-49.0		27	9.6
10	17	31,050	-44.3		26	12.9
7	9	33,419	-40.7			
5						

WASHINGTON DULLES INT. AP 1011 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	6.0	5.2	24	.2
1000	31	172	9.9	6.6	19	.6
950	31	606	10.3	4.2	25	3.3
900	31	1,048	8.3	2.0	26	5.0
850	31	1,520	6.7	-1.4	26	5.8
800	31	2,016	4.8	-4.9	25	7.7
750	31	2,543	3.2	-9.0	26	8.8
700	31	3,098	.8	-11.5	26	8.8
650	31	3,691	-2.2	-15.5	26	9.8
600	31	4,322	-5.4	-19.7	26	11.9
550	31	4,995	-9.2	-24.2	26	13.5
500	31	5,731	-14.1	-28.1	26	14.3
450	31	6,521	-19.6	-33.5	26	16.0
400	31	7,387	-25.9	-39.1	26	18.6
350	31	8,341	-32.7	-44.7	26	19.8
300	31	9,409	-40.6	-49.1	26	19.9
250	31	10,628	-49.5		26	21.2
200	31	12,064	-56.6		26	21.8
175	31	12,906	-58.9		26	20.1
150	31	13,868	-61.2		26	18.9
125	31	14,993	-63.7		26	14.9
100	31	16,358	-64.1		25	12.8
80	31	17,730	-61.9		26	9.3
70	30	18,555	-60.5		26	6.2
60	30	19,519	-59.1		26	6.1
50	30	20,665	-57.7		26	4.7
40	30	22,075	-56.9		28	4.8
30	28	23,903	-55.4		28	5.9
25	27	25,071	-53.9		27	6.4
20	25	26,509	-52.0		27	6.6
15	23	28,381	-49.1		27	8.4
10	22	31,070	-44.9		27	13.7
7	15	33,466	-41.9		27	18.6
5	7	35,728	-39.4			

WINNEMUCCA, NEV. 873 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,310	1.6	-7.3	19	1.0
1000	31	191				
950	31	615				
900	31	1,064				
850	31	1,527	9.5	-4.4	20	1.3
800	31	2,029	8.1	-6.6	24	4.0
750	31	2,553	5.2	-9.0	26	6.0
700	31	3,119	2.0	-13.1	26	8.2
650	31	3,706	-.9	-16.9	27	9.4
600	31	4,349	-4.3	-19.3	27	12.2
550	31	5,022	-8.3	-22.7	28	14.1
500	31	5,763	-13.1	-26.4	28	15.5
450	31	6,551	-18.4	-31.1	28	18.4
400	31	7,427	-24.9	-35.9	28	20.1
350	31	8,383	-32.3	-42.8	28	22.4
300	31	9,452	-40.6	-49.2	29	23.7
250	31	10,667	-50.3		29	25.0
200	31	12,094	-58.4		30	25.3
175	31	12,927	-61.6		29	25.3
150	31	13,877	-63.8		29	24.3
125	29	14,983	-66.1		29	21.5
100	28	16,333	-67.0		29	17.3
80	25	17,682	-65.2		29	10.0
70	25	18,497	-63.9		30	8.3
60	23	19,448	-62.1		31	5.9
50	23	20,579	-60.7		32	4.5
40	22	21,979	-58.7		33	4.5
30	20	23,798	-56.2		31	4.1
25	18	24,960	-54.9		30	5.5
20	17	26,392	-53.1		31	6.2
15	14	28,286	-50.4		29	7.8
10	7	30,945	-48.7			
7						
5						

WINSLOW, ARIZ. 854 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,492	6.2	-6.7	24	.5
1000	31	173				
950	31	600				
900	31	1,053				
850	31	1,532	7.8	-5.7	22	.4
800	31	2,040	12.6	-3.6	30	3.0
750	31	2,578	9.4	-6.4	31	3.3
700	31	3,147	5.7	-9.3	30	3.2
650	31	3,744	2.3	-13.4	29	3.9
600	31	4,391	-1.8	-17.2	29	5.6
550	31	5,069	-6.1	-22.2	31	7.3
500	31	5,817	-10.9	-26.9	31	8.7
450	31	6,613	-16.4	-31.3	31	10.3
400	31	7,494	-23.4	-36.1	31	11.1
350	31	8,456	-31.0	-42.6	31	11.4
300	31	9,530	-39.7	-48.5	31	13.4
250	31	10,752	-49.0		31	15.3
200	31	12,188	-57.5		30	17.6
175	31	13,024	-60.7		30	15.7
150	31	13,975	-64.3		30	15.3
125	31	15,079	-68.1		30	13.7
100	31	16,410	-70.4		30	11.6
80	31	17,738	-69.0		31	8.1
70	31	18,540	-66.5		32	5.8
60	30	19,482	-63.3		32	3.7
50	28	20,609	-60.7		31	1.8
40	27	22,009	-58.1		27	2.4
30	27	23,833	-55.0		26	4.8
25	27	25,003	-52.8		27	6.2
20	24	26,452	-51.4		27	7.8
15	21	28,328	-49.2		27	10.9
10	13	31,014	-46.2			
7						
5						

YAKUTAT, ALASKA 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	12	2.9	1.4	10	1.9
1000	31	3			10	2.4
950	31	424	5.0	-.6	13	5.9
900	31	861	2.1	-2.5	14	5.8
850	31	1,321	-1.1	-4.9	15	5.8
800	31	1,802	-4.3	-8.1	16	5.2
750	31	2,309	-7.7	-12.0	17	5.2
700	31	2,841	-11.4	-16.6	17	5.0
650	31	3,405	-15.2	-21.8	18	5.8
600	31	4,005	-19.3	-26.3	18	6.7
550	31	4,644	-24.1	-30.9	18	6.4
500	31	5,335	-29.2	-36.9	19	7.1
450	31	6,075	-35.0	-41.6	20	7.2
400	31	6,890	-41.2	-46.4	21	7.0
350	31	7,786	-47.3		22	6.1
300	31	8,792	-52.6		23	6.2
250	31	9,963	-53.8		25	7.8
200	31	11,403	-51.9		25	9.1
175	31	12,268	-51.9		25	9.3
150	30	13,273	-52.2		25	10.3
125	30	14,451	-52.7		25	11.0
100	29	15,886	-52.6		25	10.6
80	29	17,324	-53.4		25	12.0
70	29	18,182	-53.7		25	11.9
60	29	19,172	-53.9		25	11.9
50	27	20,345	-54.3		25	11.4
40	26	21,783	-54.1		25	12.3
30	25	23,635	-54.3		26	14.7
25	23	24,820	-53.9		26	14.4
20	22	26,261	-53.7		26	15.9
15	17	28,135	-52.7		27	17.7
10	13	30,760	-51.7			
7	5	33,113	-50.7			

\+ YAP, CAROLINE IS. 1007 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	17	28.1	24.3	28	1.4
1000	31	77	27.3	23.5	30	1.4
950	31	522	23.6	18.9	25	2.5
900	31	1,000	20.9	15.2	26	3.3
850	31	1,493	18.3	11.6	25	2.6
800	31	2,011	15.6	8.0	23	2.4
750	31	2,551	13.0	3.9	20	2.1
700	31	3,135	9.9	.3	18	2.0
650	31	3,742	6.5	-3.7	15	2.4
600	31	4,400	2.8	-7.4	15	2.9
550	31	5,092	-1.1	-12.8	14	3.9
500	31	5,855	-5.3	-18.5	14	4.0
450	31	6,670	-10.1	-23.6	13	3.6
400	31	7,575	-15.9	-28.9	11	3.5
350	31	8,569	-22.5	-37.0	11	4.2
300	31	9,683	-30.8	-45.3	09	4.9
250	31	10,951	-41.0	-51.2	09	4.8
200	31	12,428	-53.6		08	7.8
175	31	13,273	-60.7		08	7.6
150	31	14,215	-68.2		07	8.7
125	31	15,290	-75.8		07	12.3
100	31	16,562	-79.6		07	12.1
80	31	17,837	-75.9		08	9.2
70	31	18,616	-71.3		08	7.5
60	30	19,538	-67.2		08	5.5
50	30	20,645	-64.1		08	6.7
40	30	22,027	-59.8		09	11.6
30	30	23,837	-56.8		09	19.7
25	28	24,999	-53.0		09	27.6
20	27	26,454	-48.2		09	35.0
15	23	28,373	-43.3		09	39.0
10	18	31,143	-36.8		09	32.6
7	7	33,614	-33.5			

YUCCA FLAT, NEV. 884 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,196	6.8	-8.3	29	.7
1000	31	165				
950	31	595				
900	31	1,048				
850	31	1,526	15.6	-3.4	33	1.4
800	31	2,038	13.0	-5.8	21	1.6
750	31	2,577	10.0	-8.7	23	1.7
700	31	3,148	7.3	-11.7	26	2.6
650	31	3,754	3.6	-15.0	29	4.2
600	31	4,398	-.8	-18.5	29	6.5
550	31	5,084	-5.5	-22.4	30	8.1
500	31	5,828	-10.4	-26.7	30	9.5
450	31	6,626	-16.3	-31.5	31	10.7
400	31	7,505	-23.2	-37.4	30	10.8
350	31	8,468	-30.9	-43.0	31	12.5
300	31	9,542	-39.6	-49.3	30	14.8
250	31	10,764	-48.7		30	17.8
200	31	12,200	-57.4		30	18.7
175	31	13,036	-61.2		30	17.5
150	31	13,983	-64.7		30	17.0
125	31	15,088	-67.4		29	15.9
100	31	16,424	-69.0		29	13.0
80	31	17,761	-67.7		30	8.5
70	31	18,568	-65.1		31	6.3
60	31	19,511	-63.1		32	3.9
50	31	20,640	-60.4		32	2.8
40	30	22,039	-57.8		32	2.1
30	30	23,866	-54.6		30	4.3
25	30	25,038	-53.0		30	5.4
20	29	26,486	-51.3		29	7.8
15	27	28,360	-49.6		28	9.3
10	6	31,040	-46.7			
7						

YUMA, ARIZ. 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	22	131	18.2	3.0	36	1.0
1000	22	115				
950	22	559	23.8	3.6	35	1.3
900	22	1,032	21.5	.1	07	.5
850	22	1,523	18.0	-3.1	10	1.3
800	22	2,038	14.3	-6.4	09	1.1
750	22	2,571	11.1	-9.9	07	.6
700	22	3,151	7.6	-13.3	04	1.0
650	22	3,751	4.1	-17.3	01	1.6
600	22	4,403	.3	-21.5	34	2.9
550	22	5,085	-4.8	-25.0	34	4.2
500	22	5,837	-9.6	-28.7	34	7.0
450	22	6,632	-15.7	-32.7	34	9.4
400	22	7,519	-22.7	-39.0	34	10.8
350	22	8,485	-30.3	-45.1	34	12.2
300	22	9,562	-36.9	-51.0	33	13.1
250	22	10,788	-48.4		33	14.9
200	22	12,229	-56.7		32	15.9
175	20	13,071	-60.8		31	14.5
150	20	14,020	-64.7		31	13.1
125	14	15,119	-68.7		28	13.1
100	13	16,439	-71.9		28	10.3
80	9	17,760	-69.0			
70	8	18,555	-66.5			
60	6	19,529	-62.2			
50	6	20,660	-60.3			
40	5	22,080	-57.5			
30						
25						
20						
15						
10						
7						

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
\+ Observations for these stations are scheduled at 0000 G.C.T.
† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

Sun's zenith distance

MADISON, WIS.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Oct.									
2-----	----	----	----	----	S 1.19	S 1.10	S 0.92	S 0.79	S 0.67
17----	----	----	----	----	S 1.29	S 1.25	----	----	----
19----	S 0.94	S 1.05	S 1.19	S 1.36	S 1.39	----	----	----	----
20----	----	----	----	----	S 1.30	S 1.24	----	----	----
21----	S .89	S .99	S 1.12	S 1.27	S 1.31	----	----	----	----
22----	S .65	S .78	S .93	S 1.14	S 1.21	S 1.13	S .96	S .83	S .73
Averages	0.83	0.94	1.08	1.26	1.28	1.18	0.94	0.81	0.70

TUCSON, ARIZ.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Oct.									
1-----	0.71	0.82	0.97	1.13	----	----	----	----	----
2-----	----	----	----	----	1.30	----	1.01	----	----
3-----	----	----	----	----	----	----	1.00	0.91	0.80
4-----	.79	.89	1.01	1.19	1.36	----	1.00	----	.78
5-----	.81	.92	1.05	1.21	1.37	1.21	1.09	.97	.90
6-----	.62	.72	.88	1.12	1.36	1.20	1.01	.87	.78
7-----	.36	.43	.54	.83	1.39	----	----	----	----
8-----	.14	.19	.27	.49	1.22	1.17	.98	.88	.76
9-----	----	----	----	----	----	1.23	----	----	----
10----	.83	.92	1.03	1.20	1.34	1.22	----	----	----
11----	.83	.93	1.05	1.21	1.39	1.21	1.05	.91	.80
12----	.76	.87	1.01	1.20	1.34	1.20	1.02	.90	.81
13----	.52	.62	.79	1.03	1.32	1.12	----	.78	.70
14----	----	----	----	----	1.30	1.13	.99	.87	.78
15----	.12	.16	.24	.43	1.14	1.17	1.00	.90	.79
16----	Integrator not working								
17----	----	----	1.14	1.30	1.40	1.28	1.10	1.00	.89
18----	.98	1.06	1.16	1.30	1.41	1.25	1.07	.96	.84
19----	.97	1.03	1.15	1.30	1.40	1.23	1.08	.98	.86
20----	.88	.97	1.09	1.25	1.38	1.30	1.07	.91	.79
21----	.93	1.00	1.13	1.28	1.38	1.21	1.08	.92	.80
22----	----	----	----	----	1.32	----	----	.91	.83
23----	----	1.03	1.13	1.22	1.38	1.24	1.07	.90	.82
24----	.90	.99	1.09	1.23	1.34	1.21	1.04	.91	.80
25----	.87	.96	1.08	1.26	----	1.23	1.08	.97	.78
26----	.92	----	----	----	----	----	----	----	----
27----	----	----	1.09	1.21	1.32	1.21	1.00	.84	.77
28----	----	----	.98	1.21	1.28	1.23	1.10	.98	.90
29----	.56	.66	.79	----	----	----	----	----	----
30----	----	----	.87	1.18	1.36	1.20	----	.96	.86
31----	----	.53	.68	.98	1.37	1.27	1.10	.96	.87
Averages	0.71	0.78	0.92	1.06	1.34	1.21	1.04	0.91	0.81

GUAM, M. I.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Oct.									
3-----	S 0.50	S 0.57	S 0.70	----	M 1.06	----	----	----	----
22----	----	----	----	----	----	----	----	----	S 0.69
24----	----	----	----	----	----	S 1.01	S 0.81	----	----
25----	----	----	S .87	----	----	----	----	----	----
29----	----	S .76	S .84	----	----	----	----	----	----
30----	----	----	S .73	----	----	----	----	----	----
Averages	0.50	0.67	0.79	----	1.06	1.01	0.81	----	0.69

S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon

HS Slight haze
HM Moderate haze

BLUE HILL OBS., MASS.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Oct.									
2-----	0.70	0.81	0.94	1.13	1.29	1.21	1.01	0.87	0.76
3-----	.75	.83	.96	1.18	1.22	1.05	.83	.67	.54
11----	.82	.93	1.00	1.11	1.21	----	----	----	----
15----	.38	.47	.65	.98	1.12	1.05	.79	.61	.53
20----	.84	.94	1.07	1.24	1.33	1.25	1.12	.99	.72
22----	.87	.98	1.10	1.24	1.30	1.23	1.04	.91	.75
23----	.82	.91	1.05	1.20	1.24	1.16	1.00	.84	.75
24----	.76	.87	1.03	1.17	1.22	1.17	.95	.82	.75
26----	.91	1.03	1.08	1.20	1.21	1.15	.98	.83	.72
29----	.84	.96	1.08	1.21	1.24	1.18	1.00	.86	.76
30----	.87	1.01	1.05	1.23	1.30	1.27	1.06	.88	.81
Averages	0.78	0.88	1.00	1.17	1.24	1.17	0.98	0.83	0.71

MAUNA LOA OBS., HAWAII

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Oct.									
1-----	1.15	1.23	1.32	1.44	1.58	1.43	1.32	1.22	1.15
2-----	1.17	1.24	1.33	1.45	1.60	1.43	1.32	1.22	1.15
3-----	1.17	1.25	1.35	1.46	----	----	----	----	----
5-----	1.18	1.26	1.36	1.47	----	----	----	----	----
7-----	1.15	1.22	1.33	1.44	1.58	----	----	----	----
8-----	1.15	1.23	1.33	1.44	1.57	----	----	----	----
9-----	----	----	----	1.45	1.57	1.41	1.28	1.18	1.11
10----	1.15	1.23	1.36	1.45	1.58	1.42	1.29	1.19	1.10
11----	1.07	1.17	1.27	1.39	1.53	----	----	----	----
12----	1.09	1.22	1.27	1.39	----	----	----	----	----
15----	1.12	1.20	1.29	1.42	----	----	----	----	----
21----	1.18	1.26	1.36	1.48	1.60	----	----	----	----
22----	1.14	1.23	1.33	1.44	----	----	----	----	----
25----	1.11	1.20	1.30	1.42	1.55	----	----	----	----
Averages	1.14	1.23	1.32	1.44	1.57	1.42	1.30	1.20	1.13

OMAHA, NEBR.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Oct.									
1-----	----	----	----	----	----	----	HS0.97	HS0.82	HS0.75
2-----	HS0.72	HS0.84	HS0.94	HS1.12	HS1.25	HS1.06	HS .90	HS .80	HS .72
4-----	----	HM .66	----	----	----	----	----	----	----
13----	HS .88	HS1.04	HS1.10	HS1.22	HS1.34	HS1.21	HS1.08	HS .96	HS .83
14----	----	----	----	----	----	----	HS .98	HS .77	----
16----	HS .88	HS .97	HS1.10	HS1.23	HS1.31	HS1.22	HS1.12	HS .94	HS .90
17----	HS .90	HS1.00	HS1.11	HS1.24	HS1.36	HS1.21	HS1.05	HS .94	HS .89
18----	HS .89	HS1.00	HS1.11	HS1.26	HS1.33	----	----	----	----
19----	HS .86	HS .94	HS1.07	HS1.23	HS1.29	HS1.20	----	----	----
20----	HS .94	HS1.03	HS1.20	HS1.29	----	HS1.25	HS1.08	HS .95	HS .81
21----	----	----	----	----	HS1.29	HS1.20	HS1.03	HS .91	HS .76
22----	HS .79	HS .87	HS1.00	HS1.18	HS1.23	HS1.12	----	----	----
31----	HS .94	HS1.10	HS1.18	HS1.32	HM1.32	HM1.28	----	HS1.09	----
Averages	0.87	0.95	1.09	1.23	1.30	1.19	1.04	0.91	0.81

ALBUQUERQUE, N. MEX.

Date	A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
	No observations made								

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

OCTOBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	553	504	464	531	545	473	525	533	521	418	503	480	478	453	504	487	489	465	486	472	467	424	441	420	341	404	423	393	101	379	394	454
AMES IOWA	374	412	381	221	300	371	55	53	111	188	413	352	391	400	141	387	377	341	366	368	355	346	295	197	257	48	67	258	36	80	185	262
ANNETTE ALASKA	252	242	305	62	20	---	266	36	10	218	81	116	94	27	111	127	26	131	25	140	54	144	28	20	130	14	122	103	42	61	120	104
APALACHICOLA FLORIDA	567	563	521	526	524	505	491	500	317	532	392	293	507	487	456	478	---	503	518	499	484	435	445	314	418	488	446	405	440	260	119	448
ARGONNE NAT. LAB.	437	443	418	406	283	380	133	75	70	225	136	404	111	362	87	172	323	172	403	365	391	366	335	123	74	225	209	170	60	107	57	243
ASTORIA OREGON	76	115	244	88	235	128	346	260	247	73	264	171	145	185	349	327	330	118	339	180	215	129	190	78	280	216	29	265	156	229	118	198
ATLANTA GEORGIA	498	473	379	448	451	426	304	95	121	454	473	424	436	416	407	232	82	293	449	367	406	402	372	305	412	401	215	407	399	148	23	346
BARROW ALASKA	96	52	121	71	68	48	50	43	32	47	93	26	32	41	50	71	92	19*	27	21	21	44	34	25	12	14	11	8	9	18	5	42*
BETHEL ALASKA	83	33	146	201	91	109	199	186	---	96	76	142	34	57	47	50	33	120	129	123	166	37	47	78	175	56	176	76	115	141	39	102
BISMARCK N.DAK.	418	297	292	423	207	22	62	206	135	392	292	143	358	174	341	244	360	335	304	336	325	214	144	88	193	132	147	57	291	289	214	240
BLUE HILL MASS.	268	434	404	360	268	116	341	383	135	113	348	182	177	237	347	227	315	179	198	315	203	345	329	320	166	298	236	248	306	315	147	266
BOISE IDAHO	200	77	423	297	244	404	402	388	378	326	259	389	296	371	379	---	353	328	343	327	92	179	280	222	256	281	---	296	303	222	274	296
BOSTON MASSACHUSETTS	292	431	394	352	271	97	286	372	129	64	335	175	182	211	333	249	287	128	269	330	164	347	297	312	181	292	221	228	319	312	141	258
BURLINGTON VERMONT	230	391	340	385	288	96	374	110	44	38	166	91	305	429	289	120	128	137	135	295	121	92	316	289	229	178	203	105	117	301	147	209
CAPE HATTERAS N.C.	520	506	514	481	468	445	273	242	310	---	435	308	393	448	451	269	265	130	454	434	439	429	429	236	348	392	390	243	414	402	409	383
CARIBOU MAINE	108	118	103	223	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CHARLESTON S.C.	552	528	511	492	482	460	407	199	312	457	500	269	400	438	461	380	297	417	483	475	454	436	263	374	251	421	429	324	424	279	238	400
CLEVELAND OHIO	462	435	441	415	272	79	389	248	105	164	109	256	346	225	314	197	62	53	91	303	376	366	365	309	183	246	65	154	284	323	32	247
COLUMBIA MISSOURI	427	402	465	446	64	83	207	72	396	270	444	430	332	418	59	330	395	435	419	417	408	400	308	102	312	67	142	341	51	33	39	281
DAVIS CALIFORNIA	341	116	488	475	492	484	461	443	445	388	410	443	437	443	426	401	403	401	398	374	232	383	387	311	325	355	312	346	365	351	333	386
DODGE CITY KANSAS	515	491	499	448	257	258	513	498	461	335	489	472	486	468	363	478	470	465	468	463	444	407	437	464	360	318	340	288	45	256	135	400
E. LANSING MICHIGAN	433	444	405	412	335	177	327	102	120	141	140	297	204	347	91	54	36	243	341	230	178	368	333	233	64	55	71	276	193	187	48	222
EL CENTRO CALIF. NPF	354	354	424	435	454	460	452	453	425	427	421	426	424	411	444	446	436	417	384	---	---	---	---	---	384	417	378	378	369	377	358	412
EL PASO TEXAS	586	391	568	554	550	559	559	573	564	348	544	527	522	476*	520	552	538	541	530	529	515	429	503	498	487	504	470	457	218	378	470	499*
ELY NEVADA	420	481	465	506	227	494	511	500	494	493	469	475	476	490	486	474	470	463	455	448	328	411	383	388	329	390	344	186	421	396	393	428
EPPLEY NEWPORT R.I.	294	417	392	359	317	275	293	340	103	103	372	189	169	258	330	303	289	124	214	357	235	343	321	312	214	314	253	244	286	307	259	277
FAIRBANKS ALASKA	86	40	139	220	212	225	69	198	42	113	137	135	74	115	139	45	22	102	133	52	50	23	47	61	132	43	27	34	67	81	82	95
FLAMING GORGE UTAH	364	407	445	467	407	234	468	480	405	474	439	417	465	454	453	446	448	442	428	427	408	402	219	406	267	353	255	113	315	308	342*	386*
FORT WORTH TEXAS	563	557	358	520	460	529	113	536	523	519	469	522	487	440	46	523	515	497	492	487	477	463	294	460	468	438	441	409	223	79	97	420
FRESNO CALIFORNIA	449	476	333	434	489	481	475	471	432	436	431	407	414	416	418	427	425	393	398	348	323	321	364	382	354	359	346	359	362	368	369	402
GLASGOW MONTANA	368	382	333	398	104	93	223	377	304	335	270	316	300	312	337	233	332	308	316	303	274	302	259	277	170	192	183	117	264	249	198	272
GRAND JUNCTION COLO.	394	350	444	295	472	372	448	479	457	438	461	456	480	412	449	442	446	441	433	441	422	408	412	402	297	404	389	215	361	---	348	409
GREAT FALLS MONTANA	178	295	408	412	39	373	295	389	308	309	170	410	167	312	440	133	300	262	321	327	202	148	182	247	317	309	67	269	248	123	131	261
GREENSBORO N.C.	470	439	429	433	427	360	44	136	113	223	264	259	238	361	347	376	238	181	343	419	387	401	351	304	175	387	338	334	365	349	97	309
INDIANAPOLIS INDIANA	454	401	469	411	127	186	262	71	108	242	210	441	204	276	302	76	65	260	374	386	419	397	379	162	85	239	69	156	287	242	45	252
INYOKERN CALIFORNIA	---	---	---	---	481	485	485	478	465	468	455	442	433	416	469	458	456	443	438	403	415	401	415	398	353	397	387	368	391	382	380	428
ITHACA NEW YORK	191	400	383	297	124	65	418	123	21	149	137	113	352	99	184	124	239	13	49	338	153	263	336	317	87	138	161	60	222	310	162	195
LAKE CHARLES LA.	544	445	432	509	462	480	433	336	524	480	432	462	386	331	321	116	498	489	479	482	431	439	230	374	469	386	399	383	220	90	408	402
LAKELAND FLORIDA	444	470	546	491	368	207	368	516	197	465	534	437	500	506	501	448	431	429	518	442	468	483	390	340	345	459	395	419	396	382	250	424
LANDER WYOMING	403	428	152	404	429	349	420	469	409	460	368	411	460	286	421	375	452	447	405	422	416	375	275	413	325	442	328	198	324	375	289	378
LARAMIE WYOMING	290	259	403	220	396	193	372	401	387	373	350	249	377	104	309	373	374	366	357	340	352	317	148	342	53	267	316	182	300	309	273	302
LAS VEGAS NEVADA	518	506	505	492	506	507	510	495	485	484	476	460	457	452	482	471	463	453	435	429	382	416	423	378	354	392	398	380	402	399	392	448
LITTLE ROCK ARKANSAS	---	---	---	481	486	462	442	276	511	465	421	404	424	385	309	108	129	502	453	465	451	414	369	290	478	400	489	450	273	88	255	318
LOS ANGELES. CALIF.	292	494	463	537	505	540	548	523	411	455	408	428	461	396	484	514	512	473	440	420	301	371	426	398	412	348	310	168	397	412	423	428
LOS ANGELES CALIF.U	361	460	423	441	462	486	509	479	397	407	396	390	406	380	444	468	451	430	384	372	264	353	349	320	366	271	295	207	329	371	380	389
MADISON WISCONSIN	375	410	356	372	436	155	30	45	62	194	89	339	232	268	33	360	356	139	371	346	342	312	216	5	13	145	114	224	41	15	57	208
MANHATTAN KANSAS	355	380	407	375	33	39	68	151	344	353	336	380	391	345	128	383	381	380	364	366	350	338	299	348	304	45	353	267	5	87	42	271
MATANUSKA ALASKA	241	190	245	250	243	234	69	195	194	178	183	117	130	114	177	143	170	187	97	127	124	79	51	170	36	49	73	55	70	38	130	141
MAUNA LAO OBS.HAWAII	706	720	532	559	617	697	681	686	689	695	591	405	214	493	584	463	321	191	153	519	654	390	292	294	626	279	406	522	602	540	478	503
MEDFORD OREGON	427	119	369	330	240	315	427	328	386	375	204	388	345	392	398	373	359	305	356	299	116	178	284	154	270	270	89	217	278	290	242	294
MIAMI FLORIDA	141	284	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	398	334	444	311	---
MIDLAND TEXAS	543	524	---	489	460	410	475	475	464	468	467	460	384	341	334	475	468	462	469	454	451	392	418	437	427	345	344	414	234	361	247	423
NASHVILLE TENNESSEE	495	406	466	469	456	333	364	141	203	233	469	469	351	361	418	191	240	459	439	431	436	438	410	219	434	399	414	410	395	146	53	360
NEW YORK N.Y. U	312	434	385	378	355	317	409	77	136	38	278	238	367	90	321	203	191	22	187	374	303	366	259	224	151	336	302	293	318	331	282	267
NORTH OMAHA NEBRASKA	406	455	423	238	143	104	92	84	192	443	412	370	431	407	214	---	407	406	388	397	378	359	315	347	368	41	77	210	19	117	350	286

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

OCTOBER 1967

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OAK RIDGE TENNESSEE	484	415	378	432	418	375	321	288	142	396	464	458	435	361	381	331	101	262	449	429	420	427	369	257	363	402	248	398	380	259	87	353
OKLAHOMA CITY OKLA.	---	---	---	---	---	---	263	434	500	464	338	---	436	433	81	485	470	460	458	438	441	421	393	440	418	369	309	397	121	35	83	362
PAGE ARIZONA	503	509	476	497	493	510	482	494	379	483	472	484	468	448	487*	477*	474*	464*	456*	454*	---	---	---	---	---	---	---	---	---	---	---	---
PALMER AAES ALASKA	213	187	209	217	211	193	51	177	168	156	158	106	97	92	144	135	138	139	91	118	108	70	55	128	31	40	81	32	61	49	91	121
PHOENIX ARIZONA	469	487	310	510	502	518	519	516	484	503	485	484	479	472	503	486	480	475	465	467	461	399	---	---	434	392	420	422	443	439	426	464
PORTLAND MAINE	373	437	399	401	222	93	413	306	75	79	335	174	222	88	332	127	264	162	261	363	132	335	337	312	141	326	250	151	301	320	227	257
PROSSER WASHINGTON	262	62	317	311	385	298	---	---	304	245	160	305	256	362	337	321	315	196	341	316	---	---	306	195	289	247	59	284	242	246	178	264
RAPID CITY S.DAK.	380	421	288	429	374	98	426	406	391	402	355	196	385	295	339	348	362	371	305	354	357	297	118	334	244	283	334	83	309	313	212	317
RENO NEVADA	207	290	444	427	345	419	413	399	372	370	348	375	381	402	397	376	371	289	358	351	130	335	343	269	309	301	280	328	331	315	310	342
RICHLAND 25 NW WASH.	261	90	176	265	346	254	307	344	281	222	263	299	274	338	294	256	284	177	310	288	246	215	302	163	249	265	70	278	241	259	169	251
RIVERSIDE CALIFORNIA	420	413	418	423	445	484	472	453	429	415	410	426	415	401	441	446	431	415	398	354	248	298	364	304	358	302	323	206	342	366	360	387
RUSTON LOUISIANA	476	452	432	445	382	457	441	346	467	433	394	371	440	393	259	57	192	448	402	412	395	363	363	266	409	381	396	373	188	59	230	359
SAINT CLOUD MINN.	363	256	233	320	256*	402	19	79	128	117	333	247	300	32	324	327	340	289	329	339	341	319	299	223	72	226	92	210	60	311	301	241*
SAN ANTONIO TEXAS	551	328	298	350	427	383	76	549	536	524	375	460	413	381	222	532	518	519	495	495	481	411	419	391	478	400	352	219	204	---	446	408
SANTA MARIA CALIF.	471	425	457	463	491	493	481	483	438	446	457	442	443	449	421	454	409	419	409	405	303	409	409	369	383	371	380	376	391	385	384	423
SAULT STE MARIE MICH	386	378	368	100	312	416	245	26	155	114	162	110	53	248	32	197	128	100	247	65	108	---	258	221	146	142	102	57	76	21	191	172
SEATTLE TACOMA WASH.	100	165	295	216	146	50	150	324	244	94	210	240	91	265	238	253	240	111	257	191	136	161	270	85	236	217	33	231	105	---	40	180
SEATTLE WASHINGTON	99	141	129	215	129	74	---	---	---	---	---	---	---	---	---	---	---	---	204	165	164	171	251	87	188	180	31	173	85	154	---	---
SPOKANE WASHINGTON	211	133	288	289	205	321	172	351	---	---	---	---	95	316	245	291	287	190	293	282	141	54	269	100	278	204	33	190	232	89	---	214
STATE COLLEGE PENN.	285	445	423	413	205	195	261	29	78	207	88	176	398	148	84	214	258	44	180	390	386	381	365	345	18	167	163	161	352	330	183	238
STERLING VIRGINA	---	470	451	454	429	77	86	123	170	59	291	149	408	318	159	344	248	86	260	441	423	423	404	275	94	396	332	367	370	351	---	292
STILLWATER OKLAHOMA	407	382	437	433	319	378	167	434	425	420	294	407	395	378	65	415	404	395	389	373	373	---	357	399	---	---	---	---	---	---	---	367
SWAN ISLAND W.I.	595	546	456	548	417	476	493	531	412	566	397	466	577	461	393	368	214	417	360	233	310	431	284	544	541	556	510	487	456	512	548	455
TAMPA FLORIDA	478	430	525	494	443	152	434	566	263	490	549	468	536	533	529	534	499	441	545	487	500	501	382	343	446	481	478	466	458	429	333	458
TUCSON ARIZONA	354	378	145	484	484	498	493	502	488	471	478	473	461	427	466	468	466	462	455	444	441	357	428	419	417	404	406	408	394	418	408	432
WAKE ISLAND, PACIFIC	377	558	650	651	---	525	513	350	188	506	511	523	461	448	479	506	489	504	514	194	426	519	498	450	314	---	507	423	487	445	478	465

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

OCTOBER 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Langleys. . .	13	21	-4	-38	7	26	14	22	7	10	6	22	12	5	-25	-17

Date.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-36	-40	-39	-15	-4	-6	-5	-30	-16	7	34	7	2	-15	-71	-5

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

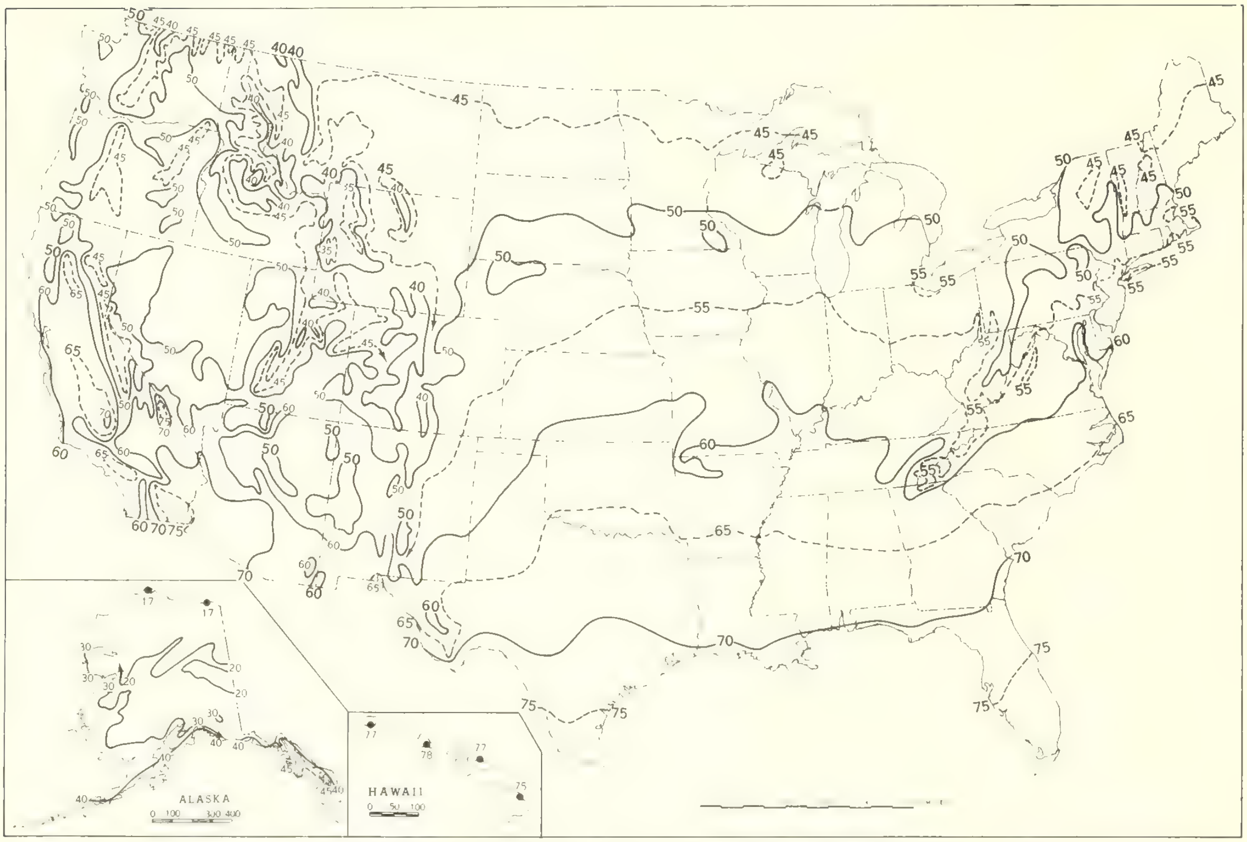
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), October



B. Temperature Departure from 30 - Year Mean (°F 1931-60), October 1967.

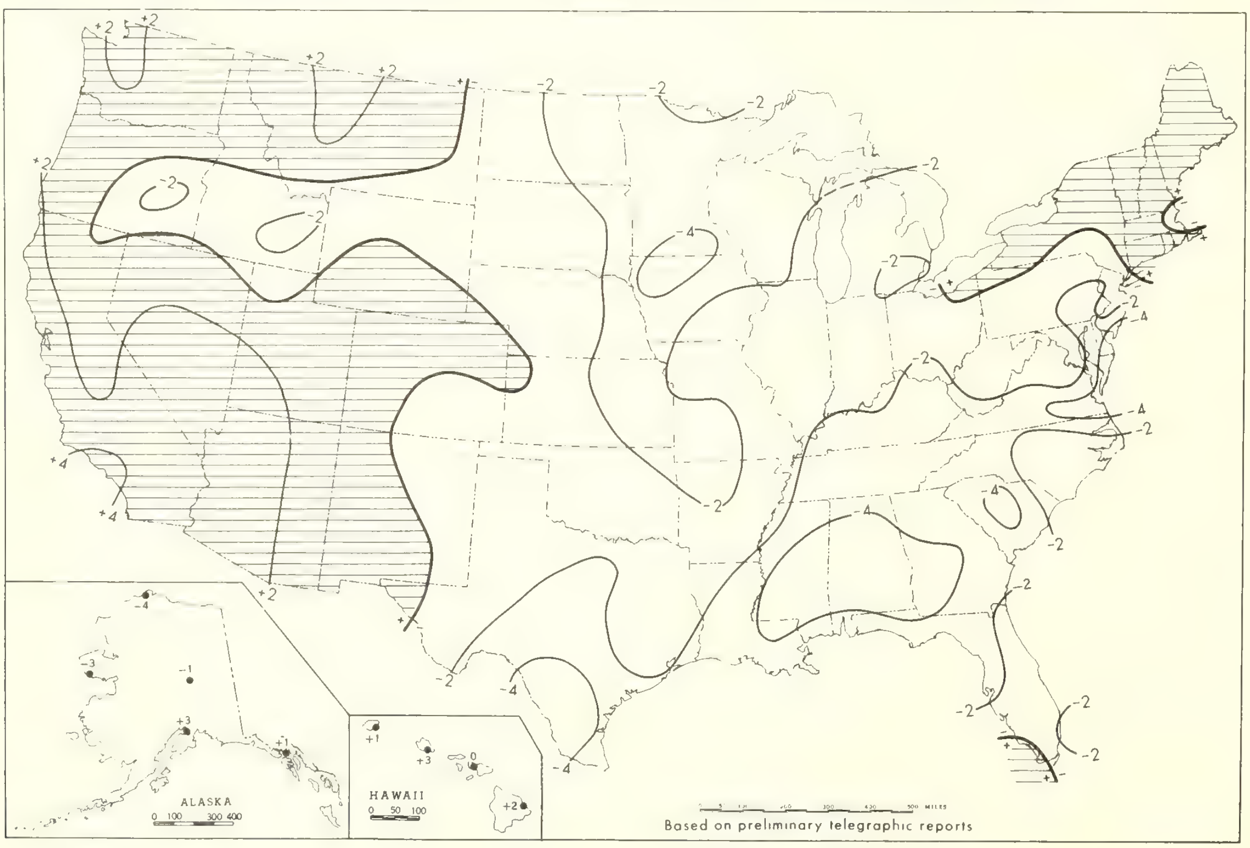


Chart II. Total Precipitation (Inches), October 1967.

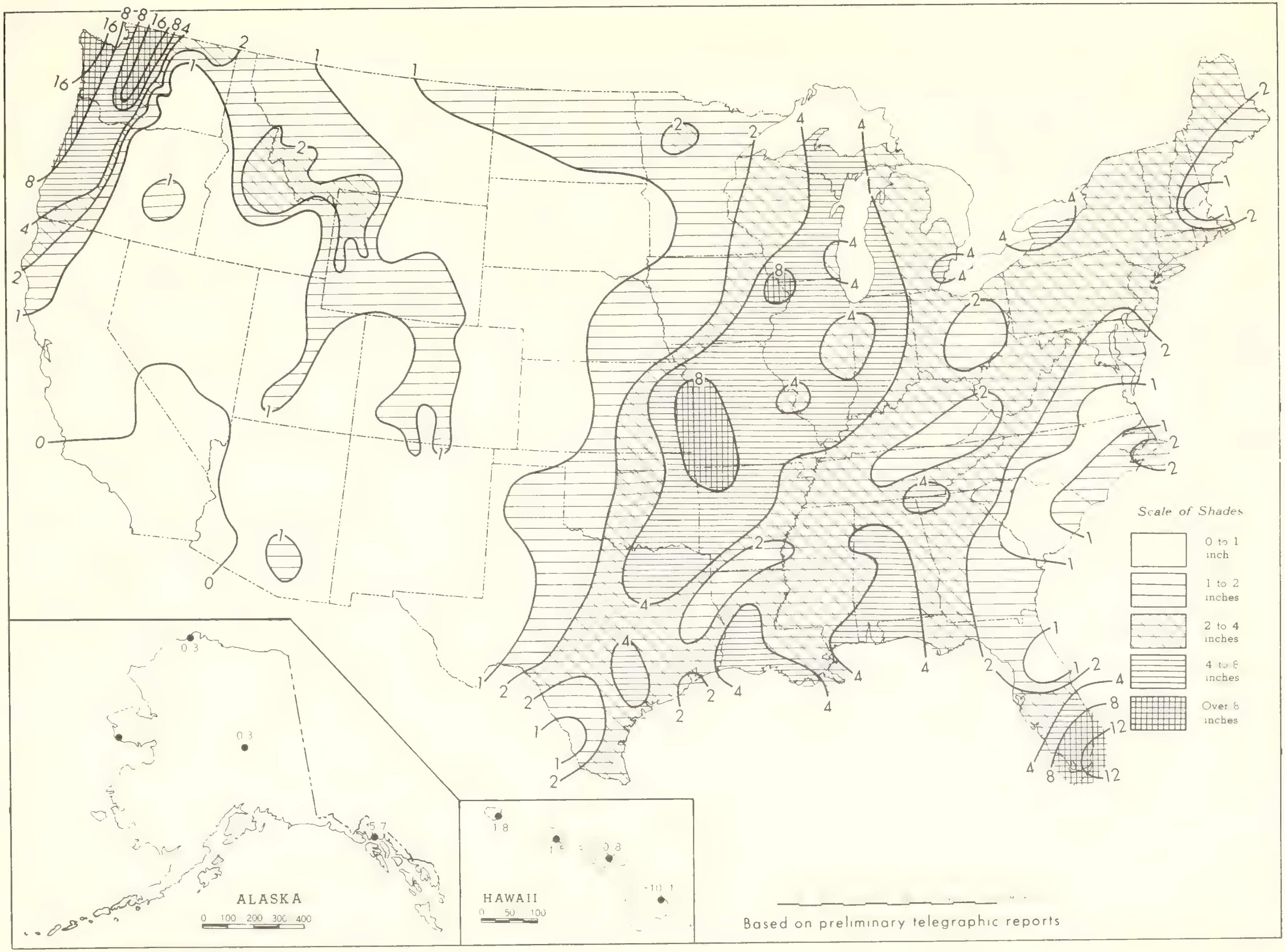


Chart III. Percentage of Normal Precipitation, October 1967.

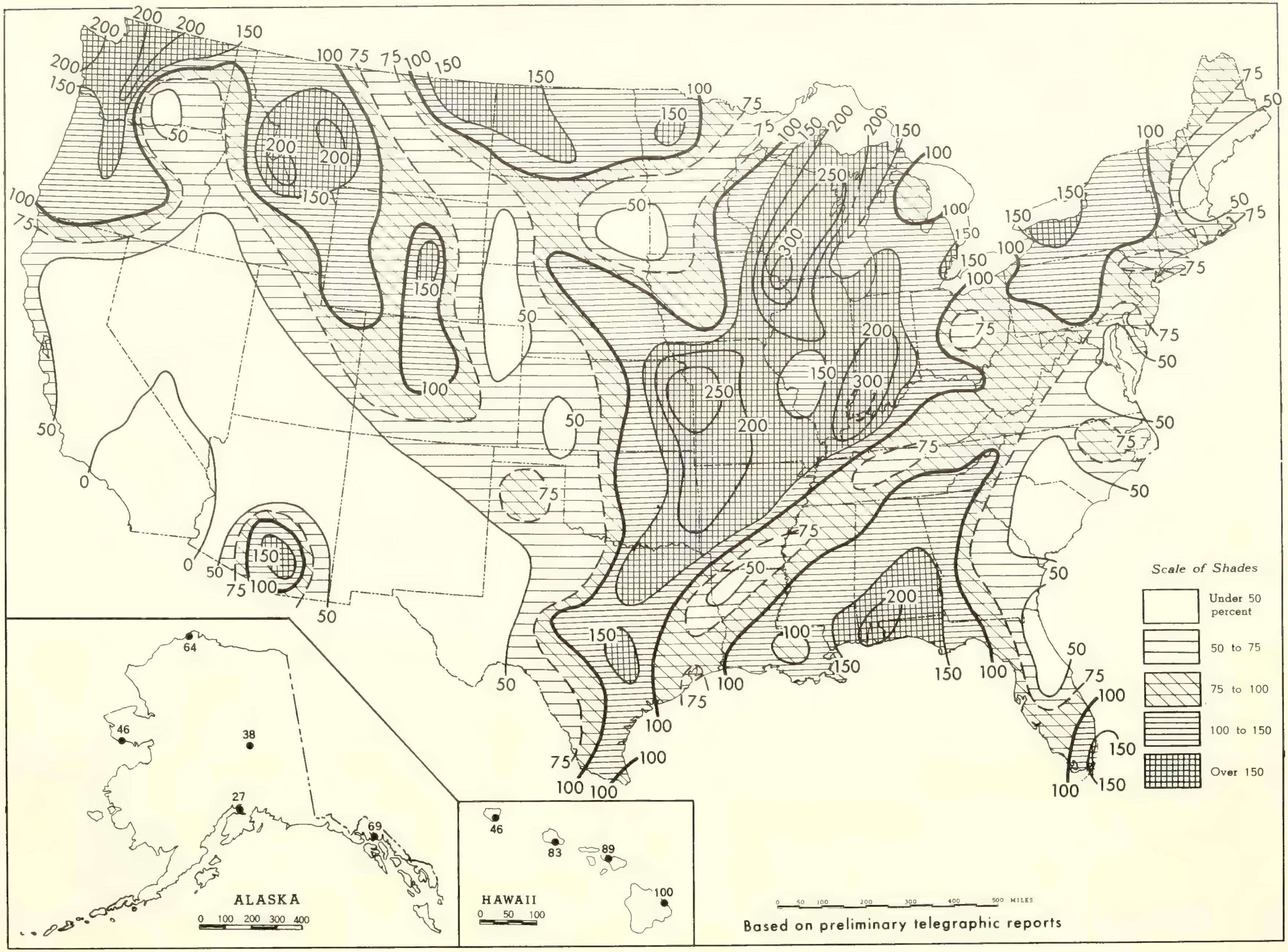
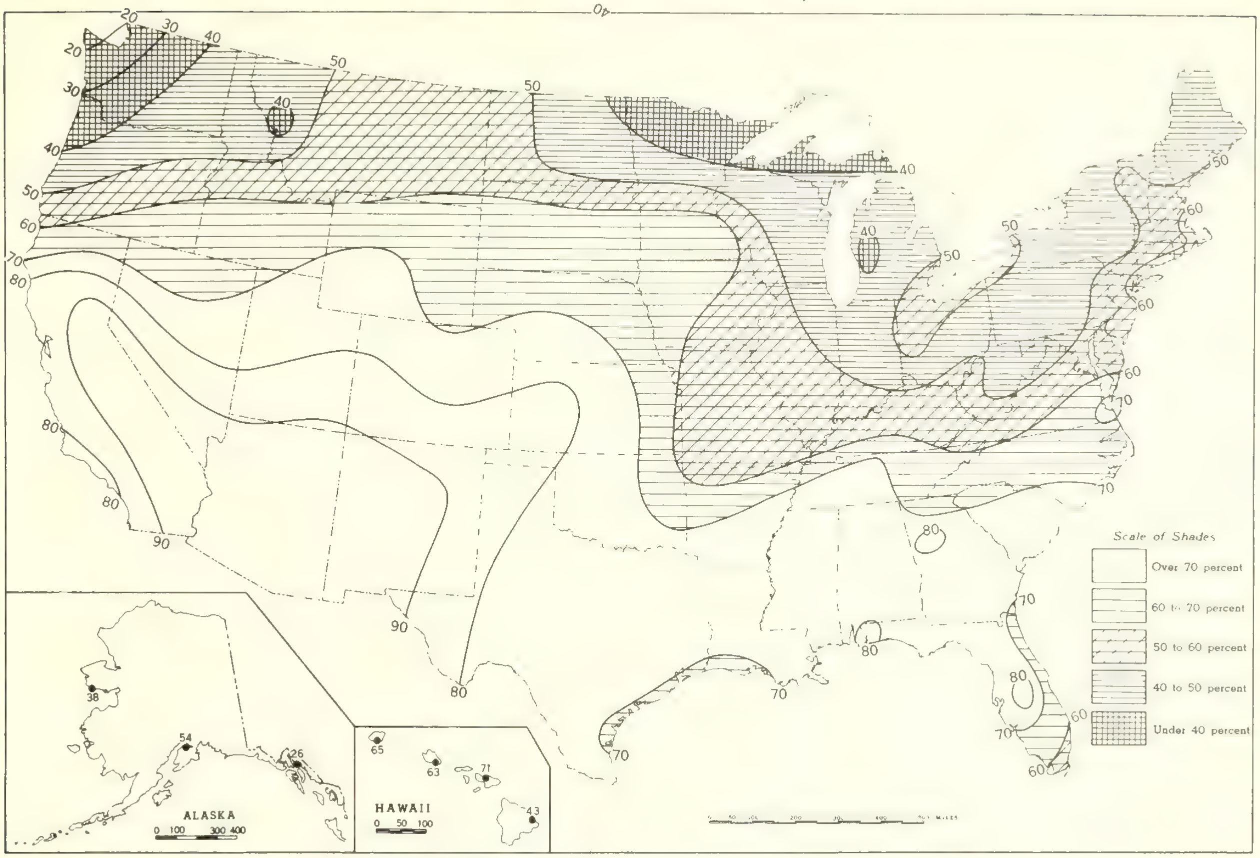
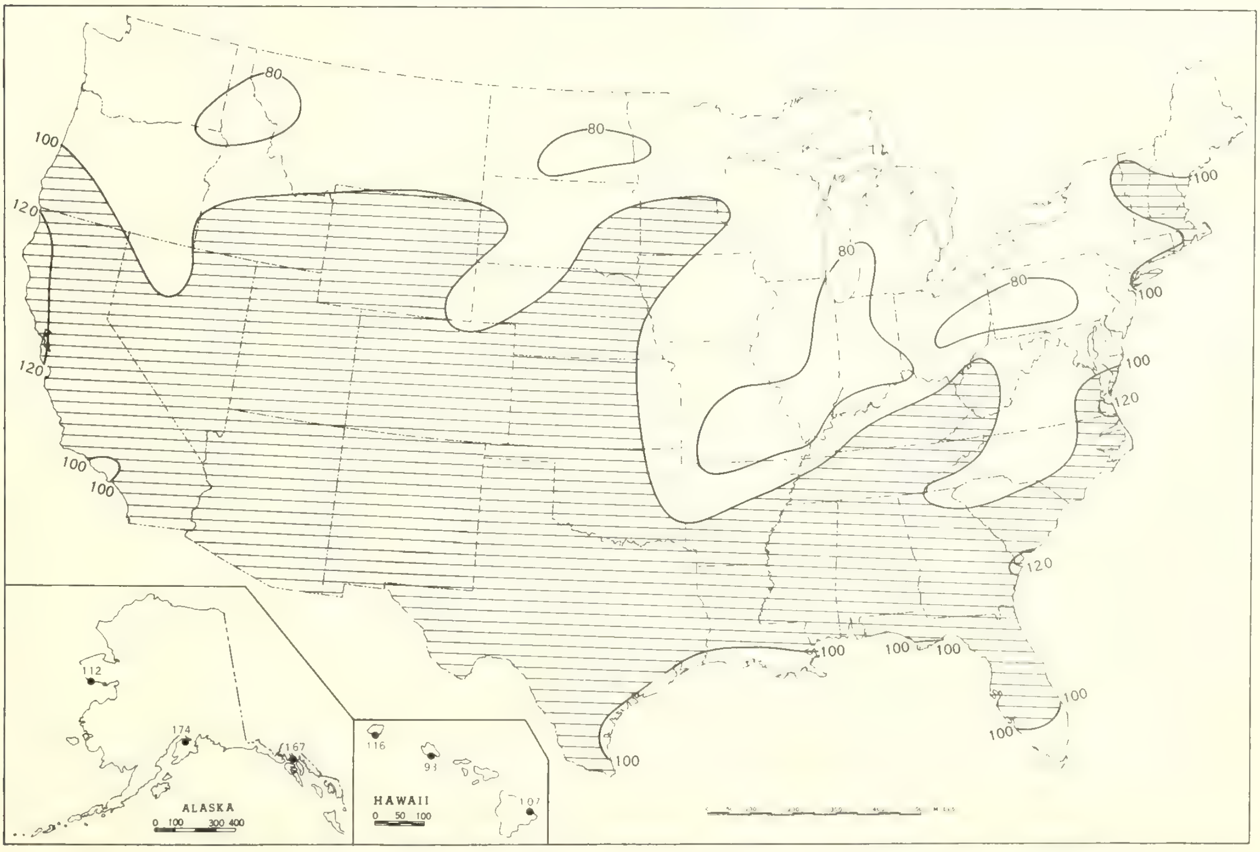


Chart VI. A. Percentage of Possible Sunshine, October 1967.

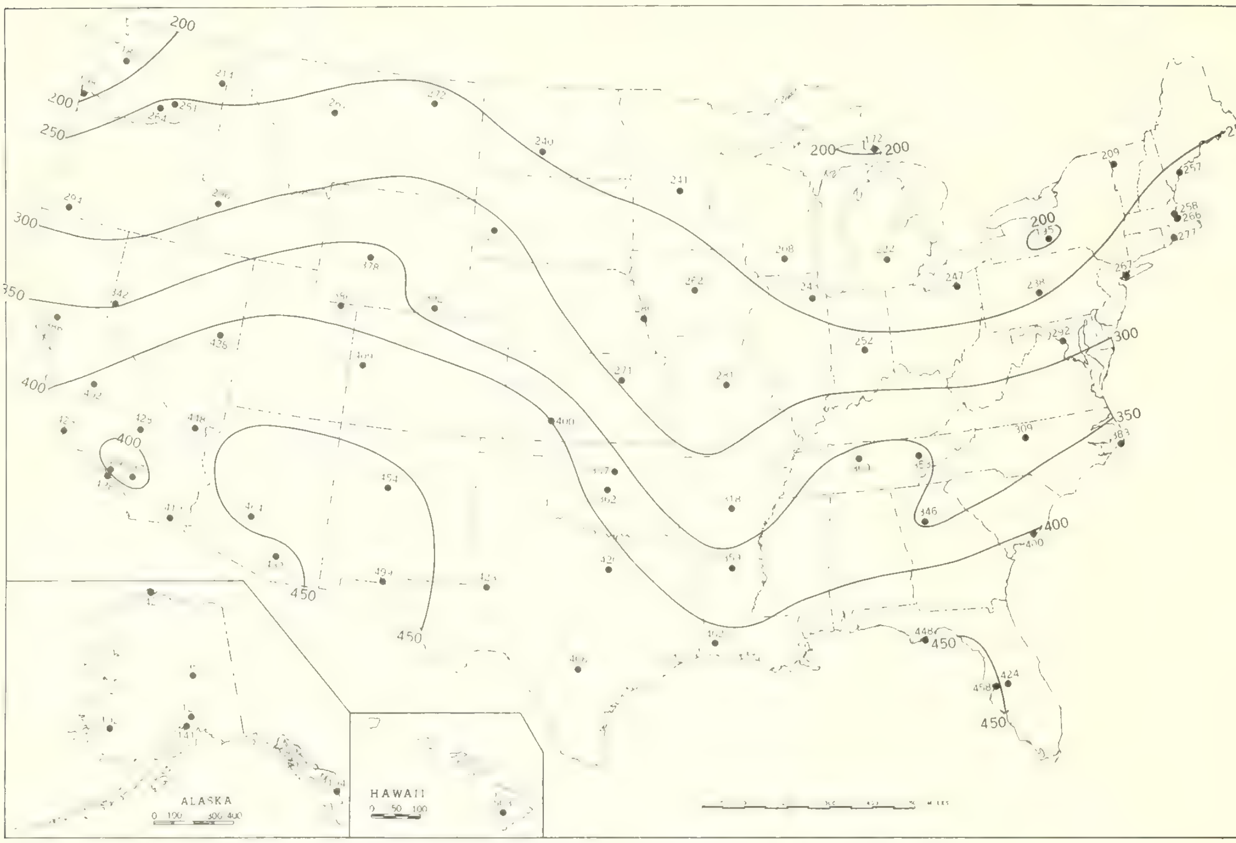


B. Percentage of Mean Monthly Sunshine, October 1967.

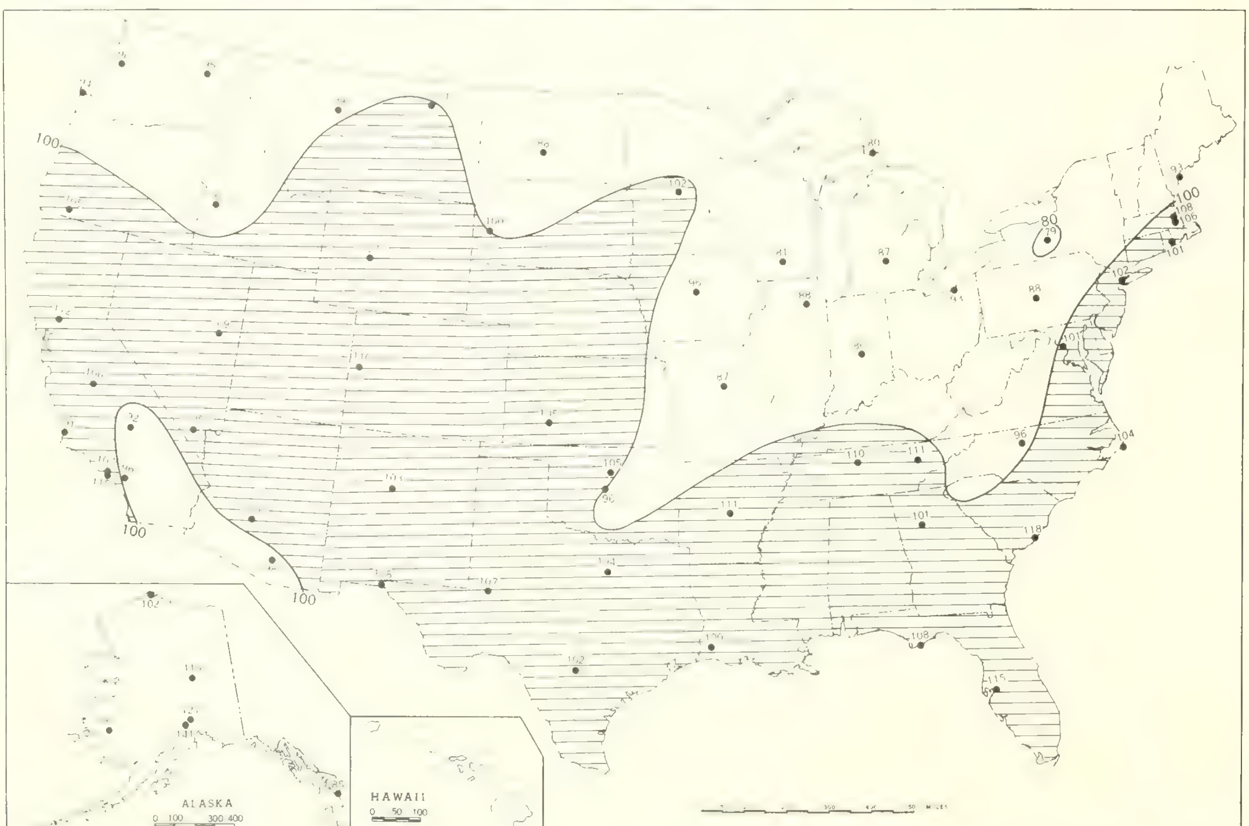


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, October 1967.

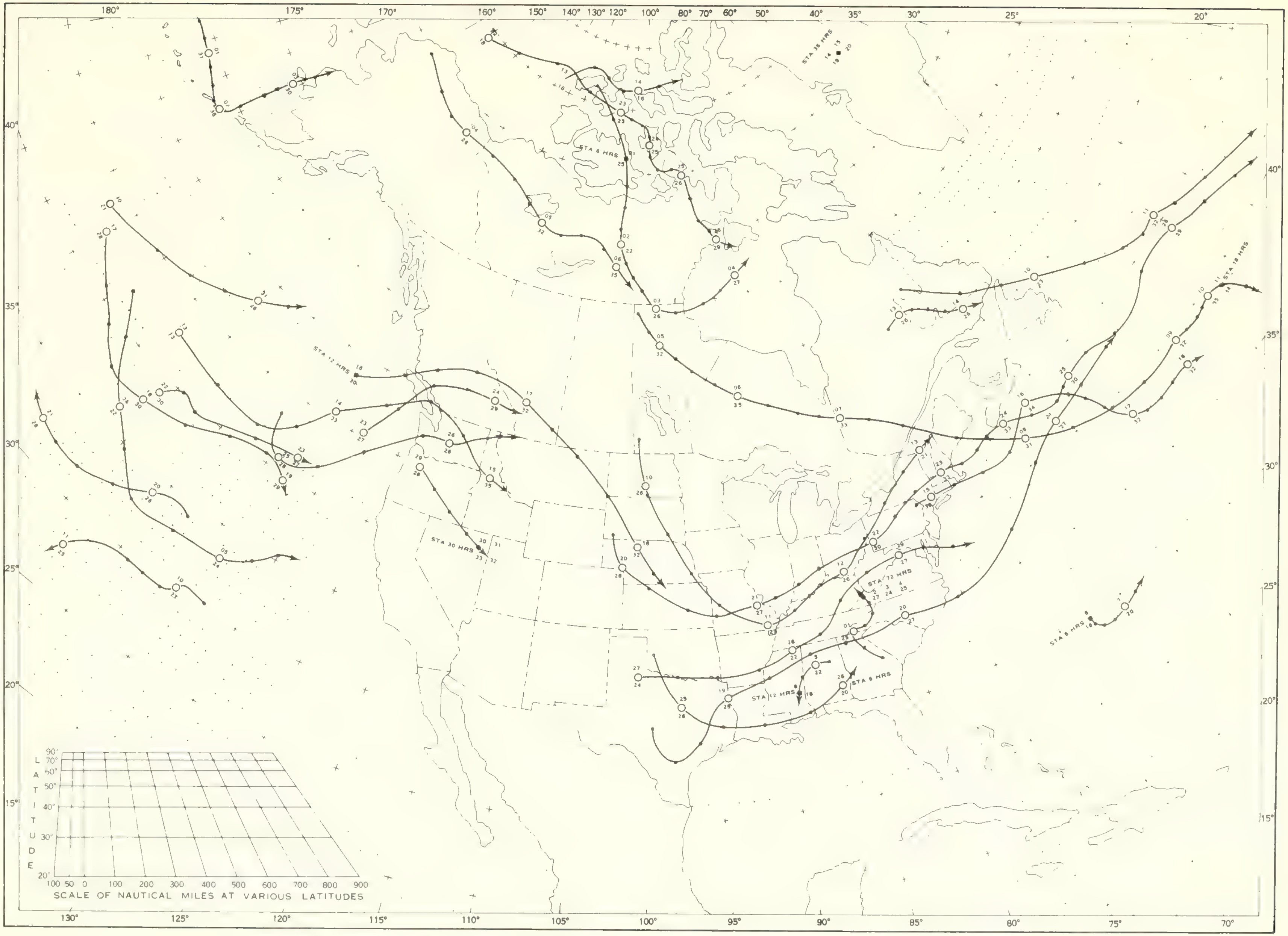


B. Percentage of Mean Daily Solar Radiation, October 1967.



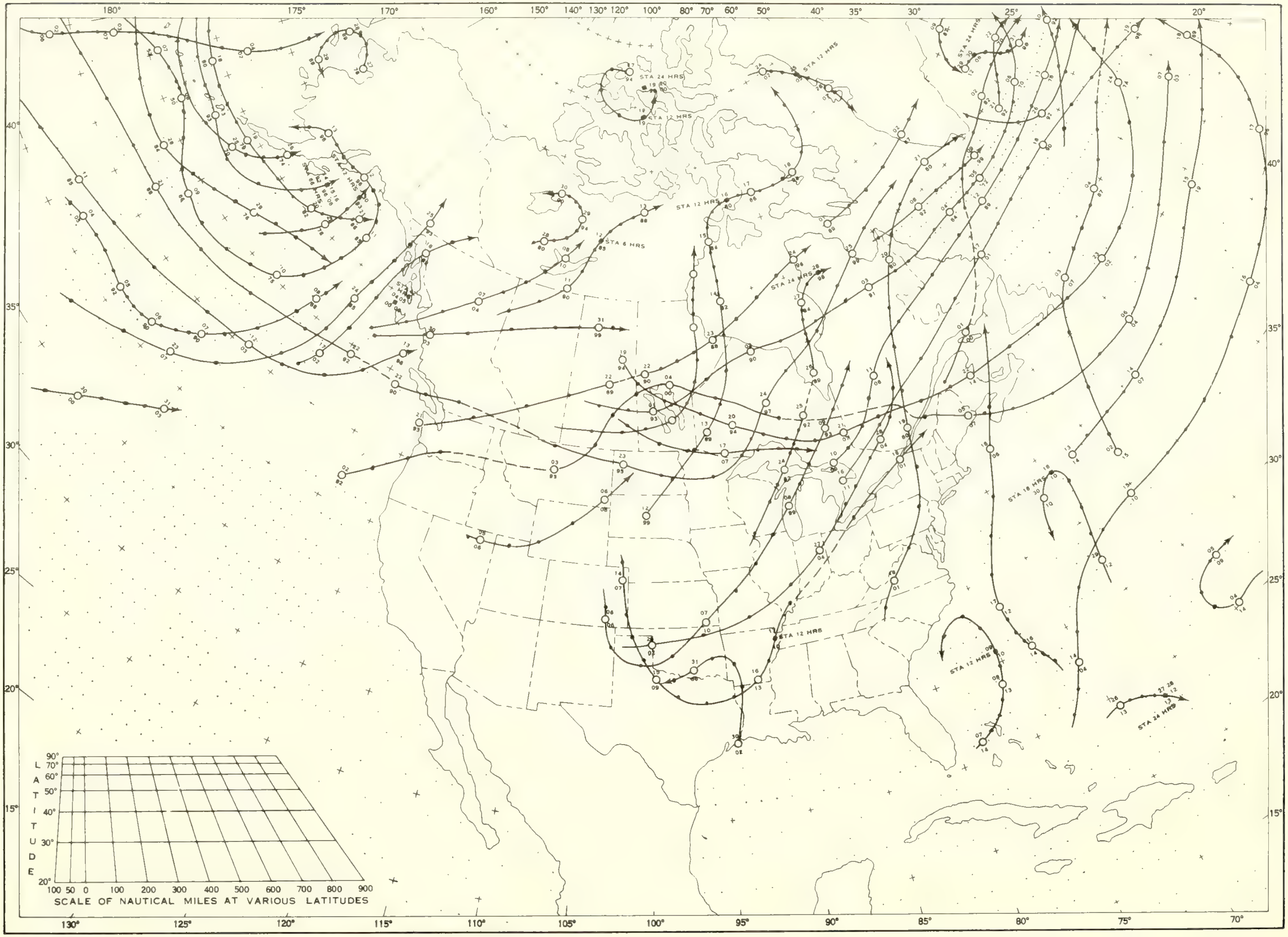
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, October 1967.



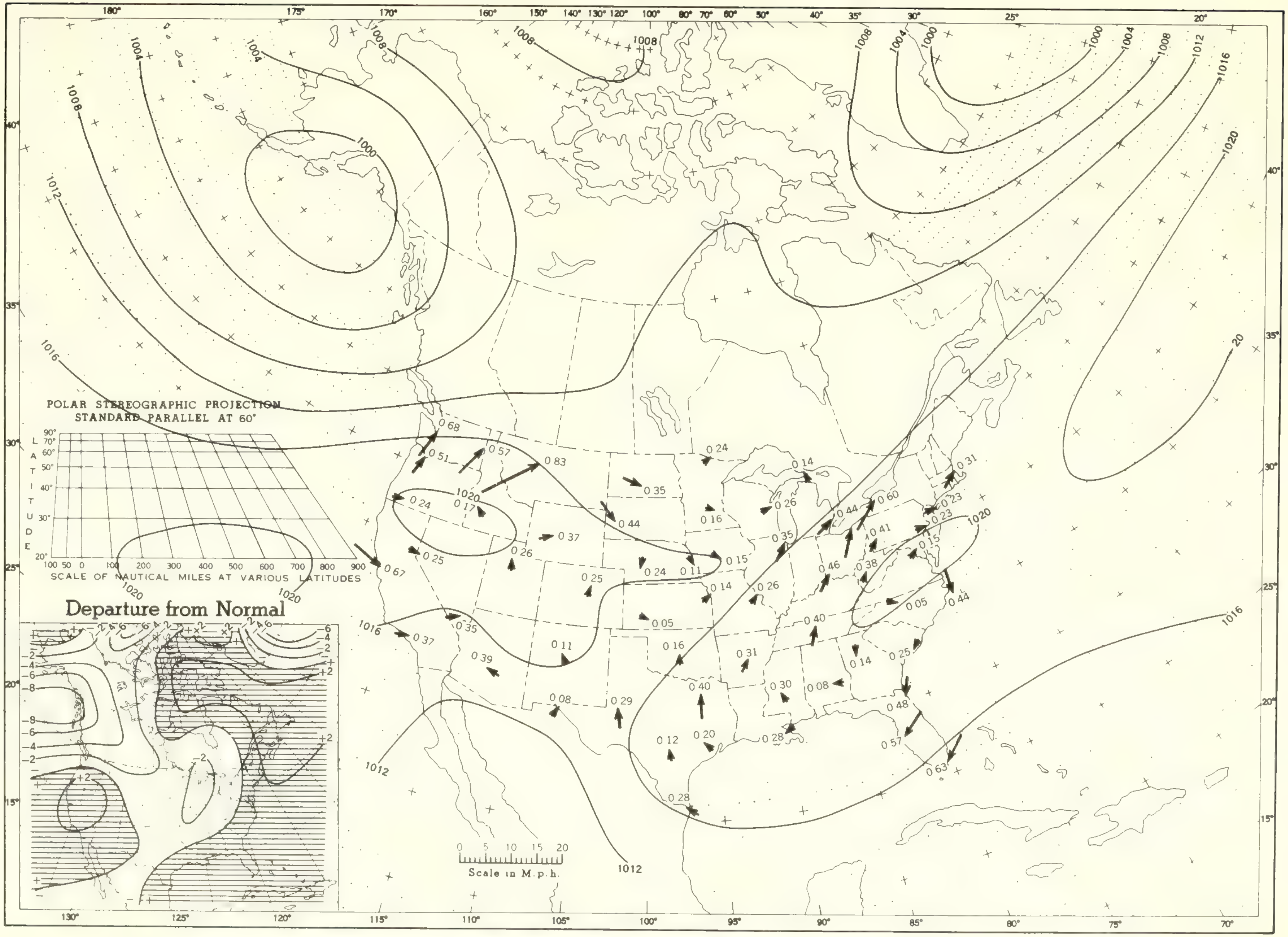
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, October 1967.



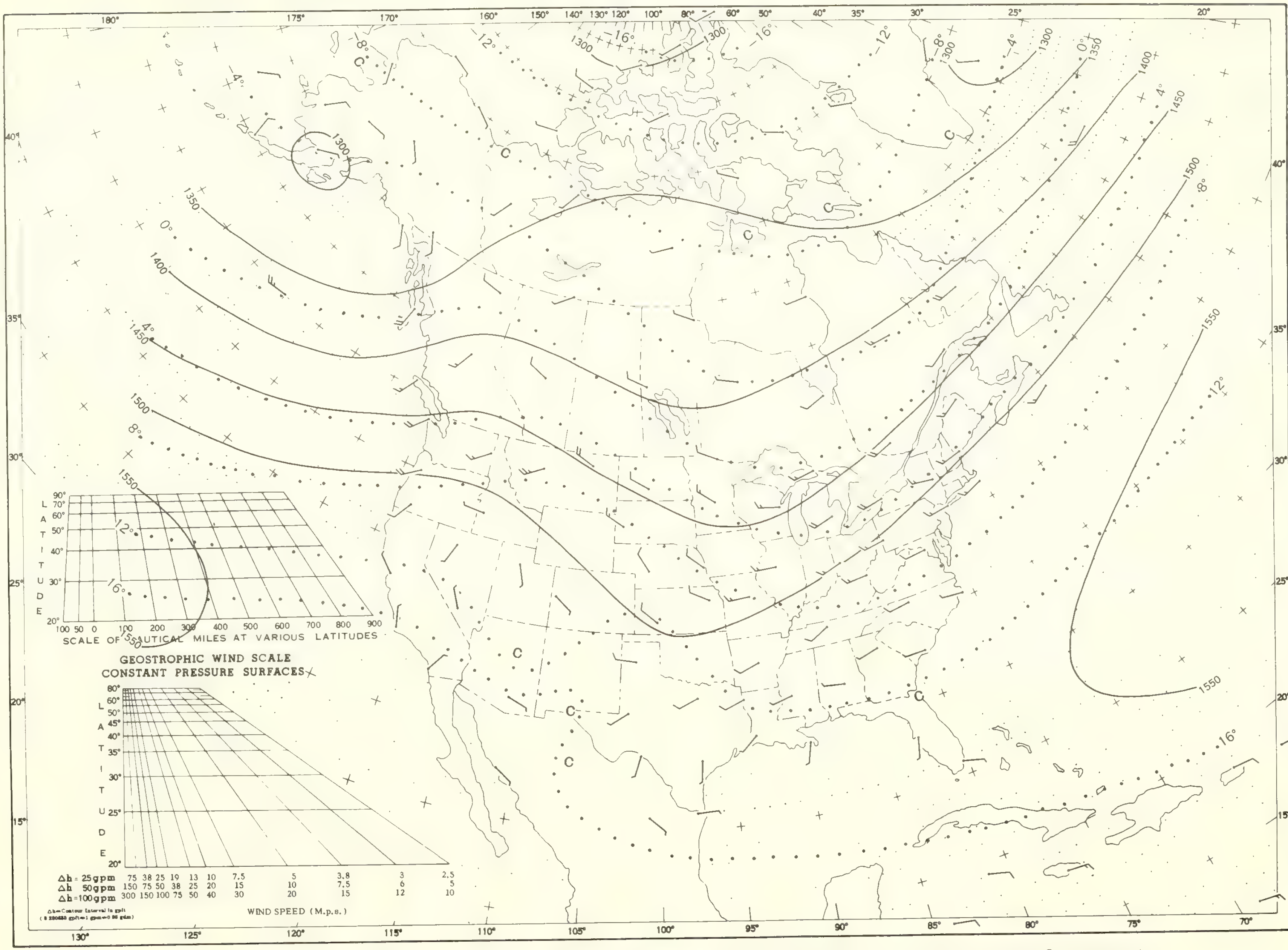
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, October 1967. Inset: Departure of Average Pressure (mb) from Normal, October 1967.



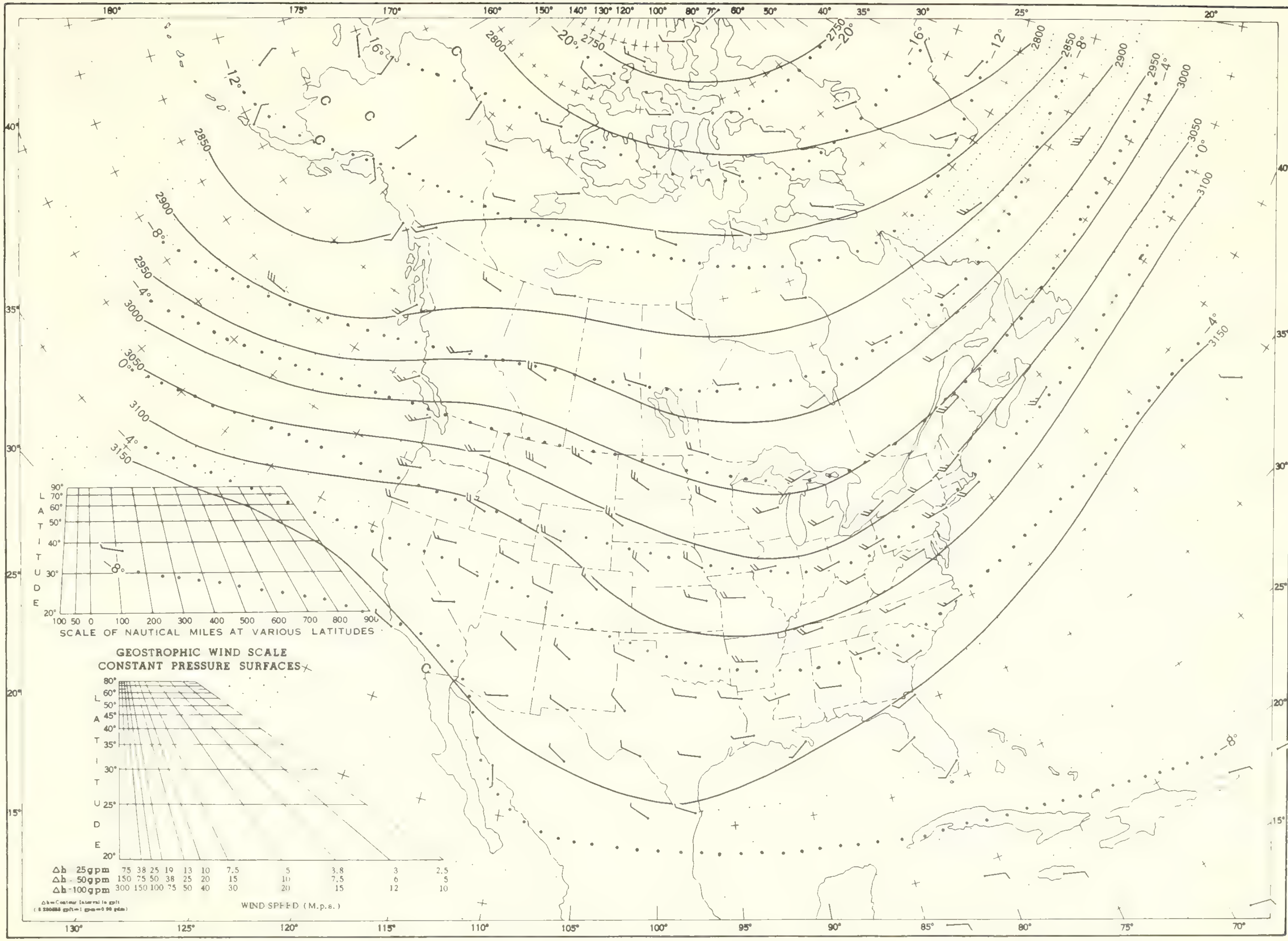
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI 850-mb Surface, 1200 GMT, October 1967. Average Height and Temperature, and Resultant Winds.



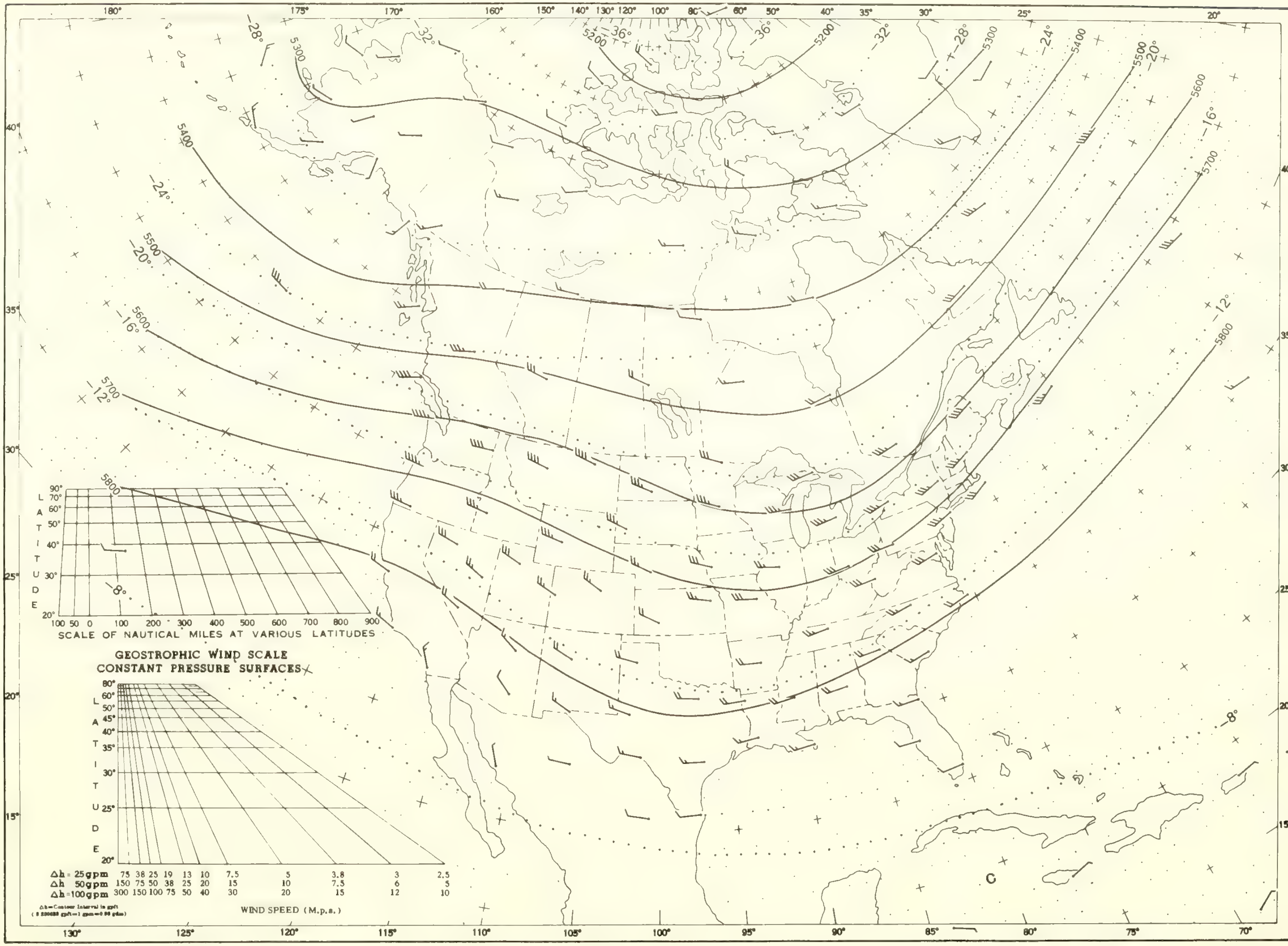
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, **October 1967**. Average Height and Temperature, and Resultant Winds.



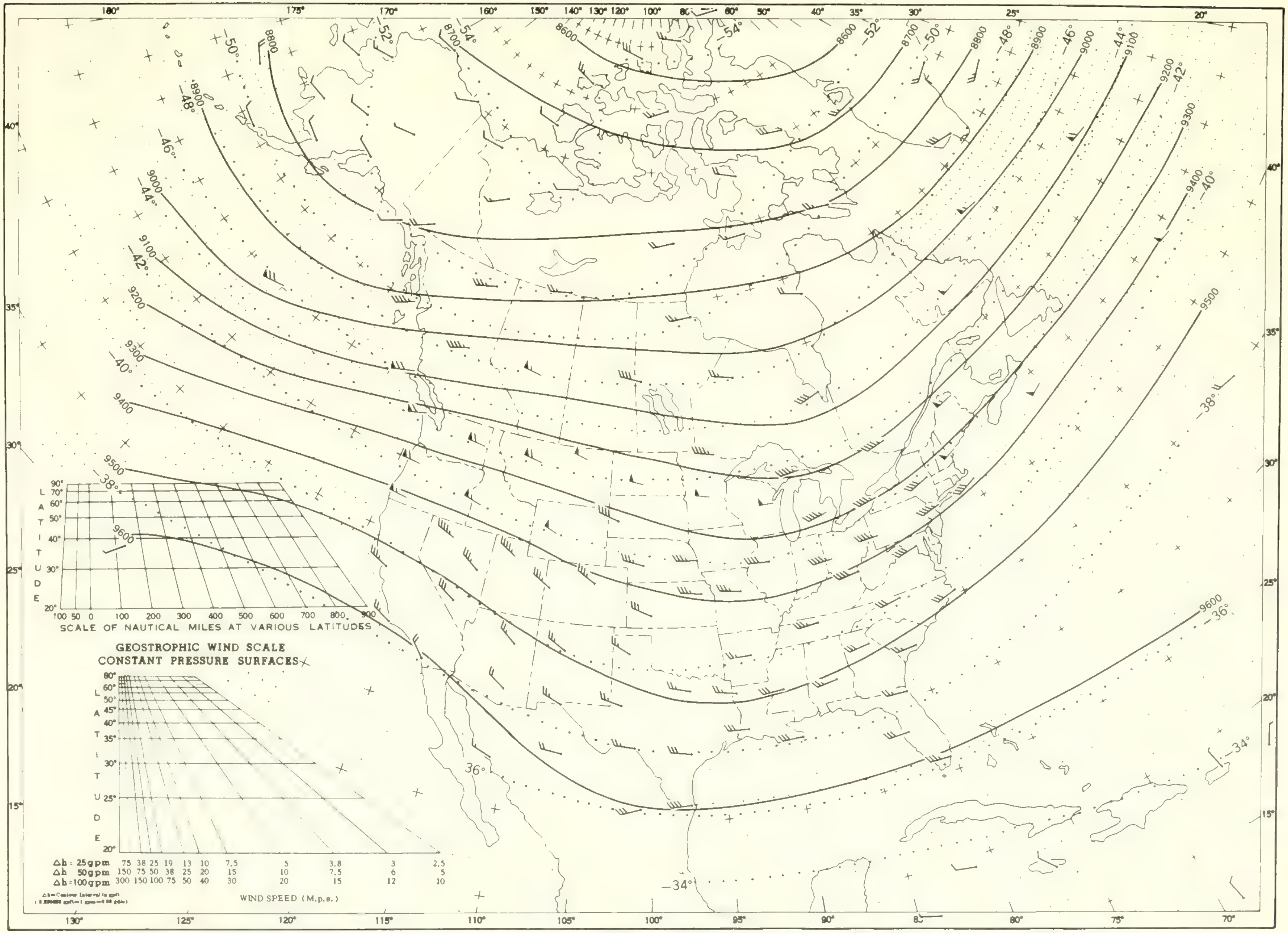
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, October 1967. Average Height and Temperature, and Resultant Winds.



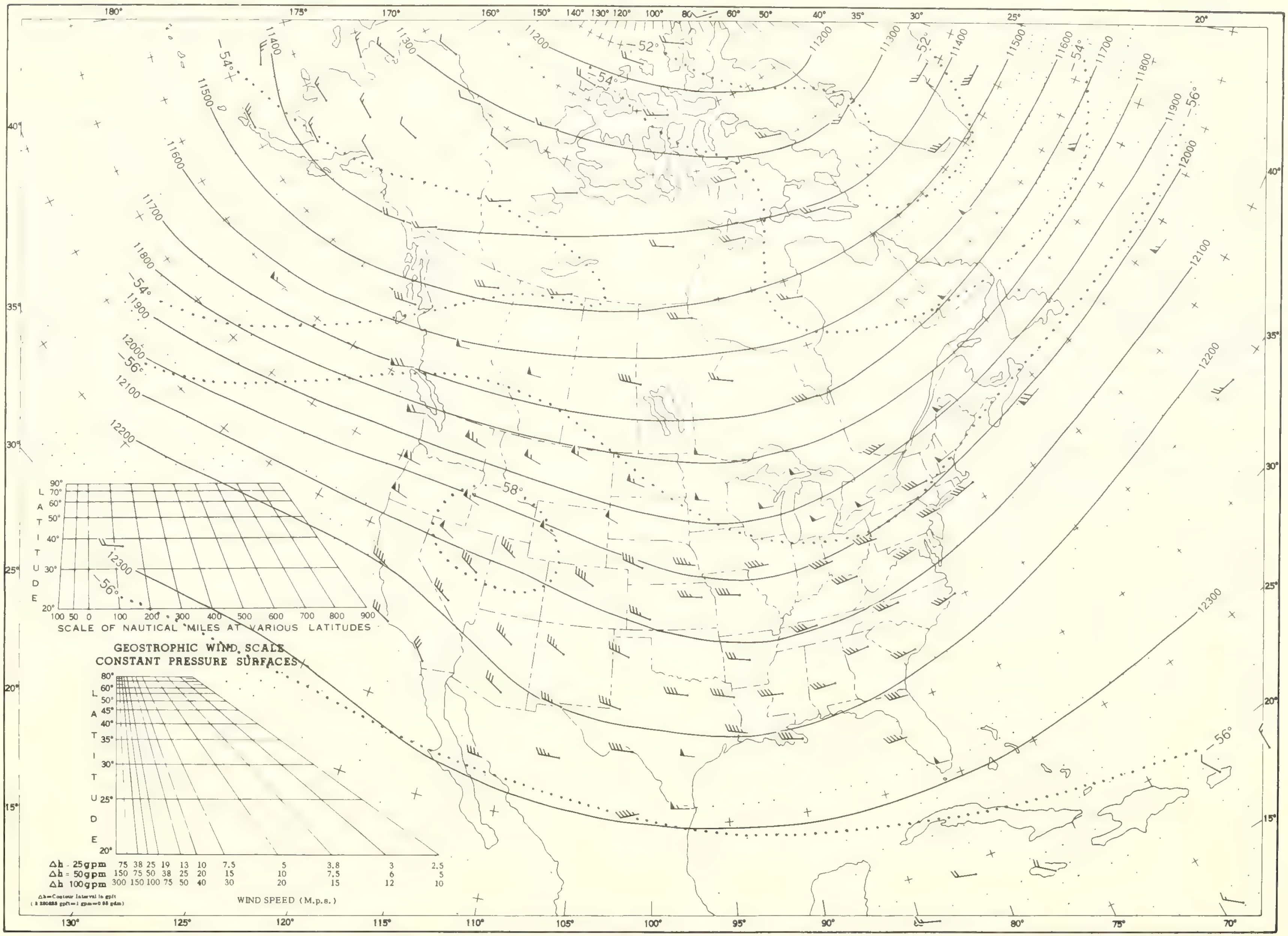
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, October 1967. Average Height and Temperature, and Resultant Winds.



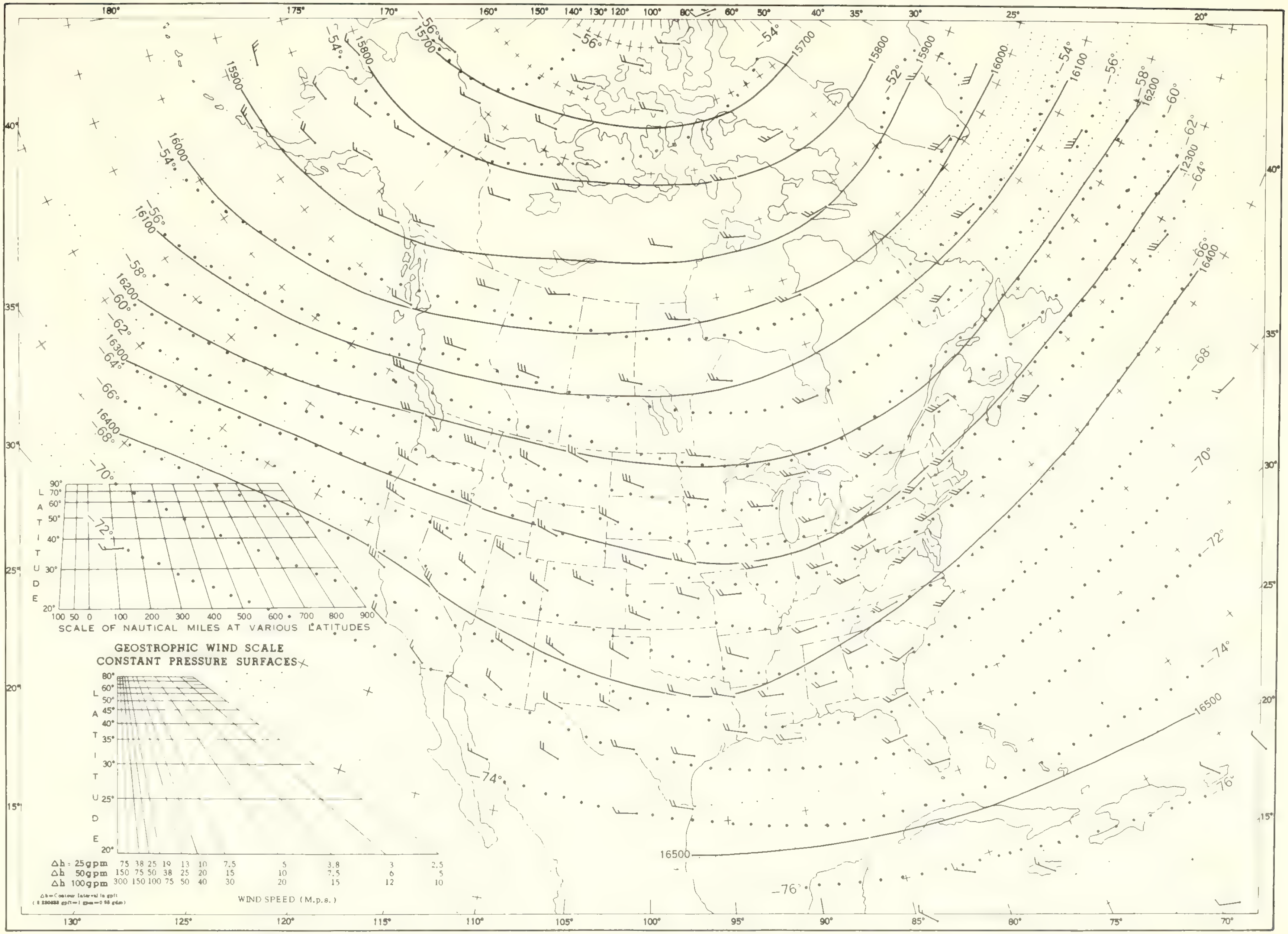
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, October 1967. Average Height and Temperature, and Resultant Winds.



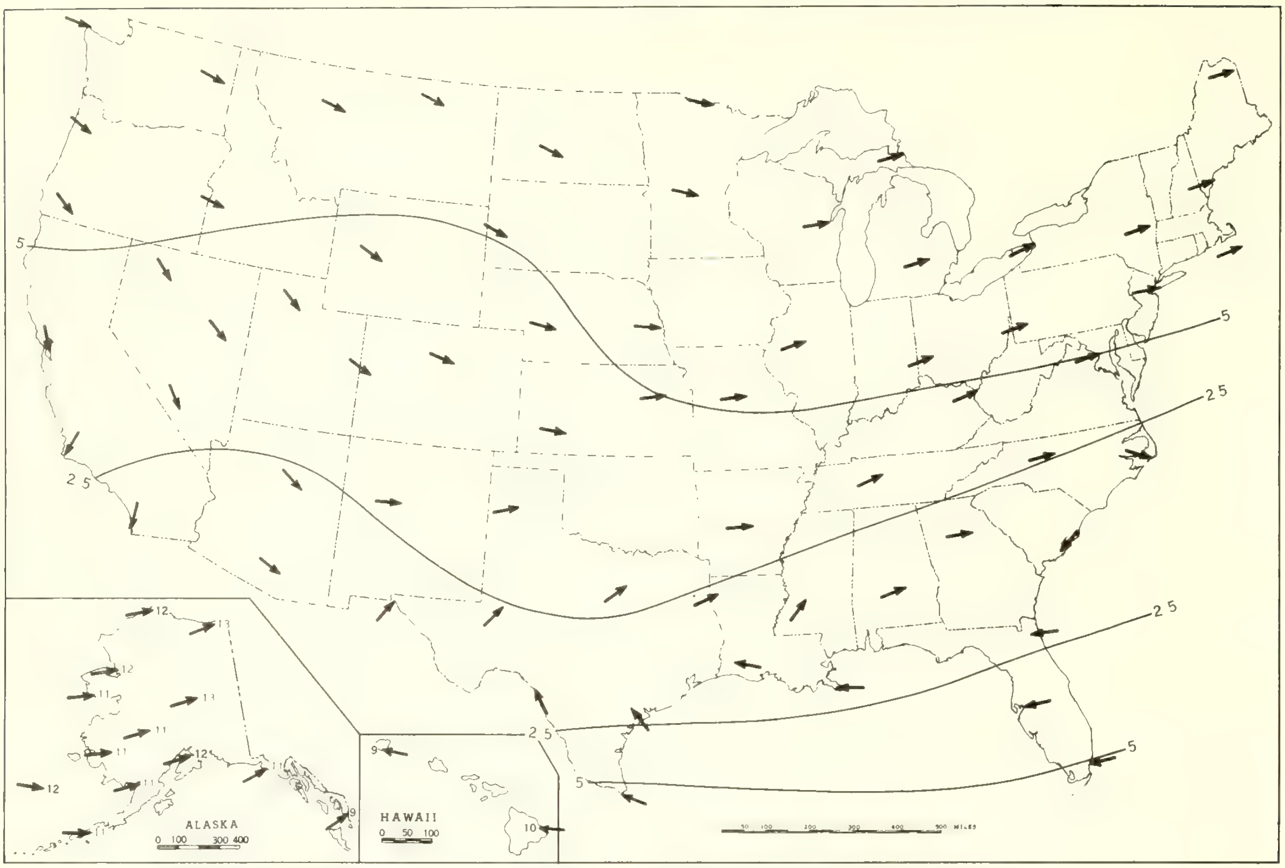
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, October 1967. Average Height and Temperature, and Resultant Winds.

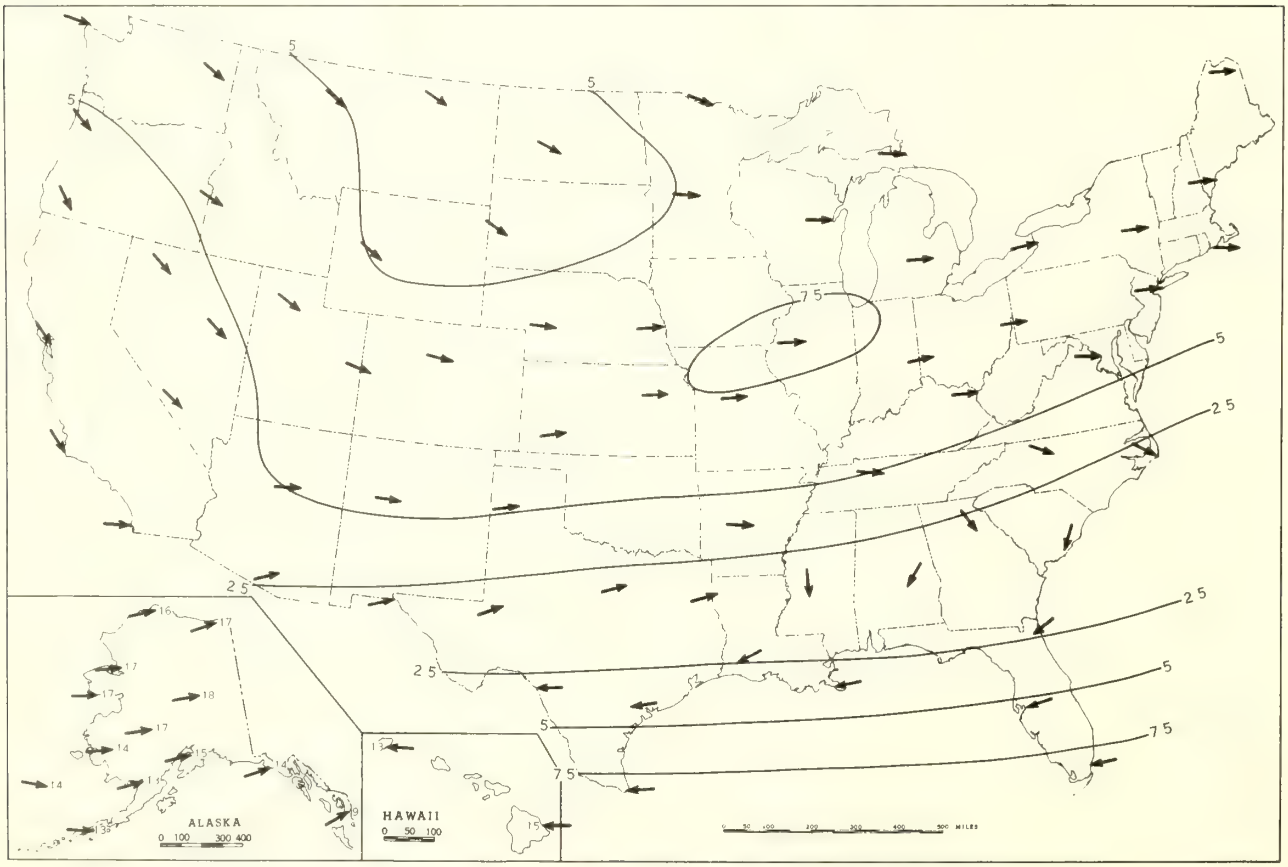


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, October 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, October 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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NOVEMBER 1967
Volume 18 No. 11

ASHEVILLE: 1968

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 11 NOVEMBER 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Record early season snowfall in Northeast.
2. Seventh consecutive relatively cold month in Southeast.
3. Cold, damp weather continued to delay harvests in Corn and Cotton Belts.
4. Continued warm in Far West.

TEMPERATURE.--November, relative to normal, was cold in the East and warm in the lower Great Plains and West. This was the seventh consecutive colder-than-normal month in the Southeast and the sixth consecutive relatively warm month in the Far West.

Cold air overspread most of the country early in the first week and weekly averages were 12° below normal at many stations in the Great Plains. Freezing occurred everywhere except coastal areas, and minima fell below zero in the central Rockies.

Rising temperatures reached above normal levels in the West by the middle of the second week and in the East by the end. Averages for the week were above normal in the Far West and central and upper Great Plains, but below in the East. Minima in the 20's were common in South Carolina until the 8th, and record early season lows occurred all over the State. In Georgia this was reported as one of the most persistent early season cold spells on record.

The weather continued warm during the third week west of the Mississippi River and cold in the East. Several cold fronts accompanied by strong gusty winds crossed the eastern United States and brought winter chill into the Deep South.

The week ending November 26 was abnormally warm with few exceptions, although temperatures gradually fell during the week and were near or below normal at the end. In much of Texas temperatures for the week averaged 10° to 18° above normal.

During the last 3 days of the month a vast cold air mass crossed the Country from the Northwest. Minima fell to subzero levels in the northern Rockies and extreme northern Great Plains, and freezing extended to the northern portions of the Gulf States.

The highest temperature of the month in the conterminous United States was 98° near Brawley, Calif., on the 15th. In the southwest desert where this high temperature occurred, Phoenix, Ariz., reported that 27 days were warmer than normal and the month was the warmest November since 1954. At Yuma, Ariz., a period of 49 consecutive warmer-than-normal days ended on the 29th. In California, this was the warmest November since 1941 at Long Beach, since 1949 at Mount Shasta, since 1932 at Sacramento, and since 1949 at San Diego; also, at Sacramento 85° on the 2d was the second highest temperature for November there since 1932. Most days in the northern Rockies were also warmer than normal.

The lowest temperature in the conterminous United States for November was -31° near Bondurant, Wyo., on the 27th when cold weather covered most of the Country. In north-central areas -15° recorded at Baudette, Minn., on the 29th and Lostwood, N. Dak., on the 28th was the lowest, and -7° at Mount Washington, N. H., on the 30th was the lowest in the Northeast. This was the coldest November since the 1950's in the midwest and for much longer periods at a number of stations in the East. It was the coldest November since 1880 at Erie, Pa.; since 1904 at Concord, N. H.; and since 1917 at Portland, Maine, and Harrisburg, Pa.

PRECIPITATION.--Well above normal precipitation fell in southern California and portions of adjoining States, central Wyoming, central and south-central Texas, from Michigan and Ohio southward to the Gulf, and in portions of New York State. Monthly totals were less than 50 percent of normal in much of Washington and Oregon, the lower Mississippi Valley, much of the Great Plains, and the upper Florida Peninsula.

Heavy frontal rains during the first week fell in the area extending from the Great Lakes to the Gulf. Large areas measured over 2 inches. Rain fell along the north Pacific coast at the beginning of the month.

Late in the second week precipitation was heavy along the Oregon and Washington coast, with weekly totals ranging up to 5 inches or more. Cold front rains were heavy from Texas to the Great Lakes with totals exceeding 4 inches in central Texas. Much of the southeast, central Great Plains, and southwestern desert areas received no precipitation during the second week.

In various sections along the west coast, precipitation was heavy during the third week. A low pressure system off the California coast was responsible for 2- to 5-inches of rain over southern California.

Totals in the Los Angeles area ranged up to more than 9 inches, and caused mud slides and local flooding. In the Great Lakes region, upper Ohio Valley and Northeast, frontal precipitation both early and late in the week totaled up to an inch or more in some places. At the end of the week up to about 10 inches of rain fell in the San Bernardino and San Gabriel Mountains of southern California. Lighter amounts fell over a much larger area of the Southwest.

Precipitation was both frequent and heavy in the East the last decade, with totals in the lower Appalachians ranging up to more than 2 inches.

Heaviest monthly total, 16.37 inches, was measured at Opids Camp in southern California. The heaviest total in the East was 9.73 inches near Boonville, N. Y.

SNOWFALL.--Light to heavy snow fell in many northern areas from the central and northern Rockies eastward the first few days of the month. Some unusually heavy amounts for so early in the season fell in the eastern Great Lakes region. In northeastern Ohio, Conneaut measured 37 inches on the morning of the 6th, and many other stations along Lake Erie reported 1-to 2-feet. In western New York, Mayville reported 28 inches.

In New England the heaviest snow fell about midmonth when 6 to over 12 inches were measured from central and northeastern Massachusetts over New Hampshire and a small portion of adjacent Maine. At Boston, Mass., 2.2 inches, the greatest amount so early in the season since 1894, caused one of the worst traffic jams on record.

Snowfall was widespread in the Northeast during the closing days of the month. In western and northern New York from the 27th to the end of the month, Little Valley

in the southwest measured 29 inches, Bennetts Bridge 34 inches, and Boonville 37 inches. The latter station had 84 inches for the month, the most for any month in 19 years of record. Erie, Pa., had 36.3 inches, the second greatest amount for November. On the 30th heavy falls were recorded as far south as northern Virginia where up to 9 inches was the heaviest there for November since 1953. Record amounts also were reported by stations in Maryland and Delaware. In northwestern Pennsylvania near record amounts of up to 40 inches were measured during the closing days, and Corry reported a monthly total of 56.5 inches for the greatest November snowfall in Pennsylvania since 1933.

Heavy snows occurred in the Far West, and depths at the end of the month ranged up to 3 feet in the Sierras and over 4 feet in the Cascades. Over a foot was reported by some stations in the central and northern Rockies.

STORMS.--A storm in southern California late in the month produced heavy rainfall in the Los Angeles area, which resulted in mud slides and some flooding.

Heavy thunderstorms with damaging winds and hail occurred from Alabama to South Carolina on the afternoon and evening of the 24th. Baseball size hail fell in Phenix City, Ala. Tornadoes occurred at Huntsville, Ala., and Horrell Hill, S. C.

CONDENSED CLIMATOLOGICAL SUMMARY

NOVEMBER 1967

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Chatom 3N	87	24	Waterloo	14	28	Rock Mills	7.68	Mobile WBAP	0.36
Alaska	Data delayed									
Arizona	Casa Grande	96	11	Fort Valley	8	29	Sunflower 3NNW	3.42	3 Stations	.00
Arkansas	2 Stations	83	13	Evening Shade 1NE	12	28	Burdette	3.55	Parks	.50
California	Brawley 2SW	98	15	White Mountain 1	-7	29	Opids Camp FC 57 BE	16.37	Williams	.11
Colorado	Flagler 2NW	81	14	Antero Reservoir	-22	3	Berthoud Pass	2.72	2 Stations	.00
Connecticut	2 Stations	71	4+	2 Stations	7	17	Groton	4.33	Cream Hill	2.21
Delaware	Lewes 1SW	72	12	Bridgeville 1NW	14	29	Wilmington Porter Resvr	2.50	Georgetown 5SW	1.35
Florida	2 Stations	90	26+	Fountain 3SSE	22	9+	Niceville	3.98	2 Stations	.00
Georgia	Moultrie 2ESE	87	26	Blairsville Exp Sta	14	7	Dahlonega	8.51	Brunswick	.48
Hawaii	Data delayed									
Idaho	5 Stations	71	11+	3 Stations	-18	27	Powell	3.38	McCammon 2WSW	T
Illinois	Cairo WB City	70	12	7 Stations	12	29+	Golconda Dam 51	4.54	Quincy Dam 21	1.16
Indiana	3 Stations	68	29+	Culver Experiment Farm	8	29	Salem	4.96	Crawfordsville Pwr Pl	1.54
Iowa	do	72	11	Inwood 2SW	0	28	Dubuque WBAP	3.27	4 Stations	T
Kansas	do	78	16	Brewster	4	5	Toronto Dam	2.17	Saint Francis 8NW	T
Kentucky	2 Stations	75	13+	Owenton 2S	9	28	Martin	5.49	Shelbyville	2.67
Louisiana	do	88	26+	3 Stations	24	8+	Stevenson Fire Tower	2.43	5 Stations	.00
Maine	do	70	3	Clayton Lake 2	-3	30	Machias	5.47	Jackman	1.84
Maryland	National Arboretum D C	77	12	Oakland 1SE	-2	16	Bittinger 2NW	3.64	Upper Marlboro 3NNW	1.10
Massachusetts	Sandwich	74	3	Birch Hill Dam	4	17	Edgartown	5.62	Tully Dam	1.98
Michigan	3 Stations	61	11	3 Stations	-5	29+	Holland WJBL	4.74	Iron Mountain Wtr Wks	.41
Minnesota	2 Stations	68	11	Baudette	-15	29	Winton Power Plant	1.07	11 Stations	T
Mississippi	Monticello	85	27	2 Stations	19	28+	2 Stations	5.16	2 Stations	.10
Missouri	Ozark Beach	78	14	do	11	28+	New Madrid Pwr Plant	3.90	do	.31
Montana	Terry	72	1	West Yellowstone	-25	27	Many Glacier	3.54	Biddle	.00
Nebraska	Greeley	76	11	2 Stations	-9	6+	Mullen 21NW	D 0.95	6 Stations	.00
Nevada	Sunrise Manor Las Vegas	89	1	Charleston	-13	30	Glenbrook	2.90	Montello	.00
New Hampshire	Massabesic Lake	76	4	Mount Washington	-7	30	Mount Washington	7.45	Lebanon FAA AP	1.92
New Jersey	Burlington	71	12	2 Stations	10	16+	Oak Ridge Reservoir	3.73	Moorestown	.79
New Mexico	Portales	87	16	Gavilan	-6	30	Jornada Exp Range	1.26	3 Stations	.00
New York	3 Stations	70	3+	3 Stations	-5	16	Boonville 2SSW	9.73	Suffern Water Works	1.12
North Carolina	Kenansville	82	4	Grandfather Mountain	9	28+	Murphy 1E	6.72	Greensboro Pump Sta	.72
North Dakota	Tioga 1E	70	1	Lostwood 12N	-15	28	Grenora	.66	11 Stations	T
Ohio	Marietta Sewage Tmt Pl	79	11	2 Stations	7	29+	Ashtabula	6.24	Summerfield 3NE	1.67
Oklahoma	Ardmore FAA AP	86	12	Goodwell	11	27	Broken Bow Dam	2.34	2 Stations	.09
Oregon	Pilot Rock 1SE	79	1	Seneca	-12	30	Valsetz	10.98	Alkali Lake	.14
Pennsylvania	3 Stations	71	11+	Coudersport 5NW	-3	16	Corry	6.71	Buffalo Mills	1.35
Puerto Rico	6 Stations	93	26+	Aibonito	57	28+	Rio Blanco Upper	13.48	Coamo Dam	1.15
Rhode Island	2 Stations	70	3	Kingston	12	17	Block Island WBAP	4.15	Providence WBAP	2.75
South Carolina	Loris	80	4	Dillon 4SW	16	9+	Crescent 1S	5.75	Hilton Head	.79
South Dakota	5 Stations	73	10+	Deerfield 4NW	-10	27	Deadwood	1.03	3 Stations	.00
Tennessee	Dayton	78	12	Mountain City No 2	10	29	Monteagle	6.45	Memphis WBAP	1.90
Texas	2 Stations	92	26+	Bravo	13	3	Avalon	5.06	4 Stations	.00
Utah	Saint George	81	12+	Strawberry Res E Prtl	-6	27	2 Stations	2.44	Fish Springs Refuge	.00
Vermont	Rutland	68	1	Bloomfield	-6	30	Mount Mansfield	D 8.89	Montpelier FAA AP	1.46
Virginia	5 Stations	76	18+	Wytheville 1S	6	28	Pennington Gap	4.61	Pilot 1ENE	.38
Washington	Wenatchee	76	1	Chesaw 4NNW	1	26	Quinault Ranger Sta	11.65	Royal City	.02
West Virginia	Gassaway	76	11	Bayard	-3	16	Williamson 2	5.82	Moorefield 2SSE	.53
Wisconsin	Clintonville	66	11	6 Stations	-8	29+	Beloit	3.36	Frederic	.02
Wyoming	2 Stations	70	15+	Bondurant 3NW	-31	27	Bondurant 3NW	2.10	Greybull 1S	.02

\+ And also on an earlier date or dates.

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	997.3	1020.4	61	36	48.4	- 4.9	76	12	24	7	0	12	37	71	6.42	2.89	2.07	9	2	T	0	1.4	34	31	W	24	12	7	11	5.3	59
HUNTSVILLE	600	996.6	1020.1	58	35	46.4	- 4.4	71	13+	23	28	0	11	37	72	4.12	0.47	1.93	10	2	0.0	0	0.8	29	29	27	24	14	4	12	5.3	
MOBILE	211	1012.2	1020.0	71	48	59.5	0.6	82	26+	35	7	0	0	47	68	0.36	- 2.99	0.30	2	0	0.0	0	0.7	33	25	36	4	14	9	7	4.0	
MONTGOMERY	194	1012.9	1020.3	66	42	53.8	- 0.4	81	24	29	7	0	2	40	66	2.58	- 0.44	2.05	7	2	0.0	0	1.6	32	24	SW	24	12	8	10	4.7	61
ALASKA												H																				
ANCHORAGE	114	1001.7	1006.7	36	24	30.0	7.8	53	20	- 2	25	0	18	20	64	1.72	0.69	0.72	12	0	2.5	4	2.8	12	32	15	12	5	6	19	7.4	32
ANNETTE	110	1009.8	1013.7	46	36	40.7	0.3	51	15+	27	24+	0	11	36	84	6.02	- 8.63	0.91	23	0	9.3	4	1.9	11	25	17	23	3	4	23	8.3	
BARROW	31	1010.5	1011.1	3	- 7	- 2.0	- 1.3	24	3	-22	27	0	30	- 7	78	0.43	0.20	0.11	11	0	5.8	9	2.1	6	26	24	24+	V7	V6	V17	6.8	
BARTER ISLAND	39	1009.8	1011.9	5	- 9	- 1.7	- 1.9	35	13	-34	10	0	30	-10	65	0.48	0.08	0.24	4	0	7.4	10	3.9	25	53	27	22	X6	X8	X14	6.1	
BETHEL	125	998.0	1003.7	29	16	22.4	5.2	43	20	-15	30	0	27	20	89	2.49	1.43	0.98	15	0	10.1	4	3.4	10	40	19	11	2	2	26	9.0	
COLD BAY	96	999.7	1003.5	43	33	38.0	3.6	49	10+	22	24	0	13	32	80	7.40	3.61	1.83	27	0	4.8	3	8.7	20	66	14	26	1	5	24	8.4	
FAIRBANKS	436	991.9	1009.8	19	1	9.5	5.6	42	13+	-34	30	0	30	5	79	0.93	0.33	0.24	16	0	14.4	8	1.8	33	22	27	13	6	4	20	7.4	
JUNEAU	12	1012.2	1012.9	38	27	32.3	- 2.0	47	7	3	30	0	20	31	96	5.81	- 0.25	1.11	20	0	9.5	6	5.1	11	41	12	22	6	3	21	7.7	31
KING SALMON	49	1002.4	1004.4	36	22	29.3	7.3	47	20+	- 7	30	0	21	24	79	1.90	0.44	0.72	15	0	4.1	2	5.4	14	48	14	12	3	5	22	8.0	
KOTZEBUE	10	1007.1	1007.6	13	- 1	6.1	- 1.3	35	3+	-26	30	0	30	0	76	0.45	0.09	0.17	9	0	9.5	9	6.1	8	43	31	21+	6	7	17	6.9	
MC GRATH	344	994.6	1007.8	21	7	14.0	8.7	49	12	-25	30+	0	27	8	74	2.99	1.91	1.08	11	0	17.4	8	1.0	19	35	19	12	4	3	23	8.1	
NOME	13	1004.4	1005.1	22	8	15.1	- 1.4	37	11+	-24	30	0	30	6	65	0.52	- 0.64	0.19	11	0	2.9	4	4.0	5	28	4	18	8	2	20	7.0	28
ST. PAUL ISLAND	22	998.0	999.0	39	32	35.3	2.4	44	11+	19	23	0	14	30	81	3.20	0.70	0.39	28	0	7.9	3	3.3	8	63	3	22	0	6	24	9.1	
SHEMYA	122	997.0	1000.7	39	32	35.2	- 0.6	43	30+	27	20	0	21	31	83	2.23	- 0.49	0.65	23	0	6.6	T	3.9	34	59	22	30	0	9	21	8.5	
YAKUTAT	28	1008.1	1009.3	37	28	32.7	- 1.1	45	21	14	26	0	21	31	92	18.83	2.80	3.12	25	0	23.0	13	4.0	10	28	12	22	1	3	26	8.8	
ARIZONA																																
FLAGSTAFF	6993	788.7	1019.2	57	24	40.4	4.3	72	13	18	8	0	30	21	57	0.54	- 0.46	0.31	5	2	5.1	3	2.7	21	21	21	28	13	8	9	4.9	
PHOENIX	1117	976.0	1015.1	78	49	63.9	5.8	92	12	37	30	2	0	39	47	1.27	0.78	0.52	6	2	0.0	0	3.1	10	40Y	WSW	26	17	6	7	4.1	83
TUCSON	2584	927.2	1015.1	76	49	62.9	4.8	87	14+	38	30	0	0	33	40	0.48	- 0.14	0.36	4	0	0.0	0	4.0	14	33	W	29	17	6	7	3.9	78
WINSLOW	4895	853.7	1019.6	63	31	47.1	5.8	75	15	23	14	0	22	20	42	0.36	0.00	0.29	3	0	0.2	T	2.3	19	29	19	28	16	9	5	3.7	
YUMA	194	1007.5	1014.6	81	53	66.9	5.2	89	15+	43	29	0	0	45	51	1.45	1.33	1.38	3	1	0.0	0	2.3	4	28	W	28	18	8	4	3.6	84
ARKANSAS																																
FORT SMITH	447	1002.7	1019.5	63	36	49.3	- 0.7	81	13	26	7	0	10	36	65	0.81	- 2.37	0.33	5	0	T	T	1.1	2	20	N	3	4	14	12	6.2	61
LITTLE ROCK	257	1009.8	1019.7	61	37	49.1	- 0.4	77	13+	26	6	0	9	37	66	1.73	- 2.39	0.85	5	0	T	0	0.9	27	21	NW	24+	10	9	11	5.5	71
TEXARKANA	391	1006.1	1019.5	66	43	54.4	0.7	82	21	31	8	0	3	40	63	1.68	- 2.65	0.47	8	0	0.0	0	1.2	18	35	28	24	13	8	9	5.1	
CALIFORNIA																																
BAKERSFIELD	475	999.0	1016.5	70	52	61.0	5.1	83	7+	42	29	0	0	46	62	1.76	1.27	0.72	6	0	0.0	0	1.2	34	23	34	30	8	3	19	6.5	
BISHOP	4108	874.7		66	33	49.3	3.5	83	1	17	29	0	13			0.30	- 0.23	0.19	4		T	0						12	6	12	5.2	
BLUE CANYON	5280			55	42	48.5	2.8	75	1	24	30	0	4			6.53	- 0.22	1.89	9		30.0	26			36	9	21	10	4	16	6.2	
EUREKA U	43			60	47	53.3	2.1	73	12	37	26	0	0			4.40	- 0.21	2.17	8		0.0	0			26	S	29+	4	8	18	7.2	49
FRESNO	328	1004.7	1016.5	68	46	56.8	3.0	84	3+	33	29	0	0	46	73	1.55	0.60	0.68	6	1	0.0	0	0.1	12	21	NW	30	9	4	17	6.7	41
LONG BEACH	34	1014.6	1016.1	75	57	66.0	4.8	90	11	42	29	1	0	55	73	4.61	3.58	3.14	6	2	0.0	0	1.3	24	25	25	28	8	12	10	5.6	
LOS ANGELES	97	1011.9	1015.4	71	58	64.2	3.1	85	1	45	29	0	0	54	75	7.47	6.38	5.60	6	1	0.0	0	1.5	26	37Y	W	28	8	11	11	5.5	
LOS ANGELES U	270			75	58	66.6	3.9	89	1	47	29	0	0			8.67	7.59	3.61	5		0.0	0			20	NE	21	12	12	6	4.5	44
MT SHASTA R	3544			56	35	45.4	3.6	70	1	25	27+	0	10			2.74	- 1.23	0.97	7		14.9	12										
OAKLAND	6	1016.6	1016.7	66	52	58.7	4.0	78	2	43	27	0	0	47	69	1.32	- 0.41	0.79	9	0	0.0	0	0.7	32	26	4	21	15	3	12	4.8	
RED BLUFF	342	1004.1	1016.7	69	47	57.6	3.1	90	1	33	27	1	0	42	64	1.90	- 0.39	0.78	7	1	0.0	0	3.0	34	41	SE	29	7	4	19	6.7	52
SACRAMENTO	17	1015.6	1016.3	67	46	56.2	3.3	84	2	34	27	0	0	46	74	1.18	- 0.27	0.65	7	1	0.0	0	0.6	19	29	NW	21	8	9	13	6.1	71
SANDBERG R	4517	863.2		59	45	51.9	2.9	77	1	27	20+	0	3			6.96	6.04	2.79	6		T	0			38	35	28	14	1	15	5.2	
SAN DIEGO	13	1014.6	1015.6	70	58	64.1	2.3	77	13	48	29	0	0	56	75	3.53	2.63	1.33	6	1	0.0	0	0.7	33	26	S	19	11	11	8	5.2	65
SAN FRANCISCO	8	1015.9	1016.6	66	49	57.8	3.0	85	2+	40	27	0	0	48	74	1.29	- 0.28	0.63	7	0	0.0	0	1.4	28	42	SSW	13	14	5	11	4.8	
SAN FRANCISCO U	52			65	55	60.0	2.6	83	2+	46	30	0	0			1.10	- 0.90	0.41	8		0.0	0			26	SW	30+					73
SANTA CATALINA	1568			67	57	61.9	1.4	86	1	48	30+	0	0			6.10	4.99	4.22	7		0.0	0										
SANTA MARIA	236			69	47	58.2	2.1	88	1	37	29	0	0			1.91	0.89	0.61	8		0.0	0						12	5	13	5.4	
STOCKTON	22	1015.9	1016.9	66	46	55.8	2.8	82	1	34	26	0	0	48	80	1.27	0.10	0.67	9	0	0.0	0	0.9	28	32	14	29	7	10	13	6.1	
COLORADO																																
ALAMOSA	7536	772.1		52	13	32.5	3.0	63	15	1	27	0	30			0.01	- 0.28	0.01	1		0.3	T						14	8	8	4.6	
COLORADO SPRINGS	6145	811.0	1018.7	54	26	39.6	2.1	73	16	7	3	0	22	17	47	0.25	- 0.15	0.15	4	0	3.1	1	3.5	4	32	36	2	13	11	6	4.2	
DENVER	5283	836.1	1016.8	56	25	40.5	2.8	74	15	8	22	0	25	21	54	1.01	0.32	0.67	2	0	9.4	6	1.4	19	32	NW	24	13	9	8	4.6	62
GRAND JUNCTION	4855	854.0	1019.5	55	27	41.0	2.2	66	16+	14	27	0	25	19	47	0.33	- 0.25	0.20	3	0	0.5	T	2.4	11	25	NE	2	11	9	10	5.2	63

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

NOVEMBER 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature, No. of days: Max. 90 F. or above	Temperature, No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation, No. of days: .01 inch or more	Precipitation, No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind, Fastest mile: Speed	Wind, Fastest mile: Direction	Wind, Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	856.1	1018.4	55	22	38.4	-1.6	74	11	7	28	0	30	20	53	0.11	-0.42	0.07	2	0	1.3	T	1.3	35	36	N	2	12	12	6	4.7	77
CONNECTICUT																																
BRIDGEPORT	7	1014.6	1015.3	48	34	41.1	-3.4	65	3	21	15	0	13	32	73	2.93	-1.09	0.69	12	2	2.1	2	7.1	29	38	30	19	7	7	16	6.5	
HARTFORD	169	1007.8	1014.4	46	30	38.0	-3.3	65	3	16	17	0	20	27	66	3.13	-0.71	0.68	11	2	3.7	3	4.1	31	28	NW	19+	4	7	19	7.5	42
NEW HAVEN	6	1014.9		48	33	40.1	-3.3	66	3	19	15	0	15			3.50	-0.55	0.75	15		2.6	2			29	NW	15	8	8	14	6.2	58
DELAWARE																																
WILMINGTON	74	1013.9	1016.9	49	32	40.7	-4.7	69	12	19	16	0	18	30	68	2.08	-1.45	0.84	10	2	6.8	6	5.1	28	31	31	15	6	13	11	6.1	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.2	1017.6	54	36	45.0	-2.7	76	12	21	16	0	9	29	56	2.10	-0.74	1.04	7	0	6.9	7	4.1	29	34	NW	19	11	10	9	5.3	51
FLORIDA																																
APALACHICOLA U	13			68	50	59.3	-2.0	79	27+	36	7	0	0			1.91	-0.67	1.93	2	0	0.0	0			26	N	27	18	9	3	3.1	76
DAYTONA BEACH	31	1017.6	1019.1	75	54	64.5	-0.8	85	25	44	22	0	0	54	73	T	-2.33	T	0	0	0.0	0	3.4	33	24	1	8+	8	19	3	4.7	
FORT MYERS	15	1018.0	1018.2	80	59	69.6	0.4	86	26	51	20	0	0	60	77	0.92	-0.28	0.92	1	0	0.0	0	3.6	3	23	7	11+	15	13	2	4.1	
JACKSONVILLE	20	1018.3	1019.4	74	50	62.2	0.5	85	24	36	10	0	0	49	66	0.24	-1.45	0.23	3	0	0.0	0	3.1	32	33	NE	16	12	14	4	4.2	64
KEY WEST	4	1016.3	1017.0	79	71	75.1	1.0	83	30+	67	22	0	0	67	77	1.38	-1.42	0.51	5	0	0.0	0	8.1	4	27	NE	8	12	8	10	5.1	72
LAKELAND U	214			77	56	66.4	-0.5	83	26+	45	7	0	0			0.18	-1.41	0.18	2		0.0	0						14	14	2	3.6	84
MIAMI	7	1016.9	1017.1	79	64	71.2	-1.2	83	25	56	22+	0	0	63	77	3.81	0.98	2.34	11	0	0.0	0	4.1	4	24	6	10	8	12	10	5.7	
ORLANDO	108	1014.9	1019.1	79	56	67.5	1.6	86	26+	47	22	0	0	54	69	0.03	-1.54	0.03	2	0	0.0	0	3.4	35	23	4	8	14	13	3	4.0	
PENSACOLA	112	1015.9	1020.0	69	48	58.9	-0.6	80	26+	33	7	0	0	47	69	1.07	-2.17	0.92	3		0.0	0	1.5	34	33	SW	24	18	10	2	3.2	74
TALLAHASSEE	55	1017.6	1019.8	74	43	58.6	-0.6	85	27+	28	20+	0	8	45	69	3.06	0.62	2.52	3	0	0.0	0	2.0	32	21	36	7	15	11	4	3.6	
TAMPA	19	1018.6	1018.8	76	54	65.3	-1.5	82	27+	42	20	0	0	55	74	0.45	-1.01	0.45	2	0	0.0	0	2.5	2	20	3	8	15	11	4	3.7	75
WEST PALM BEACH	15	1016.9	1017.6	79	62	70.5	-2.0	85	25	52	21+	0	0	60	71	1.37	-1.49	0.94	4	0	0.0	0	4.4	4	30	2	7	5	17	8	5.8	
GEORGIA																																
ATHENS	802	989.8	1019.3	60	37	48.6	-2.9	75	12	26	7	0	10	34	63	6.36	3.43	2.47	9	2	0.0	0	3.3	30	23	32	30	14	6	10	4.5	
ATLANTA	1010	982.1	1019.6	60	37	48.5	-2.7	74	12	27	8+	0	9	34	62	5.52	2.56	2.56	9	0	0.0	0	3.8	30	28	W	24	13	7	10	4.9	64
AUGUSTA	145	1013.5	1019.0	67	36	51.4	-2.7	79	24+	23	8	0	13	36	63	2.61	0.43	1.22	10	3	0.0	0	2.0	27	23	30	30	12	10	8	4.6	
COLUMBUS	385			65	40	52.6	-1.5	79	24	28	9	0	9	40	69	2.86	0.27	2.17	8		T	0	2.3	32	23	22	24	13	8	9	4.8	
MACON	354	1006.1	1019.3	65	37	50.8	-4.6	82	24	22	9	0	13	36	62	2.34	-0.11	1.21	8	2	0.0	0	2.7	30	37	S	24	12	9	9	4.7	65
ROME	637			59	33	46.2	-3.0	76	12	20	7	0	13			6.26	2.84	2.12	9		0.0	0										
SAVANNAH	46	1017.3	1019.1	70	43	56.4	-0.9	83	24	27	8	0	5	42	66	0.84	-1.21	0.43	7	2	0.0	0	1.3	28	31	N	27	12	9	9	5.0	75
HAWAII																																
HILO	27	1014.9	1016.2	82	69	75.4	2.2	85	19	64	23	0	0	66	79	21.25	7.88	9.01	28	3	0.0	0	0.7	23	22	E	24	0	6	24	8.3	27
HONOLULU	7	1014.9	1015.6	84	71	77.6	1.7	87	9	65	14	0	0	64	66	2.78	0.62	1.10	17	2	0.0	0	10.7	6	31	NE	29+	4	14	12	6.3	44
KAHULUI	48	1012.9		82	67	74.3	-0.7	85	19+	58	14	0	0	65	76	1.69	0.17	0.72	19	3	0.0	0	12.1	5	30	NE	26+	8	13	9	5.6	61
LIHUE	103	1011.9	1016.9	80	70	74.9	0.4	83	19+	64	17	0	0	65	74	4.43	-0.10	1.44	23	3	0.0	0	13.8	6	32	SE	26	1	14	15	7.4	41
IDAHO																																
BOISE	2838	918.7	1020.4	50	32	40.7	2.1	71	8	22	30+	0	19	30	69	0.89	-0.31	0.42	6	0	1.3	1	2.2	15	26	W	24	6	6	18	7.1	34
LEWISTON	1413			49	33	40.9	1.1	62	8	19	26	0	14			0.45	-0.78	0.17	7		0.8	1						5	9	16	7.1	
POCATELLO	4454	864.9	1020.6	48	23	35.4	0.4	65	11	7	30+	0	20	22	63	0.51	-0.48	0.33	7	0	4.4	2	3.7	23	48	SW	24	8	4	18	6.9	41
ILLINOIS																																
CAIRO U	314			53	39	46.1	-1.8	70	12	28	5	0	7			3.71	-0.16	1.64	10		T	T			26	SW	17	8	8	14	6.1	47
CHICAGO O HARE	658	991.9	1016.9	44	30	37.3	-0.8	59	11	16	28	0	20	28	71	2.19	0.02	0.80	10	0	2.4	1	5.9	26	31	25	27	4	7	19	7.4	
CHICAGO MIDWAY	607	993.9		44	32	38.0	-1.9	58	11	20	29+	0	17	28	70	2.27	0.07	0.86	11	0	1.2	1	5.8	24	29	S	8	4	7	19	7.4	32
MOLINE	582	995.6	1017.7	43	29	36.1	-3.1	63	11	13	28	0	25	26	69	2.26	0.31	1.33	10	0	0.3	T	4.4	26	36	W	14	8	7	15	6.5	42
PEORIA	652	993.6	1018.1	44	29	36.8	-2.9	62	11	15	28	0	23	28	72	2.18	0.04	0.63	11	0	2.5	1	4.2	25	29	NW	17	8	5	17	6.8	41
ROCKFORD	724	988.8	1016.5	41	28	34.4	-2.7	57	11	13	28	0	24	27	75	2.58	0.21	1.31	8	0	0.7	T	4.8	27	25	31	18+	6	5	19	7.3	
SPRINGFIELD	588	995.6	1018.3	46	31	38.5	-3.3	63	9	17	28	0	21	30	73	1.18	-1.18	0.44	9	0	2.8	1	4.9	24	29	W	27	8	8	14	6.3	47
INDIANA																																
EVANSVILLE	381	1005.1	1019.4	51	33	42.0	-2.8	65	9	19	28	0	15	30	65	3.88	0.72	1.73	11	3	T	T	3.0	25	23	W	18	9	6	15	6.2	48
FORT WAYNE	791	987.1	1017.8	41	28	34.2	-4.7	56	1	13	30	0	21	28	78	2.70	0.15	0.81	16	0	4.1	2	6.7	26	32	W	27	4	7	19	7.7	35
INDIANAPOLIS	792	988.5	1018.1	46	33	39.4	-1.5	62	10	19	28	0	17	31	75	2.54	-0.55	0.59	12	0	6.3	3	4.3	25	28	W	18	4	8	18	7.4	33

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
SOUTH BEND	773	987.8	1016.6	41	31	36.0	- 3.1	58	1	18	29	0	18	28	74	3.34	0.69	0.90	15	0	7.0	4	5.4	25	24	29	18	2	6	22	8.2	
IOWA																																
BURLINGTON	692			46	29	37.3	- 2.1	64	11	17	28	0	23	30	77	1.76	- 0.12		7	0	T		3.9	28	23	33	3	10	7	13	5.9	
DES MOINES	938	983.1	1018.6	45	28	36.5	- 0.6	66	11	15	28	0	24	25	67	0.47	- 1.29	0.33	4	0	0.7	T	3.0	30	26	NW	27	9	8	13	5.8	55
DUBUQUE	1056	977.0		40	26	33.2	- 1.6	62	11	10	28	0	25			3.27	0.68	2.36	8		4.1	3						5	8	17	7.0	
SIOUX CITY	1095	977.3	1018.4	47	24	35.4	- 0.7	72	11	11	28	0	27	24	66	0.01	- 1.15	0.01	1	0	T	T	2.5	30	33	NW	17	9	9	12	5.6	61
WATERLOO	868	985.1	1017.7	41	24	32.3	- 2.4	67	11	7	28	0	25	24	72	1.03	- 0.80	0.66	6	0	2.6	2	4.3	29	39	28	11	8	6	16	6.6	
KANSAS																																
CONCORDIA	1470	964.4	1018.6	52	30	41.0	- 0.5	72	11	18	27	0	21	30	70	0.37	- 0.61	0.31	4	0	0.6	T	3.3	24	27	W	24	14	6	10	4.7	66
DODGE CITY	2582	926.2	1018.4	55	30	42.4	- 0.4	74	16+	17	5	0	17	29	68	0.14	- 0.50	0.08	3	0	1.0	1	2.5	24	30	SW	19+	11	8	11	5.1	76
GOODLAND	3650	888.9	1018.0	54	25	39.1	1.1	74	16+	8	5	0	26	25	64	0.41	- 0.08	0.26	3	0	3.7	2	4.2	27	29	32	10	15	8	7	3.9	
TOPEKA	876	986.8	1019.3	52	31	41.7	- 0.9	70	16	20	27+	0	19	32	71	0.41	- 1.09	0.35	4	0	T	T	2.6	27	24	SW	23+	10	8	12	5.6	51
WICHITA	1321	970.2	1019.1	54	32	43.2	- 1.2	71	11	23	5+	0	17	30	65	0.39	- 1.10	0.28	4	0	2.2	1	1.3	24	30	SW	19	10	7	13	5.7	59
KENTUCKY																																
COVINGTON	869	986.5	1018.5	47	34	40.3	- 2.4	63	10	19	29	0	15	30	68	3.84	0.83	1.19	13	0	3.1	T	5.3	25	25	31	18	4	6	20	7.3	
LEXINGTON	966	983.1	1019.2	48	33	40.7	- 4.0	65	10	18	28	0	15	32	72	4.15	0.86	1.61	14	1	T	T	4.4	22	25	24	12	8	4	18	6.6	
LOUISVILLE	477	1001.0	1019.0	51	35	42.7	- 2.0	66	10	21	29	0	13	30	63	3.08	- 0.12	1.25	13	1	T	T	3.5	27	25	SW	11	8	7	15	6.5	43
LOUISIANA																																
ALEXANDRIA	92	1015.2	1019.6	69	41	54.9	- 1.7	81	26	28	8+	0	5	44	73	0.08	- 4.70	0.05	3	0	0.0	0	0.8	19	21	19	30+	11	6	13	5.4	
BATON ROUGE	64	1017.3	1020.0	72	45	58.9	0.0	83	25	32	7+	0	2	46	68	0.25	- 3.84	0.18	2	0	0.0	0	1.1	16	23	1	3	12	11	7	4.6	
LAKE CHARLES	9	1019.0	1019.9	72	50	61.0	1.4	81	24	36	5	0	0	52	77	0.11	- 4.11	0.06	3	1	0.0	0	1.5	12	21	17	29+	10	13	7	5.0	
NEW ORLEANS	3	1019.0	1019.9	72	48	60.3	0.3	83	26+	34	20+	0	0	52	77	0.45	- 2.89	0.28	3	0	0.0	0	0.6	5	24	23	24	15	11	4	3.9	
SHREVEPORT	254	1009.8	1019.0	70	44	57.1	1.4	83	25+	31	4	0	1	43	66	0.71	- 3.50	0.49	6	1	0.0	0	0.8	19	28	27	24	9	12	9	5.5	67
MAINE																																
CARIBOU	624	987.5		39	24	31.4	1.2	61	3	8	30	0	24			2.79	- 0.25	1.26	17		9.3	3						1	7	22	8.1	
PORTLAND	47	1011.2	1013.4	43	27	34.8	- 3.3	65	3	11	17	0	24	26	73	2.52	- 1.65	1.02	12	0	3.6	1	3.8	28	37	W	24	5	10	15	6.6	46
MARYLAND																																
BALTIMORE	148	1011.5	1017.2	52	32	42.0	- 3.5	73	12	20	29	0	16	28	61	2.60	- 0.53	1.19	10	1	8.4	8	5.5	28	37	W	19	9	13	8	5.3	55
MASSACHUSETTS																																
BLUE HILL OBS P	629			44	30	37.2	- 4.8	68	3	16	16	0	19			3.15	- 1.38	0.76	14		5.8	4			39	WNW	20					48
BOSTON	15	1013.2	1014.1	46	34	40.1	- 4.8	68	3	21	16	0	11	29	67	3.38	- 0.55	0.75	12	0	2.2	2	7.1	28	35	NW	15	8	6	16	6.4	47
NANTUCKET	43	1013.9	1014.2	50	35	42.6	- 3.3	68	2	22	21	0	12	34	73	3.86	- 0.19	0.90	14	1	2.7	2	5.3	30	38	NW	16	5	8	17	7.3	42
PITTSFIELD	1170			40	24	32.4	- 4.9	65	1	11	17+	0	26			2.96	- 0.95	0.77	14		11.1	3										
WORCESTER	986	976.6	1014.4	41	28	34.4	- 4.8	64	3	14	16	0	24	27	76	3.65	- 0.61	0.64	12	1	9.8	5	6.3	28	38	31	15	6	9	15	6.7	
MICHIGAN																																
ALPENA	689	987.5	1013.5	37	25	30.8	- 3.8	49	11	6	16+	0	27	24	76	2.67	0.30	0.97	19	0	10.9	7	4.3	26	31	W	26	0	5	25	8.9	23
DETROIT	619			44	34	38.7	- 1.7	60	1	22	28+	0	15	29	68	2.19	- 0.02	0.89	12	0	0.4	T	7.3	27	29	30	12					
DETROIT M WAYNE CO	633	990.9	1015.5	42	29	35.2	- 5.2	57	1	13	29+	0	22	27	72	2.77	0.50	1.03	16	0	1.4	T	6.6	26	28	W	27+	3	6	21	8.1	35
DETROIT WILLOW RUN	711	986.8	1015.8	41	29	34.9	- 5.1	56	10+	13	29	0	21	26	70	2.40	0.15	0.92	15	0	1.8	T	7.6	25	29	28	28+	2	7	21	8.1	
FLINT	770	986.5	1014.8	40	29	34.8	- 3.4	56	10+	13	29+	0	18	27	72	2.19	0.01	0.77	12	0	3.0	T	6.7	25	24	31	12	1	9	20	8.4	
GRAND RAPIDS	784	985.4	1015.4	40	29	34.5	- 2.8	56	1	12	29	0	22	29	81	4.35	1.86	1.15	17	1	11.0	4	4.9	25	35	W	25	0	5	25	9.0	14
HOUGHTON LAKE	1149	971.2	1014.4	36	25	30.7		49	1	8	15	0	26	26	82	2.82		1.01	15	0	12.6	2	5.6	27	25	28	26	0	5	25	8.8	
LANSING	841	982.7	1015.1	40	28	33.7	- 4.2	57	1	8	29	0	22	28	79	2.27	0.06	0.59	17	0	5.8	2	6.2	26	30	W	25+	2	6	22	8.5	24
MARQUETTE U	677			36	26	31.0	- 2.8	61	11	12	29+	0	25			1.71	- 1.57	0.55	15		17.4	8			40	S	8	1	6	23	8.5	30
MUSKEGON	627	991.5	1015.2	42	33	37.0	- 2.6	55	1	17	29	0	17	28	71	2.80	- 0.14	0.85	16	0	7.2	2	5.4	28	35	29	18	0	4	26	9.3	
SAULT STE MARIE	721	985.4	1012.8	34	24	29.0	- 4.3	49	11	6	15	0	27	25	85	3.46	0.13	0.66	26	0	24.6	8	2.5	29	28	NW	12	0	6	24	9.1	10
MINNESOTA																																
DULUTH	1428	962.1	1015.3	34	19	26.6	- 0.7	51	16	- 2	28	0	27	17	68	0.50	- 1.28	0.14	11	0	4.2	1	5.5	28	34	NW	18	1	5	24	8.3	21
INTERNATIONAL FALLS	1179	970.5	1015.2	31	15	22.8	- 1.0	52	1	-12	29+	0	29	18	78	0.74	- 0.72	0.26	15	0	7.0	5	4.1	27	26	30	18	1	8	21	8.3	
MINNEAPOLIS	834	985.4	1016.8	39	23	30.7	- 0.5	59	11	5	28	0	27	22	70	0.09	- 1.31	0.04	4	0	0.8	T	4.4	29	35	NW	17	7	5	18	7.2	38
ROCHESTER	1297	967.8	1017.1	38	21	29.8	- 1.7	62	11	3	28	0	26	22	73	0.06	- 1.51	0.03	4	0	0.5	T	6.0	28	40	31	17	6	7	17	7.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
ST CLOUD	1034	977.3	1016.3	39	22	30.2	0.7	61	11	0	28	0	26		66	0.14	- 1.19	0.06	6		1.2	1						6	6	18	7.1	
MISSISSIPPI																																
JACKSON	310	1008.1	1020.1	68	38	52.7	- 2.8	80	26	25	19+	0	10	43	76	0.93	- 2.97	0.46	6	0	0.0	0	1.2	17	29	NE	30	15	2	13	4.8	59
MERIDIAN	290	1009.1	1020.5	68	37	52.3	- 1.8	78	22+	26	9+	0	11	40	72	0.66	- 2.44	0.53	4	0	0.0	0	1.0	27	21	16	29+	13	6	11	5.2	
MISSOURI																																
COLUMBIA	778	989.5	1018.5	51	34	42.3	- 1.0	67	25	22	28	0	16	30	65	1.64	- 0.63	0.72	8	0	1.8	T	3.3	27	26	NW	3	11	8	11	5.4	57
KANSAS CITY	742	991.5	1018.9	53	36	44.4	- 0.2	70	16	25	28+	0	12	33	68	0.45	- 1.35	0.37	5	0	0.2	T	2.8	27	23	SW	25	10	8	12	5.7	49
ST JOSEPH	811			53	30	41.5	0.1	69	11	18	7	0	18	31	73	0.42	- 1.26	0.23	5	0	0.0		2.2	27	21	31	27+	13	5	12	4.9	
ST LOUIS	535	998.3	1019.2	50	34	42.0	- 2.1	68	25	22	28	0	15	31	68	2.15	- 0.42	0.99	9	1	1.6	2	3.7	26	25	SW	17+	10	7	13	5.9	50
SPRINGFIELD	1268	973.2	1019.3	56	33	44.5	- 0.5	72	12	21	28+	0	14	31	64	1.53	- 1.23	1.11	6	0	0.8	1	1.8	22	20	NE	13+	10	9	11	5.4	56
MONTANA																																
BILLINGS	3567	891.3	1017.6	45	29	37.2	2.1	64	15	12	28	0	19	20	53	0.50	- 0.13	0.35	4	0	5.1	2	8.0	26	33	W	23	9	5	16	6.2	38
GLASGOW	2284	933.0		41	20	30.6	2.4	59	7	1	27	0	28			0.36	- 0.11	0.25	7		0.4	T						10	7	13	5.8	
GREAT FALLS	3662	887.9	1018.1	45	28	36.2	1.9	60	18+	5	27+	0	19	22	59	0.26	- 0.49	0.21	6	0	2.4	1	10.0	23	38	SW	22+	5	11	14	6.4	47
HAVRE	2582	922.8		43	21	32.2	2.7	62	7	1	27	0	27	22	69	0.18	- 0.32	0.09	4	0	1.8	T	8.0	25	40	SW	11	7	11	12	6.0	56
HELENA	3828	881.8	1020.4	43	23	33.0	1.4	57	15	2	27	0	23	24	71	0.31	- 0.26	0.12	8	0	2.7	2	4.1	27	38	W	24	7	5	18	6.7	42
KALISPELL	2965	913.3	1020.4	40	24	32.3	1.3	51	16	6	27	0	23	27	81	0.58	- 0.85	0.16	12	0	2.3	1	1.9	17	23	32	24	4	5	21	7.8	
LEWISTON	4130	871.3	1016.9	43	21	32.0		62	18	- 1	27	0	22	21	65	0.64			8	0	5.9		7.1	25								
MILES CITY	2629	922.5	1017.7	43	22	32.6	0.0	63	15	1	27	0	25	22	68	0.38	- 0.05		10	0	2.5		5.4	29								
MISSOULA	3190	906.5	1021.6	40	24	31.9	1.4	54	15	- 8	27	0	22	25	79	0.65	- 0.25	0.17	9	0	5.1	2	0.8	30	33	SW	24	4	6	20	7.5	29
NEBRASKA																																
GRAND ISLAND	1841	950.9	1018.9	50	25	37.3	0.1	70	11	10	28+	0	29	26	69	0.22	- 0.54	0.19	2	0	0.7	1	3.8	28	23	36	21+	11	10	9	4.9	
LINCOLN U	1150			49	30	39.4	- 1.4	70	11	19	27	0	22			0.41	- 0.85	0.33	3		T	T			27	S	7	13	7	10	4.7	63
NORFOLK	1544			48	24	35.8	- 0.1	71	11	12	28	0	27			0.07	- 0.84	0.05	3		0.7	T						11	5	14	5.6	
NORTH PLATTE	2775	918.7	1019.0	50	18	33.9	- 1.6	72	11	4	5	0	30	22	66	0.19	- 0.31	0.10	2	0	2.9	2	3.0	33	26	N	16+	13	6	11	5.0	64
OMAHA	977	982.1	1018.4	50	27	38.4	- 0.5	70	11	14	28	0	23	26	63	0.28	- 0.98	0.20	4	0	T	T	1.8	31	28	NW	17	12	7	11	5.2	55
SCOTTSBLUFF	3957	879.8	1018.9	51	19	34.7	- 1.1	68	11+	- 1	27	0	28	22	65	0.17	- 0.29	0.11	5	0	1.6	1	5.3	32	30	28	24	15	7	8	4.2	
VALENTINE	2587			48	20	33.6	0.0	68	9	4	28	0	30			0.28	- 0.21	0.26	2		1.1	1			35	NW	21+	10	11	9	5.1	62
NEVADA																																
ELKO	5050	845.9	1018.4	57	26	41.6	7.4	72	8	5	27	0	20	24	53	0.60	- 0.28	0.48	4	1	6.4	6	1.1	24	36	26	9	8	5	17	6.3	
ELY	6253	810.0	1018.9	54	21	37.6	3.9	70	11	0	29	0	25	18	53	0.84	0.25	0.66	4	0	12.7	10	4.3	20	33	SE	29	9	8	13	6.1	55
LAS VEGAS	2162	940.1	1017.0	68	45	56.7	4.2	83	1	34	29	0	0	31	46	1.52	1.21	1.06	5	0	0.0	0	2.5	24	28	W	30	13	8	9	4.7	77
RENO	4404	867.3	1018.4	60	25	42.7	4.4	76	1	12	27+	0	25	23	49	0.22	- 0.35	0.19	3	0	T	T	0.3	12	52	SW	29	8	6	16	6.6	61
WINNEMUCCA	4299	869.3	1018.8	56	25	40.5	4.7	71	1	8	26	0	23	26	60	0.73	- 0.07	0.28	5	0	5.3	3	0.8	11	24	SE	18	7	3	20	7.1	33
NEW HAMPSHIRE																																
CONCORD	342	1001.4	1014.2	43	23	32.7	- 4.9	66	3	- 1	17	0	25	24	70	2.86	- 0.86	0.77	10	0	15.0	8	3.4	29	29	NW	20	5	9	16	6.9	50
MT WASHINGTON OBS	6262			21	9	15.0	- 5.3	47	1	- 7	30	0	27			7.45	0.84	1.87	23	0	41.6	6			103Y	W	24	1	4	25	9.0	21
NEW JERSEY																																
ATLANTIC CITY	64	1014.6	1017.1	50	29	39.5	- 7.2	69	2	14	17	0	21	31	71	1.72	- 1.94	0.86	9	2	7.8	8	6.2	27	31	29	18	7	14	9	5.9	42
ATLANTIC CITY U	11			52	38	45.2	- 3.1	65	2	24	16	0	10			1.09	- 2.70	0.37	9						39	SW	18					
NEWARK	7	1014.9	1016.0	49	35	42.2	- 3.2	65	12+	20	16	0	12	30	65	2.35	- 1.02	0.59	14	1	3.1	3	6.0	27	30	31	15	7	8	15	6.6	
TRENTON U	56			49	36	42.2	- 3.6	68	12	21	16	0	11			1.89	- 1.27	0.54	11		6.3	6			33	NW	15	5	12	13	6.6	46
NEW MEXICO																																
ALBUQUERQUE	5311	839.8	1018.4	60	32	46.1	2.5	70	14+	22	30	0	16	20	41	0.15	- 0.23	0.11	2	0	1.0	T	0.6	9	42	E	2	12	7	11	5.0	74
CLAYTON	4969			59	27	43.1	1.4	80	16	12	5	0	23			0.22	- 0.11	0.20	2		2.2	2						13	6	11	4.9	
RATON	6379			58	22	40.2	2.7	75	16	6	3	0	27			0.05	- 0.34	0.03	4		0.5	T						11	9	10	5.5	
ROSWELL	3617	893.3		65	30	47.5	1.6	82	15	15	4	0	18			0.22	- 0.12	0.11	3	0	0.8	T	0.8	27	34	NW	29	7	10	13	6.2	54
SILVER CITY	5373			63	37	49.8	2.3	76	15	27	4	0	8			0.46	0.03	0.42	3		T	T						13	7	10	4.6	
NEW YORK																																
ALBANY	275	1004.4	1015.2	43	26	34.8	- 4.3	64	1	14	30+	0	24	27	72	2.68	- 0.02	0.64	11	1	9.0	3	4.9	26	31	NW	19+	1	10	19	8.0	38
BINGHAMTON	1590	954.6	1014.9	39	27	32.9	- 5.1	63	1	9	16	0	23	27	78	4.45	1.94	2.10	18	1	18.6	5	5.2	25	35	W	12	0	7	23	8.8	33

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temp: Average maximum	Temp: Average minimum	Temp: Average	Temp: Departure from normal	Temp: Highest	Temp: Date	Temp: Lowest	Temp: Date	No. of days: Max. 90° F. or above	No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precip: Total	Precip: Departure from normal	Precip: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
BUFFALO	705	988.2	1014.3	42	31	36.3	- 2.8	64	1	9	16	0	18	29	75	3.13	- 0.47	0.73	18	2	19.7	8	9.3	25	30	SW	11	0	4	26	9.1	29
J.F. KENNEDY	13	1015.2	1015.9	47	35	41.1	- 5.1	66	3	20	16+	0	10	28	60	2.13	- 1.38	0.62	13	2	2.1	2	6.4	29	36	30	19	6	8	16	6.8	
NEW YORK U	132	1012.2	1015.4	49	36	42.5	- 4.5	65	12	20	16+	0	9	27		2.59	- 0.80	0.70	11	2	3.2	3	4.8	28	30	NW	15					48
NEW YORK LA GUARDIA	11	1013.9	1015.8	48	37	42.7	- 4.7	66	2	22	16+	0	9	27	56	2.39	- 1.20	0.62	12	2	2.2	2	6.9	29	35	NW	15	5	9	16	7.0	
ROCHESTER	547	994.6	1015.3	43	30	36.3	- 3.8	64	1	10	16	0	19	28	72	2.89	0.38	0.79	13	1	10.0	4	7.0	24	37	W	12	0	4	26	8.9	23
SYRACUSE	419	999.3	1014.4	44	31	37.6	- 2.6	68	1	10	30	0	18	28	69	4.48	1.58	2.09	17	1	14.4	3	6.1	24	31	W	13	0	6	24	8.6	24
NORTH CAROLINA																																
ASHEVILLE	2140	941.4	1018.5	55	30	42.7	- 1.9	74	12	18	29+	0	20	29	65	2.54	- 0.23	1.14	7	1	0.0	0	4.2	35	29	35	15	14	9	7	4.1	64
CAPE HATTERAS R	7	1018.0	1018.3	61	42	51.4	- 4.8	74	2	22	17	0	3	42	71	2.38	- 1.71	1.01	9	6	0.0	0	5.4	31	36	WSW	25	12	5	13	5.1	69
CHARLOTTE	736	990.5	1018.5	59	36	47.8	- 2.6	76	12	25	29+	0	12	33	61	2.51	- 0.02	0.96	8	1	0.0	0	2.2	27	25	SW	17	15	6	9	4.3	68
GREENSBORO	897	986.1	1018.3	58	35	46.8	- 1.1	75	12	18	16	0	12	33	61	1.40	- 1.28	0.51	5	1	T	T	3.5	26	34	W	18	17	3	10	4.5	65
RALEIGH	434	1002.0	1018.3	59	34	46.8	- 3.2	77	12	17	16	0	14	32	60	2.14	- 0.63	0.75	7	2	T	T	2.5	28	21	26	17	15	7	8	4.4	70
WILMINGTON	28	1017.6	1018.9	66	40	53.0	- 2.4	79	3	25	17	0	9	38	61	2.24	- 0.85	1.28	7	2	0.0	0	2.4	30	45	W	24	16	7	7	4.1	71
NORTH DAKOTA																																
BISMARCK	1647	955.6	1017.4	38	18	28.3	- 0.6	56	10	- 6	28	0	30	20	71	0.16	- 0.43	0.06	5	0	2.6	1	5.5	29	44	W	11	6	9	15	6.6	40
FARGO	896	982.7	1016.5	38	20	29.0	0.9	60	11+	- 5	28	0	29	20	70	0.04	- 0.80	0.02	4	0	0.7	1	4.8	29	43	NW	17	5	5	20	7.3	41
WILLISTON	1899	946.2	1016.8	40	20	29.7	2.1	60	15	- 2	28	0	29	21	72	0.33	- 0.25	0.19	8	0	1.6	1	5.2	28	44	NW	11	3	12	15	6.7	42
OHIO																																
AKRON	1208	971.2	1016.7	43	30	36.7	- 4.1	62	1	11	15	0	20	29	75	2.80	0.55	0.81	18	0	8.8	4	6.7	25	25	32	12+	1	4	25	8.8	
CINCINNATI OBS	761			47	33	40.1	- 4.5	62	10	22	28+	0	18			3.68	0.73	1.40	10		1.0	1			24	W	18					29
CLEVELAND	777	986.8	1016.5	44	33	38.6	- 2.7	62	1	16	16	0	16	27	65	2.88	0.27	0.96	16	2	9.1	2	7.8	23	30	W	18+	1	7	22	8.5	25
COLUMBUS	812	987.5	1018.1	43	31	36.7	- 4.5	62	10	15	16	0	17	28	71	3.22	0.72	1.04	16	0	6.5	4	5.1	25	30	NW	18	3	8	19	8.0	30
DAYTON	1002	981.0	1018.0	44	31	37.6	- 4.2	61	10+	17	16	0	18	29	72	2.99	0.32	1.17	15	0	6.2	4	5.7	25	31	W	18	4	6	20	7.8	28
MANSFIELD	1295			42	30	36.0	- 3.4	60	1	14	16	0	19	28	72	2.38	- 0.31	0.97	14	0	3.5	3	8.6	24				3	5	22	8.2	
TOLEDO	669	991.2	1016.9	42	28	34.8	- 3.8	58	1	9	29	0	23	27	73	2.85	0.81	1.01	12	0	1.9	1	6.5	25	30	W	18	4	4	22	7.9	28
YOUNGSTOWN	1178	972.6	1016.4	40	29	34.6	- 4.7	62	1	15	29	0	23	29	81	2.94	0.13	0.75	19	1	12.7	3	7.0	25	25	25	12	0	6	24	9.0	
OKLAHOMA																																
OKLAHOMA CITY	1285	971.9	1019.0	60	38	49.4	1.0	80	13	28	7+	0	4	36	66	0.40	- 1.16	0.35	3	0	1.2	T	0.4	12	30	S	10	8	7	15	6.5	62
TULSA	650	994.9	1019.5	60	36	48.2	0.6	82	13	25	4	0	9	34	63	1.09	- 1.19	0.55	5	1	0.9	T	0.7	20	28	S	10	9	12	9	5.3	64
OREGON																																
ASTORIA	8	1016.6	1017.3	55	42	48.1	1.8	63	17+	31	20	0	3	43	85	5.94	- 5.26	1.09	17	1	0.0	0	3.0	12	31	30	25	3	9	18	7.6	
BURNS U	4151	874.7	1019.9	50	26	38.1	2.0	63	8+	1	30	0	24	27	68	0.81	- 0.35	0.39	7		6.3	5	1.9	30				3	12	15	7.3	
EUGENE	359	1004.7	1018.3	54	40	46.9	1.4	64	14	30	21	0	1	43	87	3.22	- 2.40	1.06	12	0	0.0	0	0.7	18	27	36	19	1	9	20	8.2	
MEACHAM	4050	877.4	1019.8	42	29	35.2	0.8	55	7	15	26	0	20	28	79	3.24	- 0.91	0.82	12		12.0	9	1.0	19	30	30	24	5	7	18	7.2	
MEDFORD	1298	970.5	1019.0	56	35	45.5	3.1	73	12	19	26	0	10	38	81	1.04	- 1.56	0.52	8	0	0.0	0	0.4	21	26	13	13	3	9	18	7.8	
PENDLETON	1482	965.8	1020.5	49	33	41.1	- 0.2	63	10	20	27	0	15	32	74	0.63	- 0.77	0.22	8	0	0.8	1	2.6	23	37	25	24	6	7	17	6.8	
PORTLAND	21	1016.9	1018.3	54	38	46.2	1.1	63	14	25	21	0	5	39	77	2.27	- 3.06	0.71	13	0	0.0	0	2.9	14	34	E	2	4	6	20	7.6	39
SALEM	196	1010.8	1018.2	55	38	46.4	1.2	63	14	27	26+	0	5	39	78	3.30	- 2.41	1.25	13	0	0.0	0	2.0	20	32	18	29	4	5	21	7.6	
SEXTON SUMMIT R	3836	883.8	1017.0	50	38	44.1	1.3	63	17	25	30+	0	10			1.33	- 3.05	0.51	9		5.7	5			37	17	29	8	7	15	6.4	
PACIFIC AREA																																
JOHNSTON	7	1011.5	1012.3	83	75	78.9	- 0.7	85	17	70	27+	0	0	72	79	5.34	3.28	1.44	25	1	0.0	0	15.6	9	40	NE	4	8	12	10	6.0	66
KOROR R	94	1005.1	1008.8	88	76	82.1	0.9	91	20+	72	1	6	0	75	83	11.79	- 1.14	5.17	19	4	0.0	0	2.7	3	38	SW	2+	0	4	26	9.1	70
KWAJALEIN	8	1007.8	1008.4	87	77	82.0	0.7	89	23	73	1	0	0	75	81	7.71	- 4.42	1.99	21	2	0.0	0	10.2	7	32	E	1	1	4	25	8.7	
MAJURO	10	1008.5	1008.9	86	77	81.2	0.7	87	28+	73	16	0	0	74	79	11.16	- 4.76	2.86	25	1	0.0	0	6.6	8	36	E	23	3	10	17	7.8	54
MARCUS ISLAND	20			82	73	77.4	- 2.0	86	1	67	27	0	0			6.45	3.20	3.82	11		0.0	0			30	NE	28					62
PAGO PAGO	12	1009.1	1009.3	85	73	79.0		88	29	70	21+	0	0	73	81	15.30		3.44	25	2	0.0	0	5.2	10	28	E	25	2	7	21	8.1	38
PONAPE R	123	1002.4	1007.6	87	74	80.3	0.4	90	12	70	16	1	0	75	86	22.44	5.59	3.47	26	8	0.0	0	3.4	10	29	SW	11+	0	7	23	8.8	30
TAGUAC GUAM R	361			84	75	79.4	0.1	86	15+	70	30	0	0			11.75	1.46	5.09	20		0.0	0			40	SW	13					43
TRUK MOEN ISLAND	5	1007.5	1007.9	87	76	81.2	0.4	89	25+	72	10	0	0	75	82	15.55	3.19	5.21	28	2	0.0	0	5.0	5	38	NW	11	0	4	26	9.1	53
WAKE	11	1012.5	1012.7	87	76	81.3	0.9	89	8+	70	29	0	0	71	75	2.08	- 1.00	0.84	14	1	0.0	0	15.4	6	40	N	29	13	12	5	4.6	67
YAP R	62	1006.4	1008.2	86	76	80.9	- 0.6	90	15	74	11+	1	0	75	85	10.44	- 0.71	4.57	23	1	0.0	0	5.1	5	61	NE	1	1	8	21	8.4	51
PENNSYLVANIA																																
ALLENTOWN	387	1002.0	1016.3	46	29	37.3	- 4.6	64	3	17	30+	0	21	27	69	3.00	- 0.33	1.30	10	1	7.8	5	6.3	27	29	28	28+	9	4	17	6.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temp: Average maximum	Temp: Average minimum	Temp: Average	Temp: Departure from normal	Temp: Highest	Date	Temp: Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precip: Total	Precip: Departure from normal	Precip: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ERIE	731	988.2	1015.6	42	32	36.9	- 4.3	67	1	22	15	0	16	28	71	5.19	1.83	1.12	24	4	36.3	15	8.5	24	30	27	27+	0	3	27	9.4	
HARRISBURG	338	1003.7	1016.8	47	32	39.8	- 3.6	65	12	19	16	0	18	27	63	2.89	- 0.06	1.06	12	1	9.7	6	5.2	28	40	W	18	5	14	11	6.6	52
PHILADELPHIA	5	1015.9	1016.8	51	35	42.8	- 1.5	69	12	22	16	0	14	29	60	1.99	- 1.41	0.65	11	2	4.9	5	5.4	28	38	NW	18	7	10	13	6.2	49
PITTSBURGH	1137	971.9	1017.0	44	30	36.8	- 4.0	66	11+	14	16	0	20	29	75	3.07	0.83	0.86	18	0	10.1	7	6.7	25	31	22	11	0	8	22	8.6	22
READING U	266			48	35	41.4	- 3.7	65	12+	21	16	0	14			3.12	- 0.28	1.62	11		4.1	4			43	W	18	10	7	13	6.1	50
SCRANTON	930	981.0	1016.2	44	30	36.6	- 3.0	68	1	12	16	0	21	27	70	2.31	- 0.63	0.96	12	1	7.2	2	4.3	24	30	W	12	4	6	20	7.8	41
WILLIAMSPORT	524	997.0	1016.3	46	29	37.9	- 3.2	66	1	14	16	0	18	29	73	3.63	0.18	1.25	12	1	9.8	4	4.0	27	33	23	12	1	12	17	7.7	
RHODE ISLAND																																
BLOCK ISLAND	110			47	36	41.6	- 3.6	61	3	23	16	0	12			4.15	0.44	1.02	12		0.4	T						5	8	17	6.8	
PROVIDENCE	51	1012.2	1014.6	47	32	39.5	- 3.5	70	3	17	17	0	17	29	67	2.75	- 1.36	0.74	12	1	0.8	1	5.8	28	41	29	18	9	6	15	6.5	53
SOUTH CAROLINA																																
CHARLESTON	40	1016.9	1018.7	68	40	53.8	- 2.1	79	2	24	9+	0	9	40	64	1.35	- 0.74	0.51	7	1	0.0	0	1.6	30	43Y	SW	30	13	11	6	4.6	75
CHARLESTON U	9			66	49	57.3	- 1.3	78	2	36	16	0	0			1.37	- 0.55	0.72	6		0.0	0			30	W	23					
COLUMBIA	213	1010.8	1019.2	63	35	49.1	- 4.6	75	26+	21	8	0	14	36	68	3.71	1.35	2.16	9	3	0.0	0	2.0	29	35	35	24	11	13	6	4.4	65
GNVLE-SPARTANBURG	957	983.7	1018.9	60	36	48.2	- 3.1	76	12	23	29	0	10	31	57	3.50	0.66	1.22	8	1	0.0	0	2.3	29	28	SW	17	15	6	9	4.2	62
SOUTH DAKOTA																																
ABERDEEN	1296	969.2	1017.6	41	21	31.2	0.9	64	11	- 4	28	0	30	23	75	0.15	- 0.59	0.13	2	0	1.3	1	3.7	29	31	29	11	9	6	15	6.1	
HURON	1282	969.9	1017.6	46	22	33.8	2.6	66	11	- 4	28	0	26	21	63	0.06	- 0.62	0.04	3	0	0.8	1	3.7	27	42	NW	11	10	5	15	6.1	66
RAPID CITY	3162	904.5	1018.1	48	21	34.6	- 0.5	73	9	5	27	0	28	16	51	0.28	- 0.13	0.22	2	0	2.2	2	5.8	32	40	NW	25+	13	7	10	4.7	59
SIOUX FALLS	1418	965.1	1017.8	45	20	32.7	0.1	68	11	0	28	0	29	21	65	0.03	- 0.97	0.02	2	0	0.4	T	4.0	28	25	29	26+	10	7	13	5.7	
TENNESSEE																																
BRISTOL	1507	964.1	1019.3	54	32	42.7	- 3.2	73	11	17	29	0	16	31	68	3.73	1.22	1.03	11	2	T	0	3.4	27	25	31	22	11	10	9	5.4	
CHATTANOOGA	665	994.6	1019.8	59	35	46.9	- 2.5	76	12	23	7	0	13	34	66	4.49	0.84	1.63	9	2	0.0	0	1.3	30	22	NW	30	14	7	9	4.4	60
KNOXVILLE	980	983.4	1019.0	55	34	44.2	- 4.5	72	12+	21	29+	0	14	33	68	5.57	2.33	2.41	10	3	0.0	0	2.6	28	29	SW	30+	12	9	9	5.2	54
MEMPHIS	258	1009.8	1020.3	61	38	49.1	- 1.0	74	13	24	28	0	10	36	63	1.90	- 2.48	0.90	8	1	0.0	0	1.1	17	31	S	29	11	6	13	5.9	59
NASHVILLE	590	997.6	1019.7	55	33	44.3	- 4.2	75	12	15	28	0	14	32	66	3.87	0.59	0.99	11	2	0.0	0	2.2	25	30	SW	30	9	7	14	6.0	58
OAK RIDGE R	905			55	34	44.3	- 3.0	74	12	20	29	0	12			5.01	1.24	2.68	10		0.0	0			32Y		30+	11	10	9	5.5	
TEXAS																																
ABILENE	1762	956.3	1018.4	64	44	54.2	1.2	79	2	30	4	0	1	44	73	2.89	1.78	1.44	7	0	0.0	0	3.1	22	35	N	2	7	7	16	6.6	53
AMARILLO	3604	892.3	1016.7	60	33	46.6	0.6	81	16	21	27	0	13	30	59	0.28	- 0.38	0.26	2	0	2.1	2	3.7	23	40	NE	2	10	5	15	6.0	62
AUSTIN	597	997.0	1019.2	69	48	58.9	0.1	86	23	36	4	0	0	48	72	4.36	2.24	3.37	8	0	0.0	0	2.0	36	32	NW	3	10	8	12	6.1	47
BROWNSVILLE	19	1016.9	1017.4	78	62	69.9	2.3	84	25	48	4	0	0	62	79	0.63	- 0.69	0.21	6	0	0.0	0	3.5	14	33	NW	3	5	13	12	6.6	43
CORPUS CHRISTI	41	1016.6	1018.2	74	57	65.7	1.6	87	25	42	4	0	0	59	82	0.28	- 1.44	0.22	3	0	0.0	0	3.6	9	31	NW	3	5	9	16	6.8	43
DALLAS	481	1001.4	1018.9	67	46	56.4	1.5	82	23	34	4	0	0	42	62	1.19	- 1.51	0.63	7	0	0.0	0	0.9	16	28	W	24	8	9	13	6.2	55
DEL RIO	1026	982.1	1018.3	71	51	60.8	2.0	87	26+	35	4	0	0	50	73	0.66	0.04	0.40	7	0	0.0	0	2.5	9	31	33	3	6	10	14	6.6	
EL PASO	3918	884.2	1017.2	66	40	53.1	1.9	77	2	28	4	0	4	28	41	0.23	- 0.10	0.18	3	0	0.0	0	1.1	26	40	W	29	12	5	13	5.1	69
FORT WORTH	537	998.3	1019.0	67	44	55.6	0.8	83	21	31	4	0	1	43	67	0.92	- 1.54	0.40	6	0	0.0	0	0.9	26	28	1	3	10	6	14	6.2	
GALVESTON U	7			70	60	64.5	1.5	82	24	44	4	0	0			1.64	- 1.92	1.62	3		0.0	0			26	N	3					51
HOUSTON	50	1016.9	1019.0	75	54	64.1	3.3	86	26+	38	5+	0	0	53	71	0.50	- 3.36	0.42	4	0	0.0	0	1.5	12	29	18	29	6	14	10	6.0	55
LUBBOCK	3254	905.2	1017.5	63	36	49.3	1.4	82	16	27	30+	0	10	30	56	0.11	- 0.43	0.10	3	0	T	T	2.6	24	40	36	2	7	8	15	6.4	
MIDLAND	2851	918.1	1017.0	66	42	54.0	1.5	80	16+	29	4	0	3	38	65	0.44	- 0.03	0.32	7	0	0.0	0	3.1	22	37	1	2	10	6	14	6.2	
PORT ARTHUR	16	1019.0	1019.5	74	51	62.7	3.0	85	26+	34	5+	0	0	50	69	0.15	- 3.31	0.09	3	0	0.0	0	1.9	13	37	SW	29	8	12	10	5.2	56
SAN ANGELO	1903	950.9	1018.0	67	47	57.0	2.2	83	2	28	4	0	2	47	76	2.41	1.63	1.10	9	0	0.0	0	2.4	23	31	26	23	7	13	10	6.0	
SAN ANTONIO	788	990.9	1019.0	71	50	60.5	1.0	87	26	31	4	0	1	49	72	3.42	2.05	1.48	6	0	0.0	0	2.4	1	36	N	3	7	9	14	6.3	51
VICTORIA	104	1014.6	1018.5	75	56	65.4	3.0	87	25	37	4	0	0	55	75	1.31	- 1.05	0.97	4	0	0.0	0	2.1	8	39Y	S	29	5	10	15	6.7	
WACO	501	1000.7	1019.0	69	49	58.8	2.0	85	21	35	4	0	0	47	70	3.53	1.34	2.35	7	0	0.0	0	1.8	24	28	31	3	9	9	12	6.0	
WICHITA FALLS	994	981.7	1018.8	65	41	52.6	0.1	82	13	30	4	0	1	39	67	0.36	- 1.06	0.15	6	0	T	0	0.6	12	40	1	2	9	7	14	6.4	
UTAH																																
MILFORD	5028	848.0		58	26	41.8	5.7	73	1	7	27	0	22			0.52	0.00	0.38	3		5.3	2						11	8	11	5.2	
SALT LAKE CITY	4220	873.4	1019.1	56	30	43.0	6.3	75	12	16	27	0	17	26	56	0.66	- 0.64	0.40	3	0	4.2	4	1.9	18	34	S	30	4	12	14	6.8	52
WENDOVER	4237	873.0	1019.9	51	32	41.4	3.8	70	1	15	27	0	15			0.03	- 0.26	0.02	2		T	T										
VERMONT																																
BURLINGTON	332	1000.7	1013.3	39	27	32.9	- 2.4	64	1	6	16	0	23	23	68	2.12	- 0.50	0.53	15	0	10.3	3	3.0	23	33	S	26	1	7	22	8.6	47

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VIRGINIA																																
LYNCHBURG	916			53	31	41.9	- 5.1	74	12	14	16	0	15			1.28	- 1.30	0.58	7		T	0			26	W	18				4.5	62
NORFOLK	22	1016.9	1018.1	55	37	45.9	- 5.5	73	12+	24	17	0	11	31	58	1.75	- 1.30	0.58	5	0	T	0	2.7	27	30	W	18	12	8	10	4.7	68
RICHMOND	164	1011.9	1018.1	57	31	44.0	- 4.5	76	12	17	29	0	17	30	63	1.76	- 1.28	0.66	4	0	T	T	1.8	27	26	NW	23	12	10	8	4.8	68
ROANOKE	1149	975.3	1017.8	54	33	43.4	- 3.3	72	12	17	16	0	13	25	51	1.30	- 1.40	0.61	7	1	T	0	4.5	29	32	29	27	13	9	8	4.7	
WALLOPS ISLAND	9			52	35	43.2		69	12	21	16	0	15			1.66		1.01	5	0	T	T			44Y	NNW	15	14	9	7	4.7	
WASHINGTON																																
OLYMPIA	195	1010.8	1018.2	52	35	43.8	0.0	60	15+	24	4	0	12	41	91	3.90	- 3.77	1.34	15	0	0.0	0	2.6	20	29	21	8	3	6	21	8.0	
QUILLAYUTE	179	1009.1	1016.7	52	39	45.8	1.2	61	6	30	28+	0	7	42	89	8.47	- 4.85	1.98	20	2	T	0	2.1	8	31	NW	10	1	10	19	8.1	26
SEATTLE TACOMA	400	1001.4	1018.0	53	42	47.3	3.4	61	4	31	26	0	3	41	81	2.56	- 2.79	0.74	14	0	0.0	0	1.5	16	37	19	8	5	6	19	7.4	32
SPOKANE	2356	933.6	1019.2	42	29	35.4	- 0.3	52	15	13	26	0	23	29	77	0.82	- 1.42	0.43	8	0	4.8	4	1.8	17	34	SW	10	9	3	18	6.6	34
STAMPEDE PASS R	3958	880.8		37	29	32.9	1.5	46	16	18	27	0	22			8.62	- 3.96	2.25	17		36.8	20						7	3	20	7.3	
WALLA WALLA U	949			50	36	43.2	0.9	63	10	21	27	0	9			1.25	- 0.47	0.34	10		1.6	1			30	W	24	7	5	18	7.0	32
YAKIMA	1052	981.0	1020.3	52	28	40.3	2.9	65	10	11	28	0	22	28	65	0.30	- 0.66	0.18	5	0	2.0	2	3.9	28	31	29	24	13	4	13	5.7	
WEST INDIES																																
SAN JUAN P.R.	13	1011.5	1013.9	86	75	80.4	2.2	90	16+	73	24+	2	0	72	77	5.00	- 1.49	1.18	21	4	0.0	0	5.7	9	28	NE	4	2	24	4	5.4	62
SWAN ISLAND	28			84	76	80.3	0.2	87	9+	69	11	0	0			10.45	3.06	3.68	17		0.0	0						2	14	14	7.3	
WEST VIRGINIA																																
BECKLEY	2504	927.9	1018.6	47	29	38.1		68	11	11	16	0	19	26	66	3.91		1.40	13	1	0.9	T	5.7	27	44	16	2	7	11	12	6.3	
CHARLESTON	939	983.4	1018.3	50	33	41.3	- 4.0	73	11	14	16	0	14	30	68	4.30	1.51	1.46	12	2	0.2	T	4.9	24	25	26	25+	4	11	15	7.1	
ELKINS	1970	945.1	1017.9	47	28	37.2	- 3.5	70	1	6	16	0	23	28	73	3.55	0.80	1.25	17	1	9.0	5	5.6	27	32	26	17	3	8	19	7.9	
HUNTINGTON	827	988.2	1018.9	48	33	40.6	- 4.9	71	11	16	16+	0	14	30	69	4.71	2.25	1.49	15	3	0.5	T	4.0	24	23	27	12	5	9	16	7.1	
PARKERSBURG U	615			47	33	40.4	- 4.4	69	11	18	16	0	15			2.63	0.27	0.70	12		2.0	2			34	W	18					31
WISCONSIN																																
GREEN BAY	682	989.2	1015.5	38	24	30.9	- 3.3	59	11	6	29	0	25	25	78	1.66	- 0.25	0.79	13	0	2.9	1	5.2	28	31	SW	26	5	4	21	7.6	27
LA CROSSE	651	991.5	1016.9	40	26	32.9	- 1.3	63	11	10	28	0	26	24	71	0.18	- 1.76	0.05	5	1	0.8	T	3.5	29	29	31	18+	4	7	19	7.5	
MADISON	858	984.1	1016.4	41	25	33.0	- 1.0	61	11	10	29+	0	25	25	73	1.83	- 0.31	1.56	5	0	0.7	T	4.9	28	36	NW	17	4	6	20	7.6	41
MILWAUKEE	672	990.2	1016.0	42	29	35.2	- 0.6	60	11	15	29+	0	23	26	70	1.52	- 0.66	0.92	8	0	0.4	T	6.3	27	31	NW	18	4	9	17	7.7	35
WYOMING																																
CASPER	5338	837.1	1018.7	43	19	30.8	- 2.8	59	15	- 3	26	0	26	18	61	1.09	0.38	0.29	8	0	13.1	4	9.6	24	39	21	29	9	9	12	5.5	
CHEYENNE	6126	811.0	1018.1	48	22	35.1	0.9	67	15	- 1	3	0	24	17	50	0.32	- 0.30	0.22	4	0	3.6	3	8.5	29	66	W	24+	15	9	6	4.3	55
LANDER	5563	829.0	1020.2	39	17	28.1	- 2.9	60	1	0	6+	0	25	18	68	1.66	0.74	1.03	6	0	21.0	13	2.4	24	33	W	24	8	8	14	5.9	60
SHERIDAN	3964	878.8	1019.6	43	17	29.9	- 3.5	62	15	- 4	27	0	28	18	63	0.84	0.04	0.70	9	0	11.5	9	3.6	30	35	NW	24+	6	12	12	6.1	56

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

V Sun below horizon November 19 - 30, inclusive.
X Sun below horizon November 24 - 30, inclusive.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C				C.	%	Mm.	Mm	Mm.			Mm.	Mm.	M.p.s		M.p.s							%
ALABAMA																																
BIRMINGHAM	189	997.3	1020.4	16.1	2.2	9.1	-2.7	24.4	12	- 4.4	7	0	12	2.8	71	163	73	53	9	2	T	0	0.6	34	13.9	W	24	12	7	11	5.3	59
HUNTSVILLE	183	996.6	1020.1	14.4	1.7	8.0	-2.4	21.7	13+	- 5.0	28	0	11	2.8	72	105	12	49	10	2	0	0	0.4	29	13.0	27	24	14	4	12	5.3	
MOBILE	64	1012.2	1020.0	21.7	8.9	15.3	0.3	27.8	26+	1.7	7	0	0	8.3	68	9	- 76	8	2	0	0	0	0.3	33	11.2	36	4	14	9	7	4.0	
MONTGOMERY	59	1012.9	1020.3	18.9	5.6	12.1	-0.2	27.2	24	- 1.7	7	0	2	4.4	66	66	- 11	52	7	2	0	0	0.7	32	10.7	SW	24	12	8	10	4.7	61
ALASKA												B																				
ANCHORAGE	35	1001.7	1006.7	2.2	- 4.4	- 1.1	4.3	11.7	20	-18.9	25	0	18	- 6.7	64	44	18	18	12	0	64	102	1.3	12	14.3	15	12	5	6	19	7.4	32
ANNETTE	34	1009.8	1013.7	7.8	2.2	4.8	0.2	10.6	15+	- 2.8	24+	0	11	2.2	84	153	-219	23	23	0	236	102	0.8	11	11.2	17	23	3	4	23	8.3	
BARROW	9	1010.5	1011.1	-16.1	-21.7	-18.9	-0.7	- 4.4	3	-30.0	27	0	30	-21.7	78	11	5	3	11	0	147	229	0.9	6	11.6	24	24+	V7	V6	V17	6.8	
BARTER ISLAND	12	1009.8	1011.9	-15.0	-22.8	-18.7	-1.1	1.7	13	-36.7	10	0	30	-23.3	65	12	2	6	4	0	188	254	1.7	25	23.7	27	22	X8	X8	X14	6.1	
BETHEL	38	998.0	1003.7	- 1.7	- 8.9	- 5.3	2.9	6.1	20	-26.1	30	0	27	- 6.7	89	63	36	25	15	0	257	102	1.5	10	17.9	19	11	2	2	26	9.0	
COLD BAY	29	999.7	1003.5	6.1	0.6	3.3	2.0	9.4	10+	- 5.6	24	0	13	0.0	80	188	92	46	27	0	122	76	3.9	20	29.5	14	26	1	5	24	8.4	
FAIRBANKS	133	991.9	1009.8	- 7.2	-17.2	-12.5	3.1	5.6	13+	-36.7	30	0	30	-15.0	79	24	8	6	16	0	366	203	0.8	33	9.8	27	13	6	4	20	7.4	
JUNEAU	4	1012.2	1012.9	3.3	- 2.8	0.2	-1.1	8.3	7	-16.1	30	0	20	- 0.6	96	148	- 6	28	20	0	241	152	2.3	11	18.3	12	22	6	3	21	7.7	31
KING SALMON	15	1002.4	1004.4	2.2	- 5.6	- 1.5	4.1	8.3	20+	-21.7	30	0	21	- 4.4	79	48	11	18	15	0	104	51	2.4	14	21.5	14	12	3	5	22	8.0	
KOTZEBUE	3	1007.1	1007.6	-10.6	-18.3	-14.4	-0.7	1.7	3+	-32.2	30	0	30	-17.8	76	11	2	4	9	0	241	229	2.7	8	19.2	31	21+	6	7	17	6.9	
MC GRATH	105	994.6	1007.8	- 6.1	-13.9	-10.0	4.8	9.4	12	-31.7	30+	0	27	-13.3	74	76	49	27	11	0	442	203	0.4	19	15.6	19	12	4	3	23	8.1	
NOME	4	1004.4	1005.1	- 5.6	-13.3	- 9.4	-0.8	2.8	11+	-31.1	30	0	30	-14.4	65	13	- 16	5	11	0	74	102	1.8	5	12.5	4	18	8	2	20	7.0	28
ST. PAUL ISLAND	7	998.0	999.0	3.9	0.0	1.8	1.3	6.7	11+	- 7.2	23	0	14	- 1.1	81	81	18	10	28	0	201	76	1.5	8	28.2	3	22	0	6	24	9.1	
SHEMYA	37	997.0	1000.7	3.9	0.0	1.8	-0.3	6.1	30+	- 2.8	20	0	21	- 0.6	83	57	- 12	17	23	0	168	T	1.7	34	26.4	22	30	0	9	21	8.5	
YAKUTAT	9	1008.1	1009.3	2.8	- 2.2	0.4	-0.6	7.2	21	-10.0	26	0	21	- 0.6	92	478	71	79	25	0	584	330	1.8	10	12.5	12	22	1	3	26	8.8	
ARIZONA																																
FLAGSTAFF	2131	788.7	1019.2	13.9	- 4.4	4.7	2.4	22.2	13	- 7.8	8	0	30	- 6.1	57	14	- 12	8	5	2	130	76	1.2	21	9.4	21	28	13	8	9	4.9	
PHOENIX	340	976.0	1015.1	25.6	9.4	17.7	3.2	33.3	12	2.8	30	2	0	3.9	47	32	20	13	6	2	0	0	1.4	10	17.9Y	WSW	26	17	6	7	4.1	83
TUCSON	788	927.2	1015.1	24.4	9.4	17.2	2.7	30.6	14+	3.3	30	0	0	0.6	40	12	- 4	9	4	0	0	0	1.8	14	14.8	W	29	17	6	7	3.9	78
WINSLOW	1492	853.7	1019.6	17.2	- 0.6	8.4	3.2	23.9	15	- 5.0	14	0	22	- 6.7	42	9	0	7	3	0	5	T	1.0	19	13.0	19	28	16	9	5	3.7	
YUMA	59	1007.5	1014.6	27.2	11.7	19.4	2.9	31.7	15+	6.1	29	0	0	7.2	51	37	34	35	3	1	0	0	1.0	4	12.5	W	28	18	8	4	3.6	84
ARKANSAS																																
FORT SMITH	136	1002.7	1019.5	17.2	2.2	9.6	-0.4	27.2	13	- 3.3	7	0	10	2.2	65	21	- 60	8	5	0	T	T	0.5	2	8.9	N	3	4	14	12	6.2	61
LITTLE ROCK	78	1009.8	1019.7	16.1	2.8	9.5	-0.2	25.0	13+	- 3.3	6	0	9	2.8	66	44	- 61	22	5	0	T	0	0.4	27	9.4	NW	24+	10	9	11	5.5	71
TEXARKANA	119	1006.1	1019.5	18.9	6.1	12.4	0.4	27.8	21	- 0.6	8	0	3	4.4	63	43	- 67	12	8	0	0	0	0.5	18	15.6	28	24	13	8	9	5.1	
CALIFORNIA																																
BAKERSFIELD	145	999.0	1016.5	21.1	11.1	16.1	2.8	28.3	7+	5.6	29	0	0	7.8	62	45	32	18	6	0	0	0	0.5	34	10.3	34	30	8	3	19	6.5	
BISHOP	1252	874.7		18.9	0.6	9.6	1.9	28.3	1	- 8.3	29	0	13			8	- 6	5	4		T	0						12	6	12	5.2	
BLUE CANYON	1609			12.8	5.6	9.2	1.6	23.9	1	- 4.4	30	0	4			166	- 6	48	9		762	660			16.1	9	21	10	4	16	6.2	
EUREKA U	13			15.6	8.3	11.8	1.2	22.8	12	2.8	26	0	0			112	- 5	55	8		0	0			11.6	S	29+	4	8	18	7.2	49
FRESNO	100	1004.7	1016.5	20.0	7.8	13.8	1.7	28.9	3+	0.6	29	0	0	7.8	73	39	15	17	6	1	0	0	0.0	12	9.4	NW	30	9	4	17	6.7	41
LONG BEACH	10	1014.6	1016.1	23.9	13.9	18.9	2.7	32.2	11	5.6	29	1	0	12.8	73	117	91	80	6	2	0	0	0.6	24	11.2	25	28	8	12	10	5.6	
LOS ANGELES	30	1011.9	1015.4	21.7	14.4	17.9	1.7	29.4	1	7.2	29	0	0	12.2	75	190	162	142	6	1	0	0	0.7	26	16.5Y	W	28	8	11	11	5.5	
LOS ANGELES U	82			23.9	14.4	19.2	2.2	31.7	1	8.3	29	0	0			220	193	92	5		0	0			8.9	NE	21	12	12	6	4.5	44
MT SHASTA R	1080			13.3	1.7	7.4	2.0	21.1	1	- 3.9	27+	0	10			70	- 31	25	7		378	305										
OAKLAND	2	1016.6	1016.7	18.9	11.1	14.8	2.2	25.6	2	6.1	27	0	0	8.3	69	34	- 10	20	9	0	0	0	0.3	32	11.6	4	21	15	3	12	4.8	
RED BLUFF	104	1004.1	1016.7	20.6	8.3	14.2	1.7	32.2	1	0.6	27	1	0	5.6	64	48	- 10	20	7	1	0	0	1.3	34	18.3	SE	29	7	4	19	6.7	52
SACRAMENTO	5	1015.6	1016.3	19.4	7.8	13.4	1.8	28.9	2	1.1	27	0	0	7.8	74	30	- 7	17	7	1	0	0	0.3	19	13.0	NW	21	8	9	13	6.1	71
SANDBERG R	1377	863.2		15.0	7.2	11.1	1.6	25.0	1	- 2.8	29+	0	3			177	153	71	6		T	0			17.0	35	28	14	1	15	5.2	
SAN DIEGO	4	1014.6	1015.6	21.1	14.4	17.8	1.3	25.0	13	8.9	29	0	0	13.3	75	90	67	34	6	1	0	0	0.3	33	11.6	S	19	11	11	8	5.2	65
SAN FRANCISCO	2	1015.9	1016.6	18.9	9.4	14.3	1.7	29.4	2+	4.4	27	0	0	8.9	74	33	- 7	16	7	0	0	0	0.6	28	18.8	SSW	13	14	5	11	4.8	
SAN FRANCISCO U	16			18.3	12.8	15.6	1.4	28.3	2+	7.8	30	0	0			28	- 23	10	8		0	0			11.6	SW	30+					73
SANTA CATALINA	478			19.4	13.9	16.6	0.8	30.0	1	8.9	30+	0	0			155	127	107	7		0	0										
SANTA MARIA	72			20.6	8.3	14.6	1.2	31.1	1	2.8	29	0	0			49	23	15	8		0	0						12	5	13	5.4	
STOCKTON	7	1015.9	1016.9	18.9	7.8	13.2	1.6	27.8	1	1.1	26	0	0	8.9	80	32	3	17	9	0	0	0	0.4	28	14.3	14	29	7	10	13	6.1	
COLORADO																																
ALAMOSA	2297	772.1		11.1	-10.6	0.3	1.7	17.2	15	-17.2	27	0	30			T	- 7	T	1		8	T						14	8	8	4.6	
COLORADO SPRINGS	1873	811.0	1018.7	12.2	- 3.3	4.2	1.2	22.8	16	-13.9	3	0	22	- 8.3	47	6	- 4	4	4	0	79	25	1.6	4	14.3	36	2	13	11	6	4.2	
DENVER	1610	836.1	1016.8	13.3	- 3.9	4.7	1.6	23.3	15	-13.3	22	0	25	- 6.1	54	26	8	17	2	0	239	152	0.6	19	14.3	NW	24	13	9	8	4.6	62
GRAND JUNCTION	1480	854.0	1019.5	12.8	- 2.8	5.0	1.2	18.9	16+	-10.0	27	0	25	- 7.2	47	8	- 6	5	3	0	13	T	1.1	11	11.2	NE	2	11	9	10	5.2	63
PUEBLO	1428	856.1	1018.4	12.8	- 5.6	3.6	-0.9	23.3	11	-13.9	28	0	30	- 6.7	53	3	- 11	2	2	0	33	T	0.6	35	16.1	N	2	12	12	6	4.7	77

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%
CONNECTICUT															
BRIDGEPORT	2	1014.6	1015.3	8.9	1.1	5.1	-1.9	18.3	3	-6.1	15	0	13	0.0	73
HARTFORD	52	1007.8	1014.4	7.8	-1.1	3.3	-1.8	18.3	3	-8.9	17	0	20	-2.8	66
NEW HAVEN	2	1014.9		8.9	0.6	4.5	-1.8	18.9	3	-7.2	15	0	15		
DELAWARE															
WILMINGTON	23	1013.9	1016.9	9.4	0.0	4.8	-2.6	20.6	12	-7.2	16	0	18	-1.1	68
DIST.OF COLUMBIA															
WASH NATL AP	4	1015.2	1017.6	12.2	2.2	7.2	-1.5	24.4	12	-6.1	16	0	9	-1.7	56
FLORIDA															
APALACHICOLA U	4			20.0	10.0	15.2	-1.1	26.1	27+	2.2	7	0	0		
DAYTONA BEACH	9	1017.6	1019.1	23.9	12.2	18.1	-0.4	29.4	25	6.7	22	0	0	12.2	73
FORT MYERS	5	1018.0	1018.2	26.7	15.0	20.9	0.2	30.0	26	10.6	20	0	0	15.6	77
JACKSONVILLE	6	1018.3	1019.4	23.3	10.0	16.8	0.3	29.4	24	2.2	10	0	0	9.4	66
KEY WEST	1	1016.3	1017.0	26.1	21.7	23.9	0.6	28.3	30+	19.4	22	0	0	19.4	77
LAKELAND U	65			25.0	13.3	19.1	-0.3	28.3	26+	7.2	7	0	0		
MIAMI	2	1016.9	1017.1	26.1	17.8	21.8	-0.7	28.3	25	13.3	22+	0	0	17.2	77
ORLANDO	33	1014.9	1019.1	26.1	13.3	19.7	0.9	30.0	26+	8.3	22	0	0	12.2	69
PENSACOLA	34	1015.9	1020.0	20.6	8.9	14.9	-0.3	26.7	26+	0.6	7	0	0	8.3	69
TALLAHASSEE	17	1017.6	1019.8	23.3	6.1	14.8	-0.3	29.4	27+	-2.2	20+	0	8	7.2	69
TAMPA	6	1018.6	1018.8	24.4	12.2	18.5	-0.8	27.8	27+	5.6	20	0	0	12.8	74
WEST PALM BEACH	5	1016.9	1017.6	26.1	16.7	21.4	-1.1	29.4	25	11.1	21+	0	0	15.6	71
GEORGIA															
ATHENS	244	989.8	1019.3	15.6	2.8	9.2	-1.6	23.9	12	-3.3	7	0	10	1.1	63
ATLANTA	308	982.1	1019.6	15.6	2.8	9.2	-1.5	23.3	12	-2.8	8+	0	9	1.1	62
AUGUSTA	44	1013.5	1019.0	19.4	2.2	10.8	-1.5	26.1	24+	-5.0	8	0	13	2.2	63
COLUMBUS	117			18.3	4.4	11.4	-0.8	26.1	24	-2.2	9	0	9	4.4	69
MACON	108	1006.1	1019.3	18.3	2.8	10.4	-2.6	27.8	24	-5.6	9	0	13	2.2	62
ROME	194			15.0	0.6	7.9	-1.7	24.4	12	-6.7	7	0	13		
SAVANNAH	14	1017.3	1019.1	21.1	6.1	13.6	-0.5	28.3	24	-2.8	8	0	5	5.6	66
HAWAII															
HILO	8	1014.9	1016.2	27.8	20.6	24.1	1.2	29.4	19	17.8	23	0	0	18.9	79
HONOLULU	2	1014.9	1015.6	28.9	21.7	25.3	0.9	30.6	9	18.3	14	0	0	17.8	66
KAHULUI	15	1012.9		27.8	19.4	23.5	-0.4	29.4	19+	14.4	14	0	0	18.3	76
LIHUE	31	1011.9	1016.9	26.7	21.1	23.8	0.2	28.3	19+	17.8	17	0	0	18.3	74
IDAHO															
BOISE	865	918.7	1020.4	10.0	0.0	4.8	1.2	21.7	8	-5.6	30+	0	19	-1.1	69
LEWISTON	431			9.4	0.6	4.9	0.6	16.7	8	-7.2	26	0	14		
POCATELLO	1358	864.9	1020.6	8.9	-5.0	1.9	0.2	18.3	11	-13.9	30+	0	20	-5.6	63
ILLINOIS															
CAIRO U	96			11.7	3.9	7.8	-1.0	21.1	12	-2.2	5	0	7		
CHICAGO O HARE	201	991.9	1016.9	6.7	-1.1	2.9	-0.4	15.0	11	-8.9	28	0	20	-2.2	71
CHICAGO MIDWAY	185	993.9		6.7	0.0	3.3	-1.1	14.4	11	-6.7	29+	0	17	-2.2	70
MOLINE	177	995.6	1017.7	6.1	-1.7	2.3	-1.7	17.2	11	-10.6	28	0	25	-3.3	69
PEORIA	199	993.6	1018.1	6.7	-1.7	2.7	-1.6	16.7	11	-9.4	28	0	23	-2.2	72
ROCKFORD	221	988.8	1016.5	5.0	-2.2	1.3	-1.5	13.9	11	-10.6	28	0	24	-2.8	75
SPRINGFIELD	179	995.6	1018.3	7.8	-0.6	3.6	-1.8	17.2	9	-8.3	28	0	21	-1.1	73
INDIANA															
EVANSVILLE	116	1005.1	1019.4	10.6	0.6	5.6	-1.6	18.3	9	-7.2	28	0	15	-1.1	65
FORT WAYNE	241	987.1	1017.8	5.0	-2.2	1.2	-2.6	13.3	1	-10.6	30	0	21	-2.2	78
INDIANAPOLIS	241	988.5	1018.1	7.8	0.6	4.1	-0.8	16.7	10	-7.2	28	0	17	-0.6	75
SOUTH BEND	236	987.8	1016.6	5.0	-0.6	2.2	-1.7	14.4	1	-7.8	29	0	18	-2.2	74
IOWA															
BURLINGTON	211			7.8	-1.7	2.9	-1.2	17.8	11	-8.3	28	0	23	-1.1	77
DES MOINES	286	983.1	1018.6	7.2	-2.2	2.5	-0.3	18.9	11	-9.4	28	0	24	-3.9	67
DUBUQUE	322	977.0		4.4	-3.3	0.7	-0.9	16.7	11	-12.2	28	0	25		

State and Station	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
CONNECTICUT																	
BRIDGEPORT	74	-28	18	12	2	53	51	3.2	29	17.0	30	19	7	7	16	6.5	
HARTFORD	80	-18	17	11	2	94	76	1.8	31	12.5	NW	19+	4	7	19	7.5	42
NEW HAVEN	89	-14	19	15		66	51			13.0	NW	15	8	8	14	6.2	58
DELAWARE																	
WILMINGTON	53	-37	21	10	2	173	152	2.3	28	13.9	31	15	6	13	11	6.1	
DIST.OF COLUMBIA																	
WASH NATL AP	53	-19	26	7	0	175	178	1.8	29	15.2	NW	19	11	10	9	5.3	51
FLORIDA																	
APALACHICOLA U	49	-17	49	2	0	0	0			11.6	N	27	18	9	3	3.1	76
DAYTONA BEACH	T	-59	T	0	0	0	0	1.5	33	10.7	1	8+	8	19	3	4.7	
FORT MYERS	23	-7	23	1	0	0	0	1.6	3	10.3	7	11+	15	13	2	4.1	
JACKSONVILLE	6	-37	6	3	0	0	0	1.4	32	14.8	NE	16	12	14	4	4.2	64
KEY WEST	35	-36	13	5	0	0	0	3.6	4	12.1	NE	8	12	8	10	5.1	72
LAKELAND U	5	-36	5	2		0	0						14	14	2	3.6	84
MIAMI	97	25	59	11	0	0	0	1.8	4	10.7	6	10	8	12	10	5.7	
ORLANDO	1	-39	1	2	0	0	0	1.5	35	10.3	4	8	14	13	3	4.0	
PENSACOLA	27	-55	23	3		0	0	0.7	34	14.8	SW	24	18	10	2	3.2	74
TALLAHASSEE	78	16	64	3	0	0	0	0.9	32	9.4	36	7	15	11	4	3.6	
TAMPA	11	-26	11	2	0	0	0	1.1	2	8.9	3	8	15	11	4	3.7	75
WEST PALM BEACH	35	-38	24	4	0	0	0	2.0	4	13.4	2	7	5	17	8	5.8	
GEORGIA																	
ATHENS	162	87	63	9	2	0	0	1.5	30	10.3	32	30	14	6	10	4.5	
ATLANTA	140	65	65	9	0	0	0	1.7	30	12.5	W	24	13	7	10	4.9	64
AUGUSTA	66	11	31	10	3	0	0	0.9	27	10.3	30	30	12	10	8	4.6	
COLUMBUS	73	7	55	8		T	0	1.0	32	10.3	22	24	13	8	9	4.8	
MACON	59	-3	31	8	2	0	0	1.2	30	16.5	S	24	12	9	9	4.7	65
ROME	159	72	54	9		0	0										
SAVANNAH	21	-31	11	7	2	0	0	0.6	28	13.9	N	27	12	9	9	5.0	75
HAWAII																	
HILO	540	200	229	28	3	0	0	0.3	23	9.8	E	24	0	6	24	8.3	27
HONOLULU	71	16	28	17	2	0	0	4.8	6	13.9	NE	29+	4	14	12	6.3	44
KAHULUI	43	4	18	19	3	0	0	5.4	5	13.4	NE	26+	8	13	9	5.6	61
LIHUE	113	-3	37	23	3	0	0	6.2	6	14.3	SE	26	1	14	15	7.4	41
IDAHO																	
BOISE	23	-8	11	6	0	33	25	1.0	15	11.6	W	24	6	6	18	7.1	34
LEWISTON	11	-20	4	7		20	25						5	9	16	7.1	
POCATELLO	13	-12	8	7	0	112	51	1.7	23	21.5	SW	24	8	4	18	6.9	41
ILLINOIS																	
CAIRO U	94	-4	42	10		T	T			11.6	SW	17	8	8	14	6.1	47
CHICAGO O HARE	56	1	20	10	0	61	25	2.6	26	13.9	25	27	4	7	19	7.4	
CHICAGO MIDWAY	58	2	22	11	0	30	25	2.6	24	13.0	S	8	4	7	19	7.4	32
MOLINE	57	8	34	10	0	8	T	2.0	26	16.1	W	14	8	7	15	6.5	42
PEORIA	55	1	16	11	0	64	25	1.9	25	13.0	NW	17	8	5	17	6.8	41
ROCKFORD	66	5	33	8	0	18	T	2.1	27	11.2	31	18+	6	5	19	7.3	
SPRINGFIELD	30	-30	11	9	0	71	25	2.2	24	13.0	W	27	8	8	14	6.3	47
INDIANA																	
EVANSVILLE	99	18	44	11	3	T	T	1.3	25	10.3	W	18	9	6	15	6.2	48
FORT WAYNE	69	4	21	16	0	104	51	3.0	26	14.3	W	27	4	7	19	7.7	35
INDIANAPOLIS	65	-14	15	12	0	160	76	1.9	25	12.5	W	18	4	8	18	7.4	33
SOUTH BEND	85	18	23	15	0	178	102	2.4	25	10.7	29	18	2	6	22	8.2	
IOWA																	
BURLINGTON	45	-3		7	0	T		1.7	28	10.3	33	3	10	7	13	5.9	
DES MOINES	12	-33	8	4	0	18	T	1.3	30	11.6	NW	27	9	8	13	5.8	55
DUBUQUE	83	17	60	8		104	76						5	8	17	7.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C		C				C	%	Mm.	Mm	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
IOWA																																
SIOUX CITY	334	977.3	1018.4	8.3	- 4.4	1.9	-0.4	22.2	11	-11.7	28	0	27	- 4.4	66	T	- 29	T	1	0	T	T	1.1	30	14.8	NW	17	9	9	12	5.6	61
WATERLOO	265	985.1	1017.7	5.0	- 4.4	0.2	-1.3	19.4	11	-13.9	28	0	25	- 4.4	72	26	- 20	17	6	0	66	51	1.9	29	17.4	28	11	8	6	16	6.6	
KANSAS																																
CONCORDIA	448	964.4	1018.6	11.1	- 1.1	5.0	-0.3	22.2	11	- 7.8	27	0	21	- 1.1	70	9	- 15	8	4	0	15	T	1.5	24	12.1	W	24	14	6	10	4.7	66
DODGE CITY	787	926.2	1018.4	12.8	- 1.1	5.8	-0.2	23.3	16+	- 8.3	5	0	17	- 1.7	68	4	- 13	2	3	0	25	25	1.1	24	13.4	SW	19+	11	8	11	5.1	76
GOODLAND	1113	888.9	1018.0	12.2	- 3.9	3.9	0.6	23.3	16+	-13.3	5	0	26	- 3.9	64	10	- 2	7	3	0	94	51	1.9	27	13.0	32	10	15	8	7	3.9	
TOPEKA	267	986.8	1019.3	11.1	- 0.6	5.4	-0.5	21.1	16	- 6.7	27+	0	19	0.0	71	10	- 28	9	4	0	T	T	1.2	27	10.7	SW	23+	10	8	12	5.6	51
WICHITA	403	970.2	1019.1	12.2	0.0	6.2	-0.7	21.7	11	- 5.0	5+	0	17	- 1.1	65	10	- 28	7	4	0	56	25	0.6	24	13.4	SW	19	10	7	13	5.7	59
KENTUCKY																																
COVINGTON	265	986.5	1018.5	8.3	1.1	4.6	-1.3	17.2	10	- 7.2	29	0	15	- 1.1	68	98	21	30	13	0	79	T	2.4	25	11.2	31	18	4	6	20	7.3	
LEXINGTON	294	983.1	1019.2	8.9	0.6	4.8	-2.2	18.3	10	- 7.8	28	0	15	0.0	72	105	22	41	14	1	T	T	2.0	22	11.2	24	12	8	4	18	6.6	
LOUISVILLE	145	1001.0	1019.0	10.6	1.7	5.9	-1.1	18.9	10	- 6.1	29	0	13	- 1.1	63	78	- 3	32	13	1	T	T	1.6	27	11.2	SW	11	8	7	15	6.5	43
LOUISIANA																																
ALEXANDRIA	28	1015.2	1019.6	20.6	5.0	12.7	-0.9	27.2	26	- 2.2	8+	0	5	6.7	73	2	-119	1	3	0	0	0	0.4	19	9.4	19	30+	11	6	13	5.4	
BATON ROUGE	20	1017.3	1020.0	22.2	7.2	14.9	0.0	28.3	25	0.0	7+	0	2	7.8	68	6	- 98	5	2	0	0	0	0.5	16	10.3	1	3	12	11	7	4.6	
LAKE CHARLES	3	1019.0	1019.9	22.2	10.0	16.1	0.8	27.2	24	2.2	5	0	0	11.1	77	3	-104	2	3	1	0	0	0.7	12	9.4	17	29+	10	13	7	5.0	
NEW ORLEANS	1	1019.0	1019.9	22.2	8.9	15.7	0.2	28.3	26+	1.1	20+	0	0	11.1	77	11	- 73	7	3	0	0	0	0.3	5	10.7	23	24	15	11	4	3.9	
SHREVEPORT	77	1009.8	1019.0	21.1	6.7	13.9	0.8	28.3	25+	- 0.6	4	0	1	6.1	66	18	- 89	12	6	1	0	0	0.4	19	12.5	27	24	9	12	9	5.5	67
MAINE																																
CARIBOU	190	987.5		3.9	- 4.4	- 0.3	0.7	16.1	3	-13.3	30	0	24			71	- 6	32	17		236	76						1	7	22	8.1	
PORTLAND	14	1011.2	1013.4	6.1	- 2.8	1.6	-1.8	18.3	3	-11.7	17	0	24	- 3.3	73	64	- 42	26	12	0	91	25	1.7	28	16.5	W	24	5	10	15	6.6	46
MARYLAND																																
BALTIMORE	45	1011.5	1017.2	11.1	0.0	5.6	-1.9	22.8	12	- 6.7	29	0	16	- 2.2	61	66	- 13	30	10	1	213	203	2.5	28	16.5	W	19	9	13	8	5.3	55
MASSACHUSETTS																																
BLUE HILL OBS R	192			6.7	- 1.1	2.9	-2.7	20.0	3	- 8.9	16	0	19			80	- 35	19	14		147	102			17.4	WNW	20					48
BOSTON	5	1013.2	1014.1	7.8	1.1	4.5	-2.7	20.0	3	- 6.1	16	0	11	- 1.7	67	86	- 14	19	12	0	56	51	3.2	28	15.6	NW	15	8	6	16	6.4	47
NANTUCKET	13	1013.9	1014.2	10.0	1.7	5.9	-1.8	20.0	2	- 5.6	21	0	12	1.1	73	98	- 5	23	14	1	69	51	2.4	30	17.0	NW	16	5	8	17	7.3	42
PITTSFIELD	357			4.4	- 4.4	0.2	-2.7	18.3	1	-11.7	17+	0	26			75	- 24	20	14		282	76										
WORCESTER	301	976.6	1014.4	5.0	- 2.2	1.3	-2.7	17.8	3	-10.0	16	0	24	- 2.8	76	93	- 15	16	12	1	249	127	2.8	28	17.0	31	15	6	9	15	6.7	
MICHIGAN																																
ALPENA	210	987.5	1013.5	2.8	- 3.9	- 0.7	-2.1	9.4	11	-14.4	16+	0	27	- 4.4	76	68	8	25	19	0	277	178	1.9	26	13.9	W	26	0	5	25	8.9	23
DETROIT	189			6.7	1.1	3.7	-0.9	15.6	1	- 5.6	28+	0	15	- 1.7	68	56	- 1	23	12	0	10	T	3.3	27	13.0	30	12					
DETROIT M WAYNE CO	193	990.9	1015.5	5.6	- 1.7	1.8	-2.9	13.9	1	-10.6	29+	0	22	- 2.8	72	70	13	26	16	0	36	T	3.0	26	12.5	W	27+	3	6	21	8.1	35
DETROIT WILLOW RUN	217	986.8	1015.8	5.0	- 1.7	1.6	-2.8	13.3	10+	-10.6	29	0	21	- 3.3	70	61	4	23	15	0	46	T	3.4	25	13.0	28	28+	2	7	21	8.1	
FLINT	235	986.5	1014.8	4.4	- 1.7	1.6	-1.9	13.3	10+	-10.6	29+	0	18	- 2.8	72	56	0	20	12	0	76	T	3.0	25	10.7	31	12	1	9	20	8.4	
GRAND RAPIDS	239	985.4	1015.4	4.4	- 1.7	1.4	-1.6	13.3	1	-11.1	29	0	22	- 1.7	81	110	47	29	17	1	279	102	2.2	25	15.6	W	25	0	5	25	9.0	14
HOUGHTON LAKE	350	971.2	1014.4	2.2	- 3.9	- 0.7		9.4	1	-13.3	15	0	26	- 3.3	82	72		26	15	0	320	51	2.5	27	11.2	28	26	0	5	25	8.8	
LANSING	256	982.7	1015.1	4.4	- 2.2	0.9	-2.3	13.9	1	-13.3	29	0	22	- 2.2	79	58	2	15	17	0	147	51	2.8	26	13.4	W	25+	2	6	22	8.5	24
MARQUETTE U	206			2.2	- 3.3	- 0.6	-1.6	16.1	11	-11.1	29+	0	25			43	- 40	14	15		442	203			17.9	S	8	1	6	23	8.5	30
MUSKEGON	191	991.5	1015.2	5.6	0.6	2.8	-1.4	12.8	1	- 8.3	29	0	17	- 2.2	71	71	- 4	22	16	0	183	51	2.4	28	15.6	22	18	0	4	26	9.3	
SAULT STE MARIE	220	985.4	1012.8	1.1	- 4.4	- 1.7	-2.4	9.4	11	-14.4	15	0	27	- 3.9	85	88	3	17	26	0	625	203	1.1	29	12.5	NW	12	0	6	24	9.1	10
MINNESOTA																																
DULUTH	435	962.1	1015.3	1.1	- 7.2	- 3.0	-0.4	10.6	16	-18.9	28	0	27	- 8.3	68	13	- 33	4	11	0	107	25	2.5	28	15.2	NW	18	1	5	24	8.3	21
INTERNATIONAL FALLS	359	970.5	1015.2	- 0.6	- 9.4	- 5.1	-0.6	11.1	1	-24.4	29+	0	29	- 7.8	78	19	- 18	7	15	0	178	127	1.8	27	11.6	30	18	1	8	21	8.3	
MINNEAPOLIS	254	985.4	1016.8	3.9	- 5.0	- 0.7	-0.3	15.0	11	-15.0	28	0	27	- 5.6	70	2	- 33	1	4	0	20	T	2.0	29	15.6	NW	17	7	5	18	7.2	38
ROCHESTER	395	967.8	1017.1	3.3	- 6.1	- 1.2	-0.9	16.7	11	-16.1	28	0	26	- 5.6	73	2	- 38	1	4	0	13	T	2.7	28	17.9	31	17	6	7	17	7.2	
ST CLOUD	315	977.3	1016.3	3.9	- 5.6	- 1.0	0.4	16.1	11	-17.8	28	0	26		66	4	- 30	2	6		30	25						6	6	18	7.1	
MISSISSIPPI																																
JACKSON	94	1008.1	1020.1	20.0	3.3	11.5	-1.6	26.7	26	- 3.9	19+	0	10	6.1	76	24	- 75	12	6	0	0	0	0.5	17	13.0	NE	30	15	2	13	4.8	59
MERIDIAN	88	1009.1	1020.5	20.0	2.8	11.3	-1.0	25.6	22+	- 3.3	9+	0	11	4.4	72	17	- 62	13	4	0	0	0	0.4	27	9.4	16	29+	13	6	11	5.2	
MISSOURI																																
COLUMBIA	237	989.5	1018.5	10.6	1.1	5.7	-0.6	19.4	25	- 5.6	28	0	16	- 1.1	65	42	- 16	18	8	0	46	T	1.5	27	11.6	NW	3	11	8	11	5.4	57
KANSAS CITY	226	991.5	1018.9	11.7	2.2	6.9	-0.1	21.1	16	- 3.9	28+	0	12	0.6	68	11	- 34	9	5	0	5	T	1.3	27	10.3	SW	25	10	8	12	5.7	49

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: .25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
ST JOSEPH	247			11.7	-1.1	5.3	0.1	20.6	11	-7.8	7	0	18	-0.6	73	11	-32	6	5	0	0		1.0	27	9.4	31	27+	13	5	12	4.9	
ST LOUIS	163	998.3	1019.2	10.0	1.1	5.6	-1.2	20.0	25	-5.6	28	0	15	-0.6	68	55	-11	25	9	1	41	51	1.7	26	11.2	SW	17+	10	7	13	5.9	50
SPRINGFIELD	386	973.2	1019.3	13.3	0.6	6.9	-0.3	22.2	12	-6.1	28+	0	14	-0.6	64	39	-31	28	6	0	20	25	0.8	22	8.9	NE	13+	10	9	11	5.4	56
MONTANA																																
BILLINGS	1087	891.3	1017.6	7.2	-1.7	2.9	1.2	17.8	15	-11.1	28	0	19	-6.7	53	13	-3	9	4	0	130	51	3.6	26	14.8	W	23	9	5	16	6.2	38
GLASGOW	696	933.0		5.0	-6.7	-0.8	1.3	15.0	7	-17.2	27	0	28			9	-3	6	7		10	T						10	7	13	5.8	
GREAT FALLS	1116	887.9	1018.1	7.2	-2.2	2.3	1.1	15.6	18+	-15.0	27+	0	19	-5.6	59	7	-12	5	6	0	61	25	4.5	23	17.0	SW	22+	5	11	14	6.4	47
HAVRE	787	922.8		6.1	-6.1	0.1	1.5	16.7	7	-17.2	27	0	27	-5.6	69	5	-8	2	4	0	46	T	3.6	25	17.9	SW	11	7	11	12	6.0	56
HELENA	1167	881.8	1020.4	6.1	-5.0	0.6	0.8	13.9	15	-16.7	27	0	23	-4.4	71	8	-7	3	8	0	69	51	1.8	27	17.0	W	24	7	5	18	6.7	42
KALISPELL	904	913.3	1020.4	4.4	-4.4	0.2	0.7	10.6	16	-14.4	27	0	23	-2.8	81	15	-22	4	12	0	58	25	0.8	17	10.3	32	24	4	5	21	7.8	
LEWISTON	1259	871.3	1016.9	6.1	-6.1	0.0		16.7	18	-18.3	27	0	22	-6.1	65	16			8	0	150		3.2	25								
MILES CITY	801	922.5	1017.7	6.1	-5.6	0.3	0.0	17.2	15	-17.2	27	0	25	-5.6	68	10	-1		10	0	64		2.4	29								
MISSOULA	972	906.5	1021.6	4.4	-4.4	-0.1	0.8	12.2	15	-22.2	27	0	22	-3.9	79	17	-6	4	9	0	130	51	0.4	30	14.8	SW	24	4	6	20	7.5	29
NEBRASKA																																
GRAND ISLAND	561	950.9	1018.9	10.0	-3.9	2.9	0.1	21.1	11	-12.2	28+	0	29	-3.3	69	6	-14	5	2	0	18	25	1.7	28	10.3	36	21+	11	10	9	4.9	
LINCOLN U	351			9.4	-1.1	4.1	-0.8	21.1	11	-7.2	27	0	22			10	-22	8	3		T	T			12.1	S	7	13	7	10	4.7	63
NORFOLK	471			8.9	-4.4	2.1	-0.1	21.7	11	-11.1	28	0	27			2	-21	1	3		18	T						11	5	14	5.6	
NORTH PLATTE	846	918.7	1019.0	10.0	-7.8	1.1	-0.9	22.2	11	-15.6	5	0	30	-5.6	66	5	-8	3	2	0	74	51	1.3	33	11.6	N	16+	13	6	11	5.0	64
OMAHA	298	982.1	1018.4	10.0	-2.8	3.6	-0.3	21.1	11	-10.0	28	0	23	-3.3	63	7	-25	5	4	0	T	T	0.8	31	12.5	NW	17	12	7	11	5.2	55
SCOTTSBLUFF	1206	879.8	1018.9	10.6	-7.2	1.5	-0.6	20.0	11+	-18.3	27	0	28	-5.6	65	4	-7	3	5	0	41	25	2.4	32	13.4	28	24	15	7	8	4.2	
VALENTINE	789			8.9	-6.7	0.9	0.0	20.0	7	-15.6	28	0	30			7	-5	7	2		28	25			15.6	NW	21+	10	11	9	5.1	62
NEVADA																																
ELKO	1539	845.9	1018.4	13.9	-3.3	5.3	4.1	22.2	8	-15.0	27	0	20	-4.4	53	15	-7	12	4	1	163	152	0.5	24	16.1	26	9	8	5	17	6.3	
ELY	1906	810.0	1018.9	12.2	-6.1	3.1	2.2	21.1	11	-17.8	29	0	25	-7.8	53	21	6	17	4	0	323	254	1.9	20	14.8	SE	29	9	8	13	6.1	55
LAS VEGAS	659	940.1	1017.0	20.0	7.2	13.7	2.3	28.3	1	1.1	29	0	0	-0.6	46	39	31	27	5	0	0	0	1.1	24	12.5	W	30	13	8	9	4.7	77
RENO	1342	867.3	1018.4	15.6	-3.9	5.9	2.4	24.4	1	-11.1	27+	0	25	-5.0	49	6	-9	5	3	0	T	T	0.1	12	23.2	SW	29	8	6	16	6.6	61
WINNEMUCCA	1310	869.3	1018.8	13.3	-3.9	4.7	2.6	21.7	1	-13.3	26	0	23	-3.3	60	19	-2	7	5	0	135	76	0.4	11	10.7	SE	18	7	3	20	7.1	33
NEW HAMPSHIRE																																
CONCORD	104	1001.4	1014.2	6.1	-5.0	0.4	-2.7	18.9	3	-18.3	17	0	25	-4.4	70	73	-22	20	10	0	381	203	1.5	29	13.0	NW	20	5	9	16	6.9	50
MT WASHINGTON OBS	1909			-6.1	-12.8	-9.4	-2.9	8.3	1	-21.7	30	0	27			189	21	47	23	0	1057	152			46.0Y	W	24	1	4	25	9.0	21
NEW JERSEY																																
ATLANTIC CITY	20	1014.6	1017.1	10.0	-1.7	4.2	-4.0	20.6	2	-10.0	17	0	21	-0.6	71	44	-49	22	9	2	198	203	2.8	27	13.9	29	18	7	14	9	5.9	42
ATLANTIC CITY II	3			11.1	3.3	7.3	-1.7	18.3	2	-4.4	16	0	10			28	-69	9	9						17.4	SW	18					
NEWARK	2	1014.9	1016.0	9.4	1.7	5.7	-1.8	18.3	12+	-6.7	16	0	12	-1.1	65	60	-26	15	14	1	79	76	2.7	27	13.4	31	15	7	8	15	6.6	
TRENTON U	17			9.4	2.2	5.7	-2.0	20.0	12	-6.1	16	0	11			48	-32	14	11		160	152			14.8	NW	15	5	12	13	6.6	46
NEW MEXICO																																
ALBUQUERQUE	1619	839.8	1018.4	15.6	0.0	7.8	1.4	21.1	14+	-5.6	30	0	16	-6.7	41	4	-6	3	2	0	25	T	0.3	9	18.8	E	2	12	7	11	5.0	74
CLAYTON	1515			15.0	-2.8	6.2	0.8	26.7	16	-11.1	5	0	23			6	-3	5	2		56	51						13	6	11	4.9	
RATON	1944			14.4	-5.6	4.6	1.5	23.9	16	-14.4	3	0	27			1	-9	1	4		13	T						11	9	10	5.5	
ROSWELL	1102	893.3		18.3	-1.1	8.6	0.9	27.8	15	-9.4	4	0	18			6	-3	3	3	0	20	T	0.4	27	15.2	NW	29	7	10	13	6.2	54
SILVER CITY	1638			17.2	2.8	9.9	1.3	24.4	15	-2.8	4	0	8			12	1	11	3		T	T						13	7	10	4.6	
NEW YORK																																
ALBANY	84	1004.4	1015.2	6.1	-3.3	1.6	-2.4	17.8	1	-10.0	30+	0	24	-2.8	72	68	-1	16	11	1	229	76	2.2	26	13.9	NW	19+	1	10	19	8.0	38
BINGHAMTON	485	954.6	1014.9	3.9	-2.8	0.5	-2.8	17.2	1	-12.8	16	0	23	-2.8	78	113	49	53	18	1	472	127	2.3	25	15.6	W	12	0	7	23	8.8	33
BUFFALO	215	988.2	1014.3	5.6	-0.6	2.4	-1.6	17.8	1	-12.8	16	0	18	-1.7	75	80	-12	19	18	2	500	203	4.2	25	13.4	SW	11	0	4	26	9.1	29
J.F. KENNEDY	4	1015.2	1015.9	8.3	1.7	5.1	-2.8	18.9	3	-6.7	16+	0	10	-2.2	60	54	-35	16	13	2	53	51	2.9	29	16.1	30	19	6	8	16	6.8	
NEW YORK II	40	1012.2	1015.4	9.4	2.2	5.8	-2.5	18.3	12	-6.7	16+	0	9	-2.8		66	-20	18	11	2	81	76	2.1	28	13.4	NW	15					48
NEW YORK LA GUARDIA	3	1013.9	1015.8	8.9	2.8	5.9	-2.6	18.9	2	-5.6	16+	0	9	-2.8	56	61	-30	16	12	2	56	51	3.1	29	15.6	NW	15	5	9	16	7.0	
ROCHESTER	167	994.6	1015.3	6.1	-1.1	2.4	-2.1	17.8	1	-12.2	16	0	19	-2.2	72	73	10	20	13	1	254	102	3.1	24	16.5	W	12	0	4	26	8.9	23
SYRACUSE	125	999.3	1014.4	6.7	-0.6	3.1	-1.4	20.0	1	-12.2	30	0	18	-2.2	69	114	40	53	17	1	366	76	2.7	24	13.9	W	13	0	6	24	8.6	24
NORTH CAROLINA																																
ASHEVILLE	652	941.4	1018.5	12.8	-1.1	5.9	-1.1	23.3	12	-7.8	29+	0	20	-1.7	65	65	-6	29	7	1	0	0	1.9	35	13.0	35	15	14	9	7	4.1	64
CAPE HATTERAS R	2	1018.0	1018.3	16.1	5.6	10.8	-2.7	23.3	2	-5.6	17	0	3	5.6	71	60	-43	26	9	6	0	0	2.4	31	16.1	WSW	25	12	5	13	5.1	69
CHARLOTTE	224	990.5	1018.5	15.0	2.2	8.8	-1.4	24.4	12	-3.9	29+	0	12	0.6	61	64	-1	24	8	1	0	0	1.0	27	11.2	SW	17	15	6	9	4.3	68
GREENSBORO	273	986.1	1018.3	14.4	1.7	8.2	-0.6	23.9	12	-7.8	16	0	12	0.6	61	36	-33	13	5	1	T	T	1.6	26	15.2	W	18	17	3	10	4.5	65

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

NOVEMBER 1967

State and Station	Elevation (ground)	Pressure: Station ⌀	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
NORTH CAROLINA																																
RALEIGH	132	1002.0	1018.3	15.0	1.1	8.2	-1.8	25.0	12	-8.3	16	0	14	0.0	60	54	-16	10	7	2	T	T	1.1	28	9.4	26	17	15	7	8	4.4	70
WILMINGTON	9	1017.6	1018.9	18.9	4.4	11.7	-1.3	26.1	3	-3.9	17	0	9	3.3	61	57	-22	33	7	2	0	0	1.1	30	20.1	W	24	16	7	7	4.1	71
NORTH DAKOTA																																
BISMARCK	502	955.6	1017.4	3.3	-7.8	-2.1	-0.3	13.3	10	-21.1	28	0	30	-6.7	71	4	-11	2	5	0	66	25	2.5	29	19.7	W	11	6	9	15	6.6	40
FARGO	273	982.7	1016.5	3.3	-6.7	-1.7	0.5	15.6	11+	-20.6	28	0	29	-6.7	70	1	-20	1	4	0	18	25	2.1	29	19.2	NW	17	5	5	20	7.3	41
WILLISTON	579	946.2	1016.8	4.4	-6.7	-1.3	1.2	15.6	15	-18.9	28	0	29	-6.1	72	8	-6	5	8	0	41	25	2.3	28	19.7	NW	11	3	12	15	6.7	42
OHIO																																
AKRON	368	971.2	1016.7	6.1	-1.1	2.6	-2.3	16.7	1	-11.7	16	0	20	-1.7	75	71	14	21	18	0	224	102	3.0	25	11.2	32	12+	1	4	25	8.8	
CINCINNATI OBS	232			8.3	0.6	4.5	-2.5	16.7	10	-5.6	28+	0	18			93	19	36	10		25	25			10.7	W	18					29
CLEVELAND	237	986.8	1016.5	6.7	0.6	3.7	-1.5	16.7	1	-8.9	16	0	16	-2.8	65	73	7	24	16	2	231	51	3.5	23	13.4	W	18+	1	7	22	8.5	25
COLUMBUS	247	987.5	1018.1	6.1	-0.6	2.6	-2.5	16.7	10	-9.4	16	0	17	-2.2	71	82	18	26	16	0	165	102	2.3	25	13.4	NW	18	3	8	19	8.0	30
DAYTON	305	981.0	1018.0	6.7	-0.6	3.1	-2.3	16.1	10+	-8.3	16	0	18	-1.7	72	76	8	30	15	0	157	102	2.5	25	13.9	W	18	4	6	20	7.8	28
MANSFIELD	395			5.6	-1.1	2.2	-1.9	15.6	1	-10.0	16	0	19	-2.2	72	60	-8	25	14	0	89	76	3.8	24				3	5	22	8.2	
TOLEDO	204	991.2	1016.9	5.6	-2.2	1.6	-2.1	14.4	1	-12.8	29	0	23	-2.8	73	72	21	26	12	0	48	25	2.9	25	13.4	W	18	4	4	22	7.9	38
YOUNGSTOWN	359	972.6	1016.4	4.4	-1.7	1.4	-2.6	16.7	1	-9.4	29	0	23	-1.7	81	75	3	19	19	1	323	76	3.1	25	11.2	25	12	0	6	24	9.0	
OKLAHOMA																																
OKLAHOMA CITY	392	971.9	1019.0	15.6	3.3	9.7	0.6	26.7	13	-2.2	7+	0	4	2.2	66	10	-29	9	3	0	30	T	0.2	12	13.4	S	10	8	7	15	6.5	62
TULSA	198	994.9	1019.5	15.6	2.2	9.0	0.3	27.8	13	-3.9	4	0	9	1.1	63	28	-30	14	5	1	23	T	0.3	20	12.5	S	10	9	12	9	5.3	64
OREGON																																
ASTORIA	2	1016.6	1017.3	12.8	5.6	8.9	1.0	17.2	17+	-0.6	20	0	3	6.1	85	151	-134	28	17	1	0	0	1.3	12	13.9	30	25	3	9	18	7.6	
BURNS U	1265	874.7	1019.9	10.0	-3.3	3.4	1.1	17.2	8+	-17.2	30	0	24	-2.8	68	21	-9	10	7		160	127	0.8	30				3	12	15	7.3	
EUGENE	109	1004.7	1018.3	12.2	4.4	8.3	0.8	17.8	14	-1.1	21	0	1	6.1	87	82	-61	27	12	0	0	0	0.3	18	12.1	36	19	1	9	20	8.2	
MEACHAM	1234	877.4	1019.8	5.6	-1.7	1.8	0.4	12.8	7	-9.4	26	0	20	-2.2	79	82	-23	21	12		305	229	0.4	19	13.4	30	24	5	7	18	7.2	
MEDFORD	396	970.5	1019.0	13.3	1.7	7.5	1.7	22.8	12	-7.2	26	0	10	3.3	81	26	-40	13	8	0	0	0	0.2	21	11.6	13	13	3	9	18	7.8	
PENDLETON	452	965.8	1020.5	9.4	0.6	5.1	-0.1	17.2	10	-6.7	27	0	15	0.0	74	16	-20	6	8	0	20	25	1.2	23	16.5	25	24	6	7	17	6.8	
PORTLAND	6	1016.9	1018.3	12.2	3.3	7.9	0.6	17.2	14	-3.9	21	0	5	3.9	77	58	-78	18	13	0	0	0	1.3	14	15.2	E	2	4	6	20	7.6	39
SALEM	60	1010.8	1018.2	12.8	3.3	8.0	0.7	17.2	14	-2.8	26+	0	5	3.9	78	84	-61	32	13	0	0	0	0.9	20	14.3	18	29	4	5	21	7.6	
SEXTON SUMMIT R	1169	883.8	1017.0	10.0	3.3	6.7	0.7	17.2	17	-3.9	30+	0	10			34	-77	13	9		145	127			16.5	17	29	8	7	15	6.4	
PACIFIC AREA																																
JOHNSTON	2	1011.5	1012.3	28.3	23.9	26.1	-0.4	29.4	17	21.1	27+	0	0	22.2	79	136	83	37	25	1	0	0	7.0	9	17.9	NE	4	8	12	10	6.0	66
KOROR R	29	1005.1	1008.8	31.1	24.4	27.8	0.5	32.8	20+	22.2	1	6	0	23.9	83	299	-29	131	19	4	0	0	1.2	3	17.0	SW	2+	0	4	26	9.1	70
KWAJALEIN	2	1007.8	1008.4	30.6	25.0	27.8	0.4	31.7	23	22.8	1	0	0	23.9	81	196	-112	51	21	2	0	0	4.6	7	14.3	8	1	1	4	25	8.7	
MAJURO	3	1008.5	1008.9	30.0	25.0	27.3	0.4	30.6	28+	22.8	16	0	0	23.3	79	283	-121	73	25	1	0	0	3.0	8	16.1	E	23	3	10	17	7.8	54
MARCUS ISLAND	6			27.8	22.8	25.2	-1.1	30.0	1	19.4	27	0	0			164	81	97	11		0	0			13.4	NE	28					62
PAGO PAGO	4	1009.1	1009.3	29.4	22.8	26.1		31.1	29	21.1	21+	0	0	22.8	81	389		87	25	2	0	0	2.3	10	12.5	E	25	2	7	21	8.1	38
PONAPE R	37	1002.4	1007.6	30.6	23.3	26.8	0.2	32.2	12	21.1	16	1	0	23.9	86	570	142	88	26	8	0	0	1.5	10	13.0	SW	11+	0	7	23	8.8	30
TAGUAC GUAM R	110			28.9	23.9	26.3	0.1	30.0	15+	21.1	30	0	0			298	37	129	20		0	0			17.9	SW	13					43
TRUK MOEN ISLAND	2	1007.5	1007.9	30.6	24.4	27.3	0.2	31.7	25+	22.2	10	0	0	23.9	82	395	81	132	28	2	0	0	2.2	5	17.0	NW	11	0	4	26	9.1	53
WAKE	3	1012.5	1012.7	30.6	24.4	27.4	0.5	31.7	8+	21.1	29	0	0	21.7	75	53	-25	21	14	1	0	0	6.9	6	17.9	N	29	13	12	5	4.6	67
YAP R	19	1006.4	1008.2	30.0	24.4	27.2	-0.3	32.2	15	23.3	11+	1	0	23.9	85	265	-18	116	23	1	0	0	2.3	5	27.3	NE	1	1	8	21	8.4	51
PENNSYLVANIA																																
ALLENTOWN	118	1002.0	1016.3	7.8	-1.7	2.9	-2.6	17.8	3	-8.3	30+	0	21	-2.8	69	76	-8	33	10	1	198	127	2.8	27	13.0	28	28+	9	4	17	6.3	
ERIE	223	988.2	1015.6	5.6	0.0	2.7	-2.4	19.4	1	-5.6	15	0	16	-2.2	71	132	46	28	24	4	922	381	3.8	24	13.4	27	27+	0	3	27	9.4	
HARRISBURG	103	1003.7	1016.8	8.3	0.0	4.3	-2.0	18.3	12	-7.2	16	0	18	-2.8	63	73	-2	27	12	1	246	152	2.3	28	17.9	W	18	5	14	11	6.6	52
PHILADELPHIA	2	1015.9	1016.8	10.6	1.7	6.0	-0.8	20.6	12	-5.6	16	0	14	-1.7	60	51	-36	17	11	2	124	127	2.4	28	17.0	NW	18	7	10	13	6.2	49
PITTSBURGH	347	971.9	1017.0	6.7	-1.1	2.7	-2.2	18.9	11+	-10.0	16	0	20	-1.7	75	78	21	22	18	0	257	178	3.0	25	13.9	22	11	0	8	22	8.6	22
READING U	81			8.9	1.7	5.2	-2.1	18.3	12+	-6.1	16	0	14			79	-7	41	11		104	102			19.2	W	18	10	7	13	6.1	50
SCRANTON	283	981.0	1016.2	6.7	-1.1	2.6	-1.7	20.0	1	-11.1	16	0	21	-2.8	70	59	-16	24	12	1	183	51	1.9	24	17.4	W	12	4	6	20	7.8	41
WILLIAMSPORT	160	997.0	1016.3	7.8	-1.7	3.3	-1.8	18.9	1	-10.0	16	0	18	-1.7	73	92	5	32	12	1	249	102	1.8	27	14.8	23	12	1	12	17	7.7	
RHODE ISLAND																																
BLOCK ISLAND	34			8.3	2.2	5.3	-2.0	16.1	3	-5.0	16	0	12			105	11	26	12		10	T						5	8	17	6.8	
PROVIDENCE	16	1012.2	1014.6	8.3	0.0	4.2	-1.9	21.1	3	-8.3	17	0	17	-1.7	67	70	-35	19	12	1	20	25	2.6	28	18.3	29	18	9	6	15	6.5	50
SOUTH CAROLINA																																
CHARLESTON	12	1016.9	1018.7	20.0	4.4	12.1	-1.2	26.1	2	-4.4	9+	0	9	4.4	64	34	-19	13	7	1	0	0	0.7	30	19.2Y	SW	30	13	11	6	4.6	75
CHARLESTON U	3			18.9	9.4	14.1	-0.7	25.6	2	2.2	16	0	0			35	-14	18	6		0	0			13.4	W	23					

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
COLUMBIA	65	1010.8	1019.2	17.2	1.7	9.5	-2.6	23.9	26+	- 6.1	8	0	14	2.2	68	94	34	55	9	3	0	0	0.9	29	15.6	35	24	11	13	6	4.4	65
GNVLE SPARTANBURG	292	983.7	1018.9	15.6	2.2	9.0	-1.7	24.4	12	- 5.0	29	0	10	- 0.6	57	89	17	31	8	1	0	0	1.0	29	12.5	SW	17	15	6	9	4.2	62
SOUTH DAKOTA																																
ABERDEEN	395	969.2	1017.6	5.0	- 6.1	- 0.4	0.5	17.8	11	-20.0	28	0	30	- 5.0	75	4	- 15	3	2	0	33	25	1.7	29	13.9	29	11	9	6	15	6.1	
HURON	391	969.9	1017.6	7.8	- 5.6	1.0	1.4	18.9	11	-20.0	28	0	26	- 6.1	63	2	- 16	1	3	0	20	25	1.7	27	18.8	NW	11	10	5	15	6.1	66
RAPID CITY	964	904.5	1018.1	8.9	- 6.1	1.4	-0.3	22.8	9	-15.0	27	0	28	- 8.9	51	7	- 3	6	2	0	56	51	2.6	32	17.9	NW	25+	13	7	10	4.7	59
SIOUX FALLS	432	965.1	1017.8	7.2	- 6.7	0.4	0.1	20.0	11	-17.8	28	0	29	- 6.1	65	1	- 25	1	2	0	10	T	1.8	28	11.2	29	26+	10	7	13	5.7	
TENNESSEE																																
BRISTOL	459	964.1	1019.3	12.2	0.0	5.9	-1.8	22.8	11	- 8.3	29	0	16	- 0.6	68	95	31	26	11	2	T	0	1.5	27	11.2	31	22	11	10	9	5.4	
CHATTANOOGA	203	994.6	1019.8	15.0	1.7	8.3	-1.4	24.4	12	- 5.0	7	0	13	1.1	66	114	21	41	9	2	0	0	0.6	30	9.8	NW	30	14	7	9	4.4	60
KNOXVILLE	299	983.4	1019.0	12.8	1.1	6.8	-2.5	22.2	12+	- 6.1	29+	0	14	0.6	68	141	59	61	10	3	0	0	1.2	28	13.0	SW	30+	12	9	9	5.2	54
MEMPHIS	79	1009.8	1020.3	16.1	3.3	9.5	-0.6	23.3	13	- 4.4	28	0	10	2.2	63	48	- 63	23	8	1	0	0	0.5	17	13.9	S	29	11	6	13	5.9	59
NASHVILLE	180	997.6	1019.7	12.8	0.6	6.8	-2.3	23.9	12	- 9.4	28	0	14	0.0	66	98	15	25	11	2	0	0	1.0	25	13.4	SW	30	9	7	14	6.0	58
OAK RIDGE R	276			12.8	1.1	6.8	-1.7	23.3	12	- 6.7	29	0	12			127	31	68	10		0	0			14.3Y		30+	11	10	9	5.5	
TEXAS																																
ABILENE	537	956.3	1018.4	17.8	6.7	12.3	0.7	26.1	2	- 1.1	4	0	1	6.7	73	73	45	37	7	0	0	0	1.4	22	15.6	N	2	7	7	16	6.6	53
AMARILLO	1098	892.3	1016.7	15.6	0.6	8.1	0.3	27.2	16	- 6.1	27	0	13	- 1.1	59	7	- 10	7	2	0	53	51	1.7	23	17.9	NE	2	10	5	15	6.0	62
AUSTIN	182	997.0	1019.2	20.6	8.9	14.9	0.1	30.0	23	2.2	4	0	0	8.9	72	111	57	86	8	0	0	0	0.9	36	14.3	NW	3	10	8	12	6.1	47
BROWNSVILLE	6	1016.9	1017.4	25.6	16.7	21.1	1.3	28.9	25	8.9	4	0	0	16.7	79	16	- 18	5	6	0	0	0	1.6	14	14.8	NW	3	5	13	12	6.6	43
CORPUS CHRISTI	12	1016.6	1018.2	23.3	13.9	18.7	0.9	30.6	25	5.6	4	0	0	15.0	82	7	- 37	6	3	0	0	0	1.6	9	13.9	NW	3	5	9	16	6.8	43
DALLAS	147	1001.4	1018.9	19.4	7.8	13.6	0.8	27.8	23	1.1	4	0	0	5.6	62	30	- 38	16	7	0	0	0	0.4	16	12.5	W	24	8	9	13	6.2	55
DEL RIO	313	982.1	1018.3	21.7	10.6	16.0	1.1	30.6	26+	1.7	4	0	0	10.0	73	17	1	10	7	0	0	0	1.1	9	13.9	33	3	6	10	14	6.6	
EL PASO	1194	884.2	1017.2	18.9	4.4	11.7	1.1	25.0	2	- 2.2	4	0	4	- 2.2	41	6	- 3	5	3	0	0	0	0.5	26	17.9	W	29	12	5	13	5.1	69
FORT WORTH	164	998.3	1019.0	19.4	6.7	13.1	0.4	28.3	21	- 0.6	4	0	1	6.1	67	23	- 39	10	6	0	0	0	0.4	26	12.5	1	3	10	6	14	6.2	
GALVESTON U	2			21.1	15.6	18.1	0.8	27.8	24	6.7	4	0	0			42	- 49	41	3		0	0			11.6	N	3					51
HOUSTON	15	1016.9	1019.0	23.9	12.2	17.8	1.8	30.0	26+	3.3	5+	0	0	11.7	71	13	- 85	11	4	0	0	0	0.7	12	13.0	18	29	6	14	10	6.0	55
LUBBOCK	992	905.2	1017.5	17.2	2.2	9.6	0.8	27.8	16	- 2.8	30+	0	10	- 1.1	56	3	- 11	3	3	0	T	T	1.2	24	17.9	36	2	7	8	15	6.4	
MIDLAND	869	918.1	1017.0	18.9	5.6	12.2	0.8	26.7	16+	- 1.7	4	0	3	3.3	65	11	- 1	8	7	0	0	0	1.4	22	16.5	1	2	10	6	14	6.2	
PORT ARTHUR	5	1019.0	1019.5	23.3	10.6	17.1	1.7	29.4	26+	1.1	5+	0	0	10.0	69	4	- 84	2	3	0	0	0	0.8	13	16.5	SW	29	8	12	10	5.2	56
SAN ANGELO	580	950.9	1018.0	19.4	8.3	13.9	1.2	28.3	2	- 2.2	4	0	2	8.3	76	61	41	28	9	0	0	0	1.1	23	13.9	26	23	7	13	10	6.0	
SAN ANTONIO	240	990.9	1019.0	21.7	10.0	15.8	0.6	30.6	26	- 0.6	4	0	1	9.4	72	87	52	38	6	0	0	0	1.1	1	16.1	N	3	7	9	14	6.3	51
VICTORIA	32	1014.6	1018.5	23.9	13.3	18.6	1.7	30.6	25	2.8	4	0	0	12.8	75	33	- 27	25	4	0	0	0	0.9	8	17.4Y	S	29	5	10	15	6.7	
WACO	153	1000.7	1019.0	20.6	9.4	14.9	1.1	29.4	21	1.7	4	0	0	8.3	70	90	34	60	7	0	0	0	0.8	24	12.5	31	3	9	9	12	6.0	
WICHITA FALLS	303	981.7	1018.8	18.3	5.0	11.4	0.1	27.8	13	- 1.1	4	0	1	3.9	67	9	- 27	4	6	0	T	0	0.3	12	17.9	1	2	9	7	14	6.4	
UTAH																																
MILFORD	1533	848.0		14.4	- 3.3	5.4	3.2	22.8	1	-13.9	27	0	22			13	0	10	3		135	51						11	8	11	5.2	
SALT LAKE CITY	1286	873.4	1019.1	13.3	- 1.1	6.1	3.5	23.9	12	- 8.9	27	0	17	- 3.3	56	17	- 16	10	3	0	107	102	0.8	18	15.2	S	30	4	12	14	6.8	52
WENDOVER	1291	873.0	1019.9	10.6	0.0	5.2	2.1	21.1	1	- 9.4	27	0	15			1	- 7	1	2		T	T										
VERMONT																																
BURLINGTON	101	1000.7	1013.3	3.9	- 2.8	0.5	-1.3	17.8	1	-14.4	16	0	23	- 5.0	68	54	- 13	13	15	0	262	76	1.3	23	14.8	S	26	1	7	22	8.6	47
VIRGINIA																																
LYNCHBURG	279			11.7	- 0.6	5.5	-2.8	23.3	12	-10.0	16	0	15			33	- 33	15	7		T	0			11.6	W	18				4.5	62
NORFOLK	7	1016.9	1018.1	12.8	2.8	7.7	-3.1	22.8	12+	- 4.4	17	0	11	- 0.6	58	44	- 33	15	5	0	T	0	1.2	27	13.4	W	18	12	8	10	4.7	68
RICHMOND	50	1011.9	1018.1	13.9	- 0.6	6.7	-2.5	24.4	12	- 8.3	29	0	17	- 1.1	63	45	- 33	17	4	0	T	T	0.8	27	11.6	NW	23	12	10	8	4.8	68
ROANOKE	350	975.3	1017.8	12.2	0.6	6.3	-1.8	22.2	12	- 8.3	16	0	13	- 3.9	51	33	- 36	15	7	1	T	0	2.0	29	14.3	29	27	13	9	8	4.7	
WALLOPS ISLAND	3			11.1	1.7	6.2		20.6	12	- 6.1	16	0	15			42		26	5	0	T	T			19.7Y	NNW	15	14	9	7	4.7	
WASHINGTON																																
OLYMPIA	59	1010.8	1018.2	11.1	1.7	6.6	0.0	15.6	15+	- 4.4	4	0	12	5.0	91	99	- 96	34	15	0	0	0	1.2	20	13.0	21	8	3	6	21	8.0	
QUILLAYUTE	55	1009.1	1016.7	11.1	3.9	7.7	0.7	16.1	6	- 1.1	28+	0	7	5.6	89	215	-123	50	20	2	T	0	0.9	8	13.9	NW	10	1	10	19	8.1	26
SEATTLE TACOMA	122	1001.4	1018.0	11.7	5.6	8.5	1.9	16.1	4	- 0.6	26	0	3	5.0	81	65	- 71	19	14	0	0	0	0.7	16	16.5	19	8	5	6	19	7.4	32
SPOKANE	718	933.6	1019.2	5.6	- 1.7	1.9	-0.2	11.1	15	-10.6	26	0	23	- 1.7	77	21	- 36	11	8	0	122	102	0.8	17	15.2	SW	10	9	3	18	6.6	34
STAMPEDE PASS R	1206	880.8		2.8	- 1.7	0.5	0.8	7.8	16	- 7.8	27	0	22			219	-101	57	17		935	508						7	3	20	7.3	
WALLA WALLA U	289			10.0	2.2	6.2	0.5	17.2	10	- 6.1	27	0	9			32	- 12	9	10		41	25			13.4	W	24	7	5	18	7.0	32
YAKIMA	321	981.0	1020.3	11.1	- 2.2	4.6	1.6	18.3	10	-11.7	28	0	22	- 2.2	65	8	- 17	5	5	0	51	51	1.7	28	13.9	29	24	13	4	13	5.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		°C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1011.5	1013.9	30.0	23.9	26.9	1.2	32.2	16+	22.8	24+	2	0	22.2	77	127	- 38	30	21	4	0	0	2.5	9	12.5	NE	4	2	24	4	5.4	62
SWAN ISLAND	9			28.9	24.4	26.8	0.1	30.6	9+	20.6	11	0	0			265	78	93	17		0	0						2	14	14	7.3	
WEST VIRGINIA																																
BECKLEY	763	927.9	1018.6	8.3	- 1.7	3.4		20.0	11	-11.7	16	0	19	- 3.3	66	99		36	13	1	23	T	2.5	27	19.7	16	2	7	11	12	6.3	
CHARLESTON	286	983.4	1018.3	10.0	0.6	5.2	-2.2	22.8	11	-10.0	16	0	14	- 1.1	68	109	38	37	12	2	5	T	2.2	24	11.2	26	25+	4	11	15	7.1	
ELKINS	600	945.1	1017.9	8.3	- 2.2	2.9	-1.9	21.1	1	-14.4	16	0	23	- 2.2	73	90	20	32	17	1	229	127	2.5	27	14.3	26	17	3	8	19	7.9	
HUNTINGTON	252	988.2	1018.9	8.9	0.6	4.8	-2.7	21.7	11	- 8.9	16+	0	14	- 1.1	69	120	57	38	15	3	13	T	1.8	24	10.3	27	12	5	9	16	7.1	
PARKERSBURG U	187			8.3	0.6	4.7	-2.4	20.6	11	- 7.8	16	0	15			67	7	18	12		51	51			15.2	W	18					31
WISCONSIN																																
GREEN BAY	208	989.2	1015.5	3.3	- 4.4	- 0.6	-1.8	15.0	11	-14.4	29	0	25	- 3.9	78	42	- 6	20	13	0	74	25	2.3	28	13.9	SW	26	5	4	21	7.6	27
LA CROSSE	198	991.5	1016.9	4.4	- 3.3	0.5	-0.7	17.2	11	-12.2	28	0	26	- 4.4	71	5	- 45	1	5	1	20	T	1.6	29	13.0	31	18+	4	7	19	7.5	
MADISON	262	984.1	1016.4	5.0	- 3.9	0.6	-0.6	16.1	11	-12.2	29+	0	25	- 3.9	73	46	- 8	40	5	0	18	T	2.2	28	16.1	NW	17	4	6	20	7.6	41
MILWAUKEE	205	990.2	1016.0	5.6	- 1.7	1.8	-0.3	15.6	11	- 9.4	29+	0	23	- 3.3	70	39	- 17	23	8	0	10	T	2.8	27	13.9	NW	18	4	9	17	7.7	35
WYOMING																																
CASPER	1627	837.1	1018.7	6.1	- 7.2	- 0.7	-1.6	15.0	15	-19.4	26	0	26	- 7.8	61	28	10	7	8	0	333	102	4.3	24	17.4	21	29	9	9	12	5.5	
CHEYENNE	1867	811.0	1018.1	8.9	- 5.6	1.7	0.5	19.4	15	-18.3	3	0	24	- 8.3	50	8	- 8	6	4	0	91	76	3.8	29	29.5	W	24+	15	9	6	4.3	55
LANDER	1696	829.0	1020.2	3.9	- 8.3	- 2.2	-1.6	15.6	1	-17.8	6+	0	25	- 7.8	68	42	19	26	6	0	533	330	1.1	24	14.8	W	24	8	8	14	5.9	60
SHERIDAN	1208	878.8	1019.6	6.1	- 8.3	- 1.2	-1.9	16.7	15	-20.0	27	0	28	- 7.8	63	21	1	18	9	0	292	229	1.6	30	15.6	NW	24+	6	12	12	6.1	56

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

V Sun below horizon November 19 - 30, inclusive.
X Sun below horizon November 24 - 30, inclusive.

HEATING DEGREE DAYS

(Base 65°F.)

NOVEMBER 1967

State and station	Current season: This month	Current season: Period July through this month	Normals July through this month
ALABAMA			
BIRMINGHAM	492	695	462
HUNTSVILLE	553	774	565
MOBILE	202	271	235
MONTGOMERY	338	476	398
ALASKA			
ANCHORAGE	1042	2816	3192
ANNETTE	723	1868	2082
BARROW	2011	6548	6149
BARTER ISLAND	2001	6376	5923
BETHEL	1273	3696	3801
COLD BAY	804	2968	3114
FAIRBANKS	1661	3836	4181
JUNEAU	973	2731	2768
KING SALMON	1065	3327	3346
KOTZEBUE	1765	4505	4527
MC GRATH	1527	3978	4154
NOME	1492	4321	4219
ST. PAUL ISLAND	883	3285	3581
SHEMYA	886	3196	3213
YAKUTAT	965	2994	2811
ARIZONA			
FLAGSTAFF	733	1445	1740
PHOENIX	72	78	256
TUCSON	89	103	256
WINSLOW	528	791	962
YUMA	37	37	148
ARKANSAS			
FORT SMITH	464	654	589
LITTLE ROCK	472	673	601
TEXARKANA	318	425	423
CALIFORNIA			
BAKERSFIELD	137	142	319
BISHOP	462	645	866
BLUE CANYON	489	815	1130
EUREKA U	345	1264	1528
FRESNO	239	268	417
LONG BEACH	37	37	208
LOS ANGELES	49	53	292
LOS ANGELES U	32	32	169
MT SHASTA R	584	1075	1284
OAKLAND	185	349	584
RED BLUFF	230	263	371
SACRAMENTO	259	292	456
SANDBERG R	389	579	712
SAN DIEGO	42	45	181
SAN FRANCISCO	217	451	668
SAN FRANCISCO U	158	629	817
SANTA CATALINA	116	171	240
SANTA MARIA	197	384	704
STOCKTON	267	292	437
COLORADO			
ALAMOSA	970	2104	2147
COLORADO SPRINGS	758	1351	1447
DENVER	729	1246	1379
GRAND JUNCTION	714	1062	1129
PUEBLO	790	1273	1130
CONNECTICUT			
BRIDGEPORT	712	1057	988
HARTFORD	803	1305	1188
NEW HAVEN	741	1172	1094
DELAWARE			
WILMINGTON	722	1129	909
DIST.OF COLUMBIA			
WASH NATL AP	592	866	769
FLORIDA			
APALACHICOLA U	192	226	169
DAYTONA BEACH	72	78	75
FORT MYERS	2	2	24
JACKSONVILLE	141	162	156
KEY WEST	0	0	0
LAKELAND U	48	50	57
MIAMI	0	0	0
ORLANDO	29	29	72
PENSACOLA	214	282	214
TALLAHASSEE	221	283	226
TAMPA	69	69	60
WEST PALM BEACH	1	1	6
GEORGIA			
ATHENS	485	680	532
ATLANTA	490	735	559
AUGUSTA	404	553	411
COLUMBUS	370	513	420
MACON	421	595	368
ROME	558	818	659
SAVANNAH	269	363	293
IDAHO			
BOISE	723	1206	1339
LEWISTON	719	1102	1282
POCATELLO	883	1559	1565
ILLINOIS			
CAIRO U	562	778	713
CHICAGO O HARE	827	1474	1317
CHICAGO MIDWAY	803	1330	1160
MOLINE	860	1474	1217
PEORIA	841	1388	1178
ROCKFORD	910	1576	1366
SPRINGFIELD	789	1273	1059
INDIANA			
EVANSVILLE	684	1032	892
FORT WAYNE	914	1568	1275
INDIANAPOLIS	761	1183	1129
SOUTH BEND	861	1488	1266
IOWA			
BURLINGTON	826	1370	1183
DES MOINES	850	1431	1308
DUBUQUE	948	1699	1555
SIOUX CITY	880	1483	1353
WATERLOO	976	1880	1506
KANSAS			
CONCORDIA	712	1152	1038
DODGE CITY	669	985	950
GOODLAND	771	1247	1278
TOPEKA	690	1141	999
WICHITA	645	991	880
KENTUCKY			
COVINGTON	736	1133	1035
LEXINGTON	722	1099	902
LOUISVILLE	660	987	911
LOUISIANA			
ALEXANDRIA	307	446	329
BATON ROUGE	214	302	247
LAKE CHARLES	151	200	229
NEW ORLEANS	187	263	211
SHREVEPORT	244	331	344
MAINE			
CARIBOU	1060	1981	2255
PORTLAND	900	1564	1575
MARYLAND			
BALTIMORE	684	1077	897
MASSACHUSETTS			
BLUE HILL OBS R	826	1374	1201
BOSTON	739	1200	988
NANTUCKET	665	1165	1032
PITTSFIELD	974	1755	1658
WORCESTER	912	1517	1411
MICHIGAN			
ALPENA	1017	2096	1938
DETROIT	781	1314	1185
DETROIT M WAYNE CO	886	1557	1298
DETROIT WILLOW RUN	896	1619	1197
FLINT	901	1721	1397
GRAND RAPIDS	909	1650	1436
HOUGHTON LAKE	1022	2074	1867
LANSING	931	1755	1410
MARQUETTE U	1010	2014	1843
MUSKEGON	832	1480	1322
SAULT STE MARIE	1075	2328	2011
MINNESOTA			
DULUTH	1147	2334	2273
INTERNATIONAL FALLS	1260	2461	2483
MINNEAPOLIS	1024	1868	1761
ROCHESTER	1048	1969	1724
ST CLOUD	1039	1977	1914
MISSISSIPPI			
JACKSON	368	544	361
MERIDIAN	379	579	420
MISSOURI			
COLUMBIA	672	1037	956
KANSAS CITY	609	915	871
ST JOSEPH	699	1140	1059
ST LOUIS	682	1027	938
SPRINGFIELD	609	947	868
MONTANA			
BILLINGS	827	1457	1591
GLASGOW	1024	1762	2060
GREAT FALLS	858	1457	1803
HAVRE	980	1642	2047
HELENA	954	1624	1987
KALISPELL	972	1829	2144
MILES CITY	969	1584	1660
MISSOULA	987	1739	2097
NEBRASKA			
GRAND ISLAND	820	1321	1329
LINCOLN U	761	1227	1108
NORFOLK	874	1522	1390
NORTH PLATTE	926	1585	1454
OMAHA	791	1340	1205
SCOTTSBLUFF	904	1484	1473
VALENTINE	934	1593	1621
NEVADA			
ELKO	695	1210	1753
ELY	814	1567	1836
LAS VEGAS	244	262	465
RENO	663	1183	1625
WINNEMUCCA	730	1309	1656
NEW HAMPSHIRE			
CONCORD	965	1697	1560
MT WASHINGTON OBS	1497	4203	4147
NEW JERSEY			
ATLANTIC CITY	757	1306	839
ATLANTIC CITY U	591	866	766
NEWARK	677	1021	903
TRENTON U	681	1049	897
NEW MEXICO			
ALBUQUERQUE	557	790	883
CLAYTON	650	1052	1081
RATON	736	1392	1419
ROSWELL	517	733	793
SILVER CITY	448	655	714
NEW YORK			
ALBANY	899	1500	1374
BINGHAMTON	953	1702	1569
BUFFALO	853	1456	1414
NEW YORK U	671	994	803
J.F. KENNEDY	710	1091	848
NEW YORK LA GUARDIA	662	981	778
ROCHESTER	856	1474	1328
SYRACUSE	812	1432	1325
NORTH CAROLINA			
ASHEVILLE	660	1178	981
CAPE HATTERAS R	399	487	351
CHARLOTTE	509	726	568
GREENSBORO	539	806	738
RALEIGH	539	773	635
WILMINGTON	362	454	365
NORTH DAKOTA			
BISMARCK	1095	1971	1944
FARGO	1073	1990	1965
WILLISTON	1056	1883	2058
OHIO			
AKRON	841	1394	1212
CINCINNATI OBS	743	1157	914
CLEVELAND	784	1312	1192
COLUMBUS	843	1443	1151
DAYTON	816	1283	1090
MANSFIELD	865	1476	1310
TOLEDO	900	1627	1331
YOUNGSTOWN	908	1649	1328
OKLAHOMA			
OKLAHOMA CITY	464	646	677
TULSA	498	719	698
OREGON			
ASTORIA	500	1190	1422
BURNS U	800	1474	1641
EUGENE	538	894	1148
MEACHAM	889	1661	1994
MEDFORD	578	932	1128
PENDLETON	711	1041	1172
PORTLAND	558	896	1099
SALEM	549	932	1111
SEXTON SUMMIT R	619	1309	1442
PENNSYLVANIA			
ALLENTOWN	825	1422	1136
ERIE	835	1430	1232
HARRISBURG	750	1209	1009
PHILADELPHIA	660	986	972
PITTSBURGH	840	1400	1215
PITTSBURGH U	782	1269	1076
READING U	698	1097	908
SCRANTON	844	1432	1347
WILLIAMSPORT	807	1339	1212
RHODE ISLAND			
BLOCK ISLAND	695	1115	995
PROVIDENCE	761	1227	1144
SOUTH CAROLINA			
CHARLESTON	334	461	341
CHARLESTON U	233	281	244
COLUMBIA	469	665	429
GNVLE-SPARTANBURG	498	720	550
SOUTH DAKOTA			
ABERDEEN	1008	1791	1807
HURON	933	1634	1708
RAPID CITY	902	1545	1577
SIOUX FALLS	963	1721	1646
TENNESSEE			
BRISTOL	662	1054	860
CHATTANOOGA	538	784	629
KNOXVILLE	617	910	690
MEMPHIS	469	647	595
NASHVILLE	615	892	683
OAK RIDGE R	616	931	762
TEXAS			
ABILENE	321	456	465
AMARILLO	544	753	793
AUSTIN	192	240	256
BROWNSVILLE	8	13	66
CORPUS CHRISTI	63	80	120
DALLAS	259	342	383
DEL RIO	159	196	249
EL PASO	352	460	498
FORT WORTH	282	375	389
GALVESTON U	78	93	138
HOUSTON	99	120	189
LUBBOCK	463	674	705
MIDLAND	324	428	468
PORT ARTHUR	133	176	229
SAN ANGELO	249	330	386
SAN ANTONIO	164	220	235
VICTORIA	83	102	156
WACO	196	248	313
WICHITA FALLS	366	473	480
UTAH			
MILFORD	688	1166	1409
SALT LAKE CITY	653	1097	1349
WENDOVER	702	1142	1242
VERMONT			
BURLINGTON	957	1721	1730
VIRGINIA			
LYNCHBURG	688	1115	814
NORFOLK	566	813	544
RICHMOND	623	943	745
ROANOKE	643	1069	829
WALLOPS ISLAND	648	991	
WASHINGTON			
OLYMPIA	631	1168	1395
QUILLAYUTE	570	1365	1602
SEATTLE TACOMA	524	894	1304
SPOKANE	882	1471	1574
STAMPEDE PASS R	955	2301	2666
WALLA WALLA U	647	918	1078
YAKIMA	732	1186	1434
WEST VIRGINIA			
BECKLEY	802	1516	1197
CHARLESTON	704	1135	906
ELKINS	826	1565	1298
HUNTINGTON	724	1172	905
PARKERSBURG U	736	1150	930
WISCONSIN			
GREEN BAY	1017	1955	1660
LA CROSSE	957	1664	1545
MADISON	955	1910	1643
MILWAUKEE	888	1611	1611
WYOMING			
CASPER	1017	1709	1680
CHEYENNE	891	1631	1727
LANDER	1097	1778	1804
SHERIDAN	1047	1814	1762

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

NOVEMBER 1967

STATE	TORNADOES Number	TORNADOES Days	TORNADOES Deaths	TORNADOES Injuries	TORNADOES †Damage	HAILSTORMS Deaths	HAILSTORMS Injuries	HAILSTORMS †Damage Prop-erty	HAILSTORMS †Damage Crops	WINDSTORMS Deaths	WINDSTORMS Injuries	WINDSTORMS †Damage Prop-erty	WINDSTORMS †Damage Crops	LIGHTNING Deaths	LIGHTNING Injuries	LIGHTNING †Damage Prop-erty	LIGHTNING †Damage Crops	‡ HEAVY SNOWSTORMS AND BLIZZARDS Deaths	‡ HEAVY SNOWSTORMS AND BLIZZARDS Injuries	‡ HEAVY SNOWSTORMS AND BLIZZARDS †Damage Prop-erty	‡ HEAVY SNOWSTORMS AND BLIZZARDS †Damage Crops	# ICE STORMS Deaths	# ICE STORMS Injuries	# ICE STORMS †Damage Prop-erty	# ICE STORMS †Damage Crops	ø ALL OTHER Deaths	ø ALL OTHER Injuries	ø ALL OTHER †Damage Prop-erty	ø ALL OTHER †Damage Crops
Alabama	2	2	0	9	5	0	0	1	0	0	0	4	0																
Alaska										0	0	4	0																
Arizona *																													
Arkansas N																													
California														0	0	4	0									2	0	6	0
Colorado *																													
Connecticut										0	0	4	0																
Delaware *																													
Florida *																													
Georgia	2	2	0	2	4					0	0	4	0																
Hawaii												°3	C	0	0	?	0									2	0	°5	C
Idaho *																													
Illinois *																													
Indiana *																													
Iowa *																													
Kansas *																													
Kentucky						0	0	?	?																				
Louisiana *																													
Maine										0	0	4	0					0	0	4	0								
Maryland *																													
Massachusetts	1	1	0	0	2									0	0	4	0	2	0	4	0								
Michigan																		0	0	3	?								
Minnesota *																													
Mississippi *																													
Missouri *																													
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire																		3	0	4	0								
New Jersey *																													
New Mexico *																													
New York																4													
North Carolina										0	4	5	4	0	0	4	0												
North Dakota *																													
Ohio																				?									
Oklahoma *																													
Oregon *																													
Pacific Area																										0	8	°6	C
Pennsylvania										0	0	5	0	0	0	3	0												
Puerto Rico																										0	0	3	4
Rhode Island										0	0	4	0																
South Carolina	2	1	0	1	5	0	0	0	2	0	0	4	2																
South Dakota *																													
Tennessee						0	0	?	0	0	0	5	0	1	0	0	0												
Texas *																													
Utah	1	1	0	0	4																								
Vermont *																													
U. S. Virgin Is.*																													
Virginia										0	0	3	0																
Washington *																													
West Virginia *																													
Wisconsin *																													
Wyoming *																													

° Includes crop damage
C Crop damage
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS
NOVEMBER 1967

Elmer R. Nelson, Office of Hydrology

There was no major flooding reported in Continental United States during November.

ATLANTIC SLOPE DRAINAGE

A new low water record of 1.5 feet occurred on the Haw River at Haw River, N. C., in the Cape Fear Basin on the 19th, 21st and 22d. The previous low water record at this point was 1.7 feet in 1966. A number of other gaging stations approached low water records; those gages in pools remained virtually stationary all month.

The Lumber River at Lumberton, N. C., began rising on the 21st and went out of its lower banks on the 30th. It crested 1 foot above flood stage on Dec. 4. This flooding was due to intermittent rainfall which began on Nov. 22d. The rainfall averaged about one-half inch on the 22d and 23d and 1.75 inches on the 24th. Additional rainfall averaging about 0.75 inch occurred during the first few days of December. Damage from this overflow was minor.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--The Upper Mississippi Basin above Guttenberg, Iowa, (Dam 10) was extremely dry during November with the exception of southern Minnesota and southern Iowa. For the Minneapolis - St. Paul, Minn., area and much of the central and northern portions of Minnesota and Wisconsin, this was the fourth driest November of record since 1890. Minneapolis - St. Paul reported 0.09 inch of precipitation during the month which was the least observed during any November since 1939 when 0.02 inch was recorded. The other dry Novembers were 0.06 inch in 1917 and 0.08 inch in 1912.

Missouri Basin.--Heavy rains of 2 to 5 inches on Oct. 29-30 caused light flooding on streams in the northwestern quadrant of Missouri between Oct. 30 and Nov. 5. Light rain fell over the same area during the first four days of November but did not cause any further flooding. The Little Blue River at Lake City, Mo., the Wakenda at Carrollton, Mo., and the Big Creek at Blairstown, Mo., crested on Oct. 31, 1 to 2.5 feet above flood stage. The Grand River at Sumner, Mo., crested 3.4 feet above flood stage on Oct. 31 and at Brunswick, Mo., 0.2 foot above flood stage on Nov. 1. The Blackwater River at Valley City, Mo., crested 7.0 feet above flood stage on Oct. 31 and at Blue Lick, Mo., 1 foot above flood stage on Nov. 3. The South Grand River at Brownington, Mo., crested nearly 3 feet above flood stage on Nov. 3. Reports from County Farm Advisors indicate little or no damage because of the season of the year.

Ohio Basin.--Heavy rains late on the 29th and early on the 30th caused minor flooding on the Saline River at Harrisburg, Ill., beginning on Oct. 30 and continuing into November. It crested on Oct. 30, 3.5 feet above flood stage. Damage was light.

Arkansas Basin.--Heavy rainfall from Oct. 30 to Nov. 3 produced minor flooding on the Neosho River at Commerce, Okla., and on the Poteau River at Panama, Okla., between Oct. 31 and Nov. 3. The rainfall in the Poteau Basin averaged 4.1 inches. There was some overflow on tributaries of the Poteau along James Fork Creek and Black Fork River. Only minor flood damages were reported.

Red Basin.--The upper Sulphur River at Hagansport, Tex., went above flood stage on Oct. 29 and continued in flood until Nov. 4. It crested on Oct. 31, 7.4 feet above flood stage. The river began overflowing its banks at Naples, Tex., on Nov. 4 and continued in flood until Nov. 10. Little or no damage was reported. This overflow was due to 3 to 6 inches of rain.

West Gulf of Mexico Drainage.--The upper Sabine River in the reach at and above Gladewater, Tex., went above flood stage at Edgewood, Tex., on Oct. 30 and continued in flood until Nov. 15 at Gladewater, Tex. The crests between Oct. 30 and Nov. 11 ranged from 2 to 4.3 feet above flood stage. Little or no damage resulted from the flooding.

General heavy rains over the Trinity Basin, south of Dallas, Tex., on Oct. 29-30 produced flooding along the mainstem at Trinidad and Long Lake, Tex., between Nov. 1 and 7. Downstream from Long Lake, no flooding occurred except below Liberty at Moss Bluff, Tex. Flooding prevailed from the 6th to the 15th at Moss Bluff, with the highest stage of 5.8 feet on the 12th. Richland Creek, near Richland, Tex., crested slightly above flood stage on Oct. 31 and receded within its banks on Nov. 1. The East Fork of the Trinity near Crandall, Tex., reached near bankfull stage on Nov. 1. Chambers Creek near Corsicana, Tex. crested about 4.5 feet above bankfull stage on Oct. 31 and receded within its banks on Nov. 3. Heavy rains of 2 to 3 inches on the 10th over Chambers and Richland Creeks produced 2 to 4 feet of overflow along these Creeks on the 11 to 13th. These rains caused a secondary rise on the Trinity, reaching a stage of 31.2 feet at Long Lake on the 15th. This secondary rise was responsible for the second period of flooding at Moss Bluff from the 16th to the 23d.

Locally heavy showers on the 8th produced bankfull stages with low water crossings closed through the night of the 8th on the West Nueces, the extreme upper Nueces, and the upper Frio. Bankfull stages moved downstream on the Frio to Tilden on the 11th. Near bankfull stages continued downstream and combined with water from the Atascosa caused near bankfull stages at Three Rivers, Tex., on the 12th. The water entered Lake Corpus Christi and caused spillover of 0.10 foot over Wesley Seale Dam on the 14th. Bankfull stages occurred below the dam to Calallen, Tex., through the 16th.

PACIFIC SLOPE DRAINAGE

Heavy rain on the 19th-21st in southern California caused localized mud slides but no serious damage to any flood channels. However, a record flow of 33,500 c.f.s. was reached on Ballona Creek on the 21st (maximum capacity is 37,000 c.f.s.). There was relatively small inflow into reservoirs as the antecedent precipitation index was very low. Many reservoirs reached only 5% of capacity while Hansen Reservoir was the highest with 16%. Two deaths were attributed to flash flooding in mountain areas. A 3-day storm total of 8.67 inches was recorded in the Los Angeles Civic Center where several short duration rainfall intensity records were established. Storm totals in some mountain areas reached 16 inches.

FLOOD STAGE DATA

(All dates in November unless otherwise specified)

NOVEMBER 1967

River and station	Flood stage	Above flood stages -dates From—	To—	Crest * Stage	Date
ATLANTIC SLOPE DRAINAGE	Ft.			Ft.	
Lumber Lumberton, N. C.	8	30	1/	#8.95	4
MISSISSIPPI SYSTEM					
Missouri Basin					
Little Blue: Lake City, Mo.	18	Oct. 31	1	19.2	Oct. 31
Wakenda: Carrollton, Mo.	20	Oct. 31	1	21.8	Oct. 31
Grand: Sumner, Mo.	26	Oct. 30	2	29.4	Oct. 31
Brunswick, Mo.	12	Oct. 31	1	12.2	1
Blackwater: Valley City, Mo.	20	Oct. 30	2	27.0	Oct. 31
Blue Lick, Mo.	25	3	5	26.0	3
Big Creek: Blairstown, Mo.	20	Oct. 31	1	22.5	Oct. 31
South Grand: Brownington, Mo.	19	2	4	21.7	3
Ohio Basin					
Saline: Harrisburg, Ill.	13	30	1/	16.5	30
Arkansas Basin					
Neosho: Commerce, Okla.	15	Oct. 31	3	17.6	2
Poteau: Panama, Okla.	24	Oct. 31	1	27.5	Oct. 31
MISSISSIPPI SYSTEM	Ft.			Ft.	
Red Basin					
Sulphur: Hagansport, Tex.	38	Oct. 29	4	45.4	Oct. 31
Naples, Tex.	22	4	10	26.8	7
WEST GULF OF MEXICO DRAINAGE					
Sabine Quitman, Tex.	14	Oct. 31	4	18.3	1
Edgewood, Tex.	12	Oct. 30	8	14.9	Oct. 30
Mineola, Tex.	14	Oct. 31	22	17.9	2
Gladewater, Tex.	26	8	15	27.8	11
Trinity: Trinidad, Tex.	28	1	3	29.6	2
		14	17	31.2	15
Long Lake, Tex.	35	3	7	38.15	6
Moss Bluff, Tex.	4	6	15	5.8	12
		16	23	5.1	21

* Provisional
\# Highest stage observed
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

NOVEMBER 1967

ALBANY, N. Y. 1005 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	-.2	-3.2	25	2.3
1000	30	123			23	2.8
950	30	535	-.5	-4.8	26	5.2
900	30	965	-2.4	-6.5	27	7.0
850	30	1,418	-4.3	-8.4	27	8.3
800	30	1,894	-6.6	-10.4	27	9.8
750	30	2,398	-8.9	-14.5	27	10.6
700	30	2,930	-11.1	-19.0	27	11.2
650	30	3,499	-13.6	-22.6	27	13.4
600	30	4,103	-16.8	-25.7	26	15.2
550	30	4,749	-21.1	-29.2	26	16.2
500	30	5,450	-25.3	-34.7	26	18.4
450	30	6,205	-30.6	-38.5	26	20.7
400	30	7,035	-36.2	-43.3	27	22.3
350	30	7,951	-41.8	-46.8	27	23.6
300	30	8,984	-46.6		27	28.6
250	30	10,184	-49.8		26	26.5
200	30	11,639	-51.1		26	27.4
175	30	12,506	-52.3		26	26.7
150	30	13,501	-53.5		26	24.9
125	30	14,669	-54.9		26	20.8
100	30	16,090	-56.8		26	19.0
80	30	17,503	-56.7		26	14.3
70	30	18,348	-57.2		26	13.5
60	30	19,323	-57.6		27	10.8
50	30	20,475	-57.1		27	8.2
40	30	21,886	-57.3		28	8.2
30	30	23,704	-57.8		28	9.1
25	30	24,855	-57.2		29	10.4
20	30	26,271	-56.2		29	10.1
15	28	28,111	-55.0		29	11.8
10	24	30,697	-53.0		27	19.8
7	20	32,979	-52.0		27	31.4
5	13	35,129	-51.2			
4						

ALBUQUERQUE, N. MEX. 840 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,619	3.0	-6.9	06	.9
1000	30	182				
950	30	602				
900	30	1,054				
850	30	1,522				
800	30	2,018	6.2	-6.7	26	1.5
750	30	2,542	3.9	-9.6	29	4.3
700	30	3,103	.8	-11.5	30	7.3
650	30	3,690	-2.4	-15.4	29	9.5
600	30	4,326	-5.9	-20.2	28	11.3
550	30	4,996	-9.8	-25.5	28	13.0
500	30	5,732	-14.4	-28.2	28	15.6
450	30	6,516	-19.3	-33.6	28	17.2
400	30	7,389	-25.6	-38.9	28	19.7
350	29	8,345	-32.5	-45.0	28	21.9
300	29	9,414	-40.7	-49.9	27	25.7
250	29	10,632	-49.3		27	28.4
200	29	12,069	-57.1		28	27.1
175	29	12,908	-59.6		28	24.4
150	29	13,864	-63.0		28	21.2
125	29	14,977	-66.7		28	19.0
100	29	16,320	-67.7		28	15.6
80	29	17,661	-67.6		29	9.2
70	29	18,465	-66.5		30	6.4
60	28	19,403	-63.5		33	3.9
50	27	20,528	-61.3		01	2.6
40	25	21,919	-59.1		04	2.3
30	25	23,734	-56.3		04	3.1
25	25	24,894	-55.2		03	3.1
20	25	26,320	-54.6		36	2.3
15	23	28,172	-53.0		34	4.0
10	9	30,846	-49.3			
7						
5						
4						

AMARILLO, TEXAS 892 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,095	3.0	-1.6	26	2.5
1000	30	161				
950	30	583				
900	30	1,031				
850	30	1,493	6.6	-3.4	25	3.7
800	30	1,990	5.6	-6.1	27	4.3
750	30	2,520	4.0	-9.5	27	6.0
700	30	3,075	1.4	-12.6	28	8.0
650	30	3,665	-2.1	-16.1	28	10.0
600	30	4,300	-5.5	-20.0	29	12.3
550	30	4,974	-9.7	-24.2	28	14.6
500	30	5,707	-14.7	-28.0	28	17.4
450	30	6,496	-20.1	-32.2	28	20.9
400	30	7,360	-26.1	-37.3	28	25.0
350	30	8,314	-32.7	-42.7	26	28.2
300	30	9,383	-40.4	-47.3	28	32.2
250	30	10,603	-48.6		28	35.0
200	30	12,045	-56.3		28	33.2
175	29	12,885	-59.5		28	30.0
150	29	13,842	-62.4		28	27.4
125	28	14,960	-65.9		28	25.0
100	27	16,307	-66.6		28	19.9
80	26	17,655	-67.1		28	13.0
70	23	18,466	-65.9		28	7.7
60	23	19,406	-63.3		30	3.4
50	23	20,531	-61.4		34	2.1
40	21	21,925	-58.8		35	2.0
30	20	23,742	-56.2		31	1.6
25	19	24,898	-55.4		31	3.5
20	19	26,323	-54.3		30	5.7
15	13	28,163	-53.1		30	8.2
10	6	30,720	-52.9			
7						
5						
4						

ANCHORAGE, ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	45	-.8	-6.9	11	.8
1000	30	63			11	1.4
950	30	473	-1.3	-8.0	12	3.7
900	30	902	-3.1	-9.1	14	4.2
850	30	1,352	-5.8	-10.8	16	4.7
800	30	1,825	-8.7	-13.4	18	6.2
750	30	2,322	-11.8	-16.5	20	7.9
700	30	2,847	-15.0	-20.1	21	8.5
650	30	3,402	-18.4	-23.7	22	8.2
600	30	3,998	-21.3	-26.7	22	10.3
550	30	4,631	-25.6	-32.3	22	11.0
500	30	5,320	-30.2	-37.0	23	12.8
450	30	6,057	-35.4	-40.3	23	14.6
400	30	6,872	-41.0	-42.2	23	15.6
350	30	7,768	-46.8		23	17.8
300	30	8,777	-51.7		24	20.6
250	30	9,953	-53.7		24	21.7
200	30	11,390	-52.1		24	22.8
175	29	12,260	-50.7		25	22.1
150	29	13,065	-50.3		25	21.0
125	29	14,454	-50.3		25	21.2
100	29	15,911	-50.0		25	19.5
80	29	17,370	-49.8		25	19.3
70	28	18,243	-49.4		25	17.5
60	28	19,253	-49.8		25	17.5
50	28	20,443	-50.2		25	17.1
40	28	21,901	-49.7		26	16.2
30	28	23,787	-49.4		26	16.2
25	26	24,973	-49.9		26	16.8
20	24	26,430	-50.0		27	18.9
15	24	28,304	-50.7		28	21.8
10	16	30,935	-51.0		27	28.0
7	6	33,104	-54.0			
5						
4						

* ANNETTE, ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	37	4.3	1.7	10	1.5
1000	30	118			10	1.7
950	30	532	2.4	-1.1	15	3.4
900	30	970	.3	-3.9	18	3.9
850	30	1,427	-1.5	-6.7	21	4.4
800	30	1,908	-3.8	-10.1	23	4.7
750	30	2,413	-6.3	-15.0	24	5.8
700	30	2,953	-9.2	-16.8	25	7.1
650	30	3,518	-12.5	-20.7	26	8.3
600	30	4,130	-16.3	-24.9	27	9.2
550	30	4,774	-20.6	-30.0	27	10.4
500	30	5,477	-25.7	-34.8	27	12.4
450	30	6,230	-30.7	-38.3	28	14.4
400	30	7,060	-36.2	-43.4	28	15.2
350	30	7,974	-42.1	-43.9	28	18.0
300	30	9,003	-48.2		27	22.0
250	29	10,185	-52.4		27	21.1
200	28	11,621	-52.7		28	20.4
175	28	12,483	-52.5		28	19.0
150	27	13,478	-52.6		28	17.9
125	27	14,653	-53.4		28	16.5
100	27	16,086	-54.3		28	13.5
80	27	17,517	-54.0		28	12.5
70	27	18,375	-53.4		29	10.5
60	27	19,367	-53.4		29	8.7
50	27	20,540	-53.3		29	8.1
40	25	21,985	-52.6		30	6.6
30	25	23,848	-51.3		32	6.9
25	25	25,032	-50.9		32	8.0
20	24	26,484	-50.9		33	9.7
15	24	28,353	-51.5		33	11.9
10	22	30,965	-52.4		34	14.9
7	21	33,270	-53.2		34	19.0
5	15	35,495	-51.7		33	20.2
4	12	36,953	-51.1			

ATHENS, GEORGIA 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	4.4	.6	34	1.0
1000	30	164				
950	30	584	7.9	-1.3	29	2.5
900	30	1,032	7.3	-4.1	28	5.2
850	30	1,501	6.1	-6.8	28	8.4
800	30	1,997	4.5	-8.1	28	11.6
750	30	2,518	2.3	-9.7	27	13.7
700	30	3,077	-.3	-13.6	27	15.5
650	30	3,659	-3.2	-17.3	27	17.5
600	30	4,297	-6.7	-20.2	27	19.5
550	30	4,963	-10.8	-24.6	27	22.6
500	30	5,698	-15.6	-28.3	27	25.5
450	30	6,475	-21.0	-32.8	27	27.6
400	30	7,347	-26.5	-38.1	27	30.3
350	30	8,299	-33.4	-43.8	27	33.7
300	30	9,365	-41.3	-50.3	27	38.1
250	30	10,581	-49.2		27	42.8
200	30	12,020	-56.6		27	41.1
175	30	12,861	-59.2		27	39.9
150	29	13,827	-61.6		27	36.9
125	29	14,949	-64.6		27	31.0
100	28	16,305	-66.4		27	24.7
80	28	17,654	-66.1		28	16.8
70	27	18,466	-65.2		27	12.3
60	27	19,409	-63.1		27	8.6
50	27	20,537	-61.0		30	4.4
40	27	21,932	-58.1		31	3.2
30	27	23,754	-55.7		28	3.1
25	27	24,918	-54.0		29	5.4
20	26	26,358	-52.4		28	9.4
15	24	28,230	-49.8		27	13.9
10	21	30,903	-46.7		27	29.1
7	7	33,254	-47.0			

* BARROW, ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	-18.8	-21.8	09	1.0
1000	30	83			08	2.4
950	30	471	-16.1	-18.2	08	2.0
900	30	875	-16.2	-18.5	08	1.2
850	30	1,304	-17.7	-20.3	09	.6
800	30	1,756	-18.8	-22.6	18	.5
750	30	2,237	-20.4	-25.2	22	2.0
700	30	2,744	-22.6	-27.9	22	2.7
650	30	3,285	-25.4	-30.5	23	4.4
600	30	3,862	-28.8	-34.0	23	6.3
550	30	4,481	-32.5	-37.5	24	6.6
500	30	5,146	-37.0	-40.3	24	7.0
450	30	5,868	-41.8	-44.4	25	7.7
400	30	6,658	-47.4		24	7.9
350	30	7,531	-52.9		24	9.3
300	29	8,513	-56.9		25	11.6
250	28	9,667	-57.1		25	12.3
200	28	11,088	-54.7		25	14.0
175	28	11,943	-54.4		25	14.5
150	27	12,934	-54.3		25	16.4
125	25	14,101	-53.6		24	18.1
100	24	15,536	-53.3		24	21.4
80	24	16,972	-53.5		25	24.2
70	24	17,830	-53.6		25	25.8
60	24	18,820	-53.8		25	27.8
50	24	19,991	-54.1		25	29.9
40	22	21,419	-54.1		25	34.0
30	21	23,265	-54.8		25	38.2
25	19	24,457	-54.4		25	39.1
20	17	25,877	-55.2		26	40.7
15	11	27,676	-55.7			
10						
7						

BARTER IS., ALASKA 1010 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	15	-16.1	-23.7	20	.8
1000	27	86			19	.5
950	27	479	-13.3	-17.1	11	1.2
900	27	887	-12.2	-15.8	19	.7
850	27	1,324	-13.2	-17.5	25	2.8
800	27	1,784	-15.2	-19.4	25	4.3
750	27	2,268	-17.7	-21.7	25	5.4
700	27	2,784	-20.3	-25.4	26	6.3
650	27	3,327	-23.1	-29.6	26	8.1
600	27	3,912	-26.6	-33.1	26	8.8
550	27	4,531	-30.5	-36.2	26	10.0
500	27	5,208	-35.0	-39.7	26	11.6
450	27	5,933	-39.9	-41.9	26	13.1
400	26	6,733	-45.6		26	16.7
350	26	7,612	-51.1		26	17.6
300	26	8,604	-55.3		26	19.5
250	26	9,765	-55.6		26	19.1
200	26	11,195	-53.2		26	18.6
175	26	12,057	-52.6		26	19.2
150	25	13,059	-51.9		26	20.3
125	25	14,240	-51.9		26	20.3
100	22	15,698	-51.9		26	22.4
80	22	17,144	-51.8		26	23.9
70	22	18,009	-51.9		26	24.2
60	22	19,006	-52.3		26	27.2
50	22	20,184	-52.6		27	28.3
40	22	21,623	-52.9		27	31.9
30	20	23,478	-53.5		27	32.4
25	17	24,634	-54.2		27	36.9
20	16	26,073	-54.8		27	38.8
15	11	27,923	-55.4		27	40.8
10	7	30,550	-55.0			
7						

BETHEL, ALASKA 999 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	39	-5.1	-6.7	10	2.3
1000	30	25			17	1.6
950	30	429	-4.5	-7.6	15	5.0
900	30	854	-5.6	-9.3	17	6.2
850	30	1,301	-7.8	-11.5	18	7.0
800	30	1,771	-10.5	-15.3	20	7.3
750	30	2,263	-13.2	-19.1	20	7.4
700	30	2,788	-16.6	-22.3	21	7.4
650	30	3,339	-20.1	-26.0	21	8.7
600	30	3,931	-23.6	-29.7	21	9.6
550	30	4,556	-28.0	-35.0	21	10.7
500	30	5,239	-32.6	-39.0	21	12.1
450	30	5,970	-37.6	-40.8	21	13.5
400	30	6,779	-43.0	-40.8	22	12.6
350	30	7,668	-48.6		22	14.3
300	30	8,671	-53.0		23	15.2
250	30	9,844	-53.4		22	17.3
200	30	11,283	-51.9		23	18.7
175	30	12,151	-50.9		23	19.6
150	30	13,155	-50.5		23	19.8
125	30	14,345	-50.1		23	19.9
100	29	15,804	-49.6		23	20.5
80	29	17,264	-49.4		24	19.9
70	29	18,138	-49.5		24	22.0
60	29	19,149	-49.2		24	19.1
50	29	20,344	-49.6		24	19.3
40	29	21,805	-49.2		24	19.6
30	29	23,691	-49.4		24	19.7
25	28	24,886	-49.1		24	20.5
20	24	26,353	-48.9		24	20.3
15	23	28,231	-50.1		25	23.7
10	17	30,681	-49.8		25	29.9
7						

BISMARCK, N. DAK. 956 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	505	-4.1	-7.0	29	2.2
1000	30	145				
950	30	550			29	2.3
900	30	980	-2.5	-8.3	30	6.4
850	30	1,433	-3.3	-11.2	30	9.0
800	30	1,912	-4.9	-14.5	30	11.1
750	30	2,417	-7.3	-16.4	30	12.9
700	30	2,952	-9.8	-19.7	30	14.6
650	30	3,518	-12.6	-22.6	30	16.5
600	30	4,129	-15.9	-25.9	30	18.6
550	30	4,775	-20.2	-29.7	30	20.1
500	30	5,480	-24.7	-34.6	30	20.6
450	30	6,233	-30.2	-37.7	30	23.1
400	30	7,068	-36.0	-43.0	30	24.6
350	30	7,983	-42.0	-48.5	30	26.4
300	30	9,014	-47.7		30	28.7
250	30	10,206	-51.6		30	32.6
200	30	11,651	-52.4		30	31.4
175	30	12,513	-52.7		30	29.0
150	30	13,506	-53.5		30	26.8
125	30	14,675	-55.1		30	21.3
100	30	16,095	-56.0		30	17.2
80	30	17,512	-56.4		31	12.6
70	30	18,360	-56.2		31	10.5
60	29	19,340	-56.0		32	9.7
50	29	20,499	-56.2		33	7.9
40	29	21,917	-55.7		34	6.9
30	29	23,749	-56.0		36	7.9
25	26	24,922	-55.8		01	8.7
20	24	26,347	-55.2		01	8.8
15	21	28,192	-55.1		01	9.3
10	19	30,802	-53.7		36	12.1
7	5	33,112	-51.9			

BOISE, IDAHO 919 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	868	2.3	-2.0	14	1.6
1000	30	181				
950	30	602				
900	30	1,039	4.5	-2.5	13	1.1
850	30	1,505	3.5	-5.3	31	.8
800	30	1,995	1.3	-7.5	28	2.6
750	30	2,513	-1.5	-10.3	28	4.7
700	30	3,060	-4.4	-13.4	28	7.4
650	30	3,640	-7.4	-16.8	29	9.1
600	30	4,261	-10.5	-19.9	29	11.3
550	30	4,923	-14.4	-23.9	29	13.1
500	30	5,643	-19.2	-28.4	29	14.2
450	30	6,418	-24.5	-32.5	29	16.5
400	30	7,269	-30.2	-38.1	29	18.8
350	30	8,208	-36.6	-43.8	29	20.2
300	30	9,259	-44.1		29	22.8
250	30	10,462	-51.0		29	25.7
200	30	11,900	-55.3		29	25.3
175	30	12,749	-56.6		28	24.3
150	30	13,723	-58.5		29	22.1
125	30	14,865	-60.4		29	17.5
100	29	16,247	-62.4		29	13.6
80	27	17,624	-61.4		30	8.8
70	26	18,448	-60.7		31	6.7
60	25	19,408	-59.2		33	5.0
50	21	20,555	-58.1		36	3.7
40	20	21,962	-56.5		04	4.1
30	20	23,792	-55.4		04	5.8
25	20	24,956	-55.2		05	6.9
20	18	26,383	-54.7		05	8.5
15	17	28,235	-53.7		05	10.7
10	10	30,841	-51.9			
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* BOOTHVILLE, LA. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1	15.2	12.9	02	1.7
1000	30	163	15.8	10.9	03	1.9
950	30	597	13.1	7.7	29	1.0
900	30	1,051	11.4	3.2	27	2.6
850	30	1,529	10.5	-2.9	28	4.3
800	30	2,032	9.2	-7.7	28	6.3
750	30	2,565	7.0	-10.4	28	7.5
700	30	3,129	4.0	-13.2	27	10.3
650	30	3,727	.8	-15.5	28	12.1
600	30	4,367	-2.7	-18.3	28	14.1
550	30	5,048	-6.9	-21.3	28	15.6
500	30	5,789	-11.5	-25.1	28	18.0
450	30	6,586	-16.5	-31.2	28	22.2
400	30	7,465	-22.6	-37.1	27	23.6
350	30	8,432	-29.7	-43.7	27	26.5
300	30	9,513	-38.0	-50.5	27	29.3
250	30	10,745	-47.0		27	30.8
200	30	12,189	-56.8		27	32.7
175	30	13,025	-61.9		27	31.7
150	30	13,969	-65.8		27	29.1
125	29	15,068	-69.0		27	25.8
100	28	16,391	-71.3		28	18.8
80	27	17,708	-71.4		28	11.6
70	27	18,500	-69.0		28	7.3
60	27	19,429	-65.5		30	3.4
50	27	20,548	-61.8		30	2.7
40	27	21,940	-58.3		28	3.6
30	26	23,768	-53.5		29	5.5
25	26	24,946	-51.4		28	7.3
20	25	26,400	-49.5		28	8.6
15	25	28,292	-47.6		27	12.8
10	23	30,999	-44.3		26	20.6
7	21	33,391	-44.9		26	31.1
5	10	35,647	-45.1			

* BROWNSVILLE, TEXAS 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	7	18.2	16.1	14	.7
1000	30	144	19.4	17.4	14	3.0
950	30	583	17.8	13.8	16	5.2
900	30	1,048	15.9	7.2	17	4.4
850	30	1,532	14.0	2.4	19	4.3
800	30	2,042	12.2	-1.2	22	4.6
750	30	2,579	9.9	-5.4	24	4.7
700	30	3,152	6.6	-9.0	27	6.5
650	30	3,751	2.8	-12.5	28	8.1
600	30	4,401	-1.0	-18.8	28	8.0
550	30	5,083	-5.0	-23.2	27	8.7
500	30	5,834	-9.6	-26.9	26	10.2
450	30	6,631	-15.2	-31.2	27	12.8
400	30	7,521	-21.5	-36.5	26	16.4
350	29	8,491	-28.8	-42.8	26	17.7
300	29	9,576	-37.1	-49.1	26	20.7
250	29	10,612	-46.6		26	21.3
200	29	12,258	-57.1		26	25.5
175	29	13,093	-62.2		26	25.9
150	29	14,035	-66.5		26	24.1
125	28	15,132	-70.0		26	21.0
100	25	16,448	-73.5		26	16.2
80	24	17,746	-75.0		27	8.4
70	24	18,523	-73.0		26	4.5
60	23	19,438	-68.8		27	.9
50	23	20,544	-63.9		15	.5
40	22	21,928	-59.5		25	2.0
30	22	23,751	-54.8		27	2.6
25	22	24,923	-52.5		28	3.2
20	21	26,370	-50.5		27	6.8
15	21	28,261	-47.2		27	12.5
10	20	30,953	-45.2		26	20.5
7	20	33,339	-44.4		25	27.3
5	11	35,564	-42.2			

BUFFALO, N. Y. 988 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	218	1.6	-1.6	24	4.1
1000	30	121				
950	30	531	-.2	-3.6	25	7.4
900	30	964	-3.0	-5.6	26	10.2
850	30	1,415	-5.5	-8.4	27	11.0
800	30	1,889	-7.7	-11.6	27	12.1
750	30	2,393	-9.8	-14.4	27	13.2
700	30	2,919	-12.3	-19.5	27	14.0
650	30	3,486	-14.6	-23.3	27	15.6
600	30	4,087	-17.8	-25.9	27	16.2
550	30	4,733	-21.8	-30.7	27	18.2
500	30	5,429	-26.1	-35.2	27	19.8
450	30	6,181	-31.2	-40.4	27	20.3
400	30	7,010	-36.6	-43.5	27	21.6
350	30	7,924	-42.0	-44.1	27	23.4
300	30	8,956	-47.0		27	25.1
250	30	10,155	-49.6		27	25.7
200	30	11,611	-51.1		27	25.3
175	30	12,478	-52.1		27	24.6
150	30	13,472	-53.7		27	24.0
125	30	14,640	-55.0		26	19.8
100	30	16,060	-56.7		27	17.0
80	29	17,468	-57.2		27	14.5
70	28	18,310	-57.4		27	11.7
60	28	19,283	-57.1		28	10.2
50	27	20,438	-57.0		28	9.6
40	27	21,850	-57.2		29	7.9
30	26	23,668	-57.5		29	7.9
25	26	24,818	-57.6		29	8.7
20	26	26,231	-56.3		30	10.9
15	26	28,062	-54.9		29	11.0
10	20	30,663	-52.5		28	20.6
7	9	32,989	-50.8			
5	6	35,125	-50.0			

* CAPE HATTERAS, N. C. 1018 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	8.5	4.9	32	3.1
1000	30	148	10.4	2.6	32	3.9
950	30	572	8.2	-1.3	30	5.6
900	30	1,019	6.0	-4.7	28	6.8
850	30	1,486	4.4	-7.9	27	10.0
800	30	1,979	3.0	-11.2	27	13.9
750	30	2,498	1.1	-13.3	27	16.4
700	30	3,054	-.8	-15.4	27	18.9
650	30	3,640	-3.4	-18.0	27	21.0
600	30	4,272	-6.9	-22.0	27	23.1
550	30	4,939	-11.2	-25.5	27	25.5
500	30	5,671	-16.2	-28.7	27	27.1
450	30	6,450	-21.7	-34.0	27	30.3
400	29	7,317	-27.8	-38.9	27	34.0
350	27	8,265	-34.6	-44.7	27	36.7
300	27	9,325	-42.1		27	39.7
250	26	10,544	-49.3		27	43.1
200	26	11,984	-55.5		27	41.8
175	26	12,832	-57.6		27	39.7
150	26	13,799	-60.0		27	33.1
125	26	14,930	-62.6		27	29.2
100	26	16,296	-64.7		27	21.8
80	25	17,671	-64.1		26	14.0
70	25	18,480	-62.7		26	10.5
60	24	19,436	-60.9		26	6.6
50	24	20,573	-59.5		28	5.9
40	24	21,975	-57.9		28	3.7
30	23	23,799	-55.1		29	5.4
25	22	24,965	-53.9		28	5.6
20	22	26,403	-52.3		28	10.0
15	22	28,274	-50.1		27	15.2
10	19	30,947	-46.5		26	32.0
7	9	33,324	-46.5			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CARIBOU, MAINE — 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	191	-1.8	-3.9	25	2.2
1000	30	88				
950	30	495	-2.4	-5.2	25	4.7
900	30	924	-4.0	-8.1	27	6.5
850	30	1,375	-5.3	-10.2	26	8.1
800	30	1,849	-7.4	-12.4	26	9.0
750	30	2,348	-9.9	-16.0	25	10.0
700	30	2,880	-11.8	-21.1	25	11.0
650	29	3,449	-14.8	-23.7	25	11.9
600	29	4,054	-18.3	-27.3	24	13.9
550	29	4,693	-22.5	-31.2	24	15.7
500	29	5,391	-27.2	-35.5	24	14.6
450	29	6,137	-32.3	-39.7	24	16.5
400	29	6,964	-38.2	-41.9	24	20.0
350	28	7,678	-43.6	-45.7	24	20.7
300	26	8,904	-48.1		24	24.9
250	26	10,097	-51.1		24	26.1
200	28	11,548	-51.4		25	23.4
175	28	12,414	-51.6		25	23.1
150	28	13,412	-53.0		24	21.4
125	28	14,584	-54.0		25	20.3
100	28	16,013	-55.0		25	17.6
80	27	17,437	-55.7		25	14.9
70	26	18,289	-56.4		25	14.0
60	26	19,268	-56.7		26	13.1
50	26	20,421	-57.5		27	11.4
40	26	21,827	-58.2		27	12.2
30	26	23,635	-58.7		28	11.5
25	25	24,787	-58.1		28	11.6
20	25	26,191	-57.7		29	11.8
15	23	27,991	-57.4		29	14.1
10	22	30,567	-54.2		28	19.1
7	21	32,867	-51.7		28	24.3
5	6	35,053	-49.3			
4						
3						

CHARLESTON, S. C. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	13	6.3	3.4	35	1.3
1000	29	158	11.4	4.3	35	2.1
950	29	585	11.2	.9	31	3.3
900	29	1,038	9.3	-1.4	28	6.1
850	29	1,510	7.5	-4.0	27	8.7
800	29	2,008	5.9	-7.2	27	10.4
750	29	2,535	3.9	-10.4	27	11.4
700	29	3,094	1.3	-12.6	27	14.0
650	29	3,686	-1.8	-16.5	27	16.6
600	29	4,321	-5.1	-20.8	27	17.7
550	29	4,999	-9.1	-24.2	27	19.6
500	29	5,732	-14.0	-28.0	27	21.6
450	29	6,518	-19.8	-31.8	27	24.3
400	29	7,389	-25.7	-36.6	27	28.0
350	29	8,343	-32.7	-43.3	27	30.9
300	29	9,411	-40.6	-49.8	27	34.9
250	29	10,632	-48.4		27	39.5
200	29	12,072	-56.5		27	40.0
175	29	12,913	-59.5		27	38.6
150	29	13,872	-62.1		27	34.8
125	29	14,991	-65.2		28	29.2
100	29	16,343	-67.0		27	21.2
80	29	17,689	-66.8		27	15.5
70	29	18,498	-65.3		27	10.9
60	29	19,442	-62.6		28	7.4
50	29	20,572	-60.5		29	6.2
40	29	21,971	-57.7		29	4.6
30	29	23,798	-54.5		28	6.2
25	29	24,971	-52.5		29	6.9
20	29	26,419	-50.5		28	11.6
15	28	28,303	-48.3		27	19.0
10	17	30,987	-45.2		26	28.5
7	9	33,357	-43.9			

CHIHUAHUA, MEXICO — 859 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,428	6.7	.8	23	.3
1000	30	158				
950	30	585				
900	30	1,037				
850	30	1,515	9.1	2.3	23	.9
800	30	2,021	11.1	1.3	25	2.9
750	30	2,552	8.4	-1.8	26	4.2
700	30	3,124	5.1	-5.4	26	6.0
650	30	3,722	1.9	-9.3	26	7.8
600	30	4,367	-1.5	-13.4	26	10.1
550	30	5,047	-5.6	-17.3	26	10.7
500	30	5,796	-10.6	-21.9	26	10.9
450	30	6,591	-16.2	-26.2	26	12.2
400	30	7,474	-22.8	-32.2	26	12.8
350	30	8,438	-30.0	-39.1	26	12.8
300	30	9,517	-38.2	-46.7	26	14.4
250	30	10,745	-47.3		26	15.2
200	30	12,184	-57.7		25	15.4
175	30	13,017	-61.6		26	13.8
150	30	13,962	-65.6		26	14.0
125	29	15,059	-69.1		26	12.5
100	29	16,383	-71.5		26	10.0
80	27	17,697	-71.9		26	11.8
70	25	18,486	-70.1		26	9.9
60	23	19,418	-65.8		26	7.1
50	23	20,535	-61.9		26	3.1
40	23	21,924	-58.8		30	1.4
30	19	23,740	-55.0		28	1.7
25	17	24,903	-53.3		26	3.3
20	14	26,343	-51.5		27	8.7
15	6	28,246	-49.4			

* COLD BAY, ALASKA — 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	30	3.1	-.2	20	4.8
1000	29	19			25	2.9
950	29	435	1.6	-2.4	21	6.7
900	29	869	-1.7	-3.9	21	7.2
850	29	1,322	-4.6	-7.5	22	7.9
800	29	1,797	-7.5	-11.0	23	9.9
750	29	2,293	-10.5	-15.2	23	10.6
700	29	2,825	-13.8	-20.0	23	11.1
650	29	3,380	-17.6	-23.9	23	12.0
600	29	3,980	-21.6	-28.3	23	12.9
550	29	4,610	-25.4	-33.3	23	14.1
500	29	5,302	-30.0	-38.1	23	15.0
450	29	6,039	-35.1	-42.6	23	16.3
400	29	6,857	-40.2	-45.5	23	18.0
350	29	7,759	-45.2		23	20.4
300	29	8,779	-49.5		24	22.0
250	29	9,970	-50.4		23	25.2
200	29	11,429	-49.9		23	25.9
175	28	12,301	-49.3		23	23.6
150	28	13,313	-49.4		22	24.3
125	28	14,508	-49.6		22	22.2
100	28	15,969	-49.7		23	21.3
80	28	17,430	-49.9		23	18.3
70	28	18,303	-49.8		23	17.5
60	28	19,310	-49.6		23	16.2
50	27	20,498	-49.9		22	13.1
40	27	21,959	-49.6		23	11.1
30	27	23,842	-49.5		22	9.3
25	27	25,039	-48.8		22	6.2
20	27	26,507	-48.3		22	6.2
15	27	28,401	-48.4		23	5.5
10	26	31,081	-48.3		23	9.3
7	20	33,450	-48.1		26	12.2
5	19	35,666	-48.7		27	15.6
4	15	37,143	-49.0		28	20.8
3	10	38,986	-49.7			

COLUMBIA, MO. — 989 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	238	2.4	-1.3	24	1.3
1000	30	151				
950	30	567	3.7	-3.2	28	4.1
900	30	1,007	2.7	-5.1	30	7.5
850	30	1,468	1.0	-7.6	30	9.3
800	30	1,955	-.6	-9.7	30	10.5
750	30	2,470	-2.1	-13.2	29	13.1
700	30	3,016	-4.1	-16.0	29	15.4
650	30	3,593	-7.3	-18.4	29	16.8
600	30	4,217	-10.9	-22.1	29	18.5
550	30	4,878	-15.1	-25.9	29	19.6
500	30	5,594	-20.0	-29.5	29	21.5
450	30	6,364	-25.0	-35.9	29	24.5
400	30	7,214	-30.7	-41.4	28	27.2
350	30	8,150	-37.4	-46.5	28	31.0
300	30	9,199	-44.1		28	34.4
250	30	10,405	-50.3		28	38.9
200	30	11,850	-54.1		29	38.0
175	30	12,703	-56.2		29	36.0
150	30	13,679	-57.8		29	33.1
125	30	14,822	-60.4		29	27.8
100	30	16,206	-61.8		29	22.5
80	30	17,586	-61.8		29	15.9
70	29	18,412	-61.1		29	13.0
60	29	19,371	-60.3		30	9.5
50	29	20,510	-59.2		31	6.7
40	29	21,911	-58.3		32	5.0
30	27	23,724	-57.2		33	4.0
25	27	24,878	-56.5		33	5.1
20	23	26,302	-55.3		32	5.9
15	16	28,126	-54.1		29	10.6
10	12	30,736	-51.7			

DAYTON, OHIO — 982 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	297	1.1	-1.6	25	1.9
1000	30	147				
950	30	560	.6	-3.3	25	5.6
900	30	993	-1.3	-6.0	27	8.8
850	30	1,448	-2.3	-10.3	27	10.9
800	30	1,929	-4.2	-13.2	28	12.4
750	30	2,435	-5.9	-16.0	28	14.8
700	30	2,975	-8.1	-19.0	28	17.1
650	30	3,545	-11.0	-21.4	28	20.1
600	30	4,160	-14.5	-24.7	28	22.0
550	30	4,812	-18.2	-28.5	28	24.4
500	30	5,521	-22.6	-33.4	27	25.2
450	30	6,284	-27.9	-38.0	28	25.9
400	30	7,123	-33.8	-41.2	28	28.4
350	30	8,047	-39.8	-46.9	28	31.6
300	30	9,086	-45.7		28	37.1
250	30	10,286	-50.6		27	38.8
200	30	11,732	-53.0		27	38.4
175	30	12,592	-54.0		27	37.4
150	30	13,576	-56.1		28	34.0
125	30	14,727	-59.0		27	28.9
100	30	16,122	-60.0		28	22.3
80	28	17,513	-60.3		27	14.3
70	28	18,345	-59.9		27	11.4
60	27	19,312	-59.3		27	9.1
50	27	20,455	-58.9		27	7.0
40	27	21,857	-58.2		29	5.5
30	27	23,674	-56.8		29	4.8
25	27	24,830	-56.2		30	5.6
20	26	26,247	-55.1		29	8.1
15	24	28,103	-52.8		29	10.3
10	17	30,736	-49.2		28	17.8
7	9	33,083	-46.8			

DEL RIO, TEXAS — 982 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	314	11.9	9.4	07	1.2
1000	30	158				
950	30	591	13.7	9.3	14	2.6
900	30	1,045	12.7	5.9	20	3.3
850	30	1,525	11.9	1.6	24	3.8
800	30	2,032	10.7	-1.7	25	5.1
750	30	2,567	8.2	-5.7	26	6.6
700	30	3,135	5.0	-10.1	27	7.6
650	30	3,734	1.6	-14.6	27	9.4
600	30	4,378	-1.9	-17.2	27	11.9
550	30	5,057	-6.1	-21.4	27	13.6
500	30	5,605	-10.8	-25.7	27	15.7
450	30	6,603	-16.2	-30.7	27	16.8
400	30	7,484	-22.6	-35.3	27	18.2
350	30	8,450	-29.7	-42.8	27	18.7
300	30	9,531	-37.9	-49.0	27	20.3
250	30	10,762	-47.0		27	21.5
200	30	12,206	-57.1		27	23.8
175	30	13,041	-61.8		27	23.2
150	30	13,986	-65.7		27	19.8
125	30	15,085	-69.1		26	18.7
100	30	16,410	-71.4		27	14.1
80	26	17,726	-72.1		27	9.5
70	24	18,511	-70.6		27	4.5
60	22	19,442	-66.1		26	2.2
50	22	20,558	-62.3		30	.3
40	22	21,947	-58.8		09	.5
30	22	23,769	-54.8		29	2.7
25	22	24,940	-52.9		28	4.6
20	20	26,375	-51.6		27	8.9
15	20	28,247	-50.2		27	13.8
10	17	30,908	-47.4		27	25.2
7	7	33,284	-44.6			

DENVER, COLO. — 837 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,611	-1.4	-7.1	21	1.7
1000	30	175				
950	30	590				
900	30	1,028				
850	30	1,491				
800	30	1,981	4.3	-8.2	28	3.1
750	30	2,501	2.1	-11.5	30	5.6
700	30	3,059	-.9	-14.6	30	8.7
650	30	3,637	-5.2	-17.9	30	11.3
600	30	4,270	-9.2	-21.0	30	14.1
550	30	4,930	-13.1	-24.8	30	16.0
500	30	5,659	-17.9	-29.3	30	18.8
450	30	6,430	-23.3	-34.5	29	21.9
400	30	7,291	-29.0	-39.4	29	25.0
350	30	8,233	-35.4	-44.4	29	26.9
300	30	9,290	-42.8	-48.1	29	30.2
250	30	10,501	-49.5		28	31.9
200	30	11,945	-54.7		28	32.1
175	30	12,795	-57.3		28	29.2
150	30	13,762	-60.1		29	29.1
125	30	14,894	-62.3		29	22.7
100	29	16,272	-63.8		29	16.5
80	29	17,640	-63.3		29	11.1
70	29	18,462	-61.9		30	8.5
60	29	19,419	-60.8		32	6.1
50	29	20,557	-59.3		35	4.5
40	28	21,959	-57.5		02	4.4
30	25	23,782	-55.9		03	4.6
25	25	24,944	-55.4		03	5.5
20	22	26,373	-54.9		04	5.7
15	18	28,234	-53.4		04	8.8
10	9	30,926	-50.0			

DODGE CITY, KANS. — 926 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	791	.6	-2.2	28	1.2
1000	30	166				
950	30	579				
900	30	1,021	5.1	-3.3	28	2.1
850	30	1,488	5.4	-6.8	27	3.1
800	30	1,982	4.0	-10.0	28	5.2
750	30	2,506	1.7	-13.0	29	6.9
700	30	3,058	-1.2	-14.8	29	9.7
650	30	3,642	-4.6	-18.5	29	11.7
600	30	4,272	-8.4	-22.0	29	13.4
550	30	4,935	-12.5	-26.5	29	15.7
500	30	5,664	-17.2	-31.3	29	18.6
450	30	6,437	-22.7	-35.9	29	21.2
400	30	7,300	-28.6	-40.2	29	25.0
350	30	8,244	-34.9	-45.4	29	28.0
300	30	9,303	-42.1	-48.4	29	31.2
250	30	10,519	-48.9		29	36.1
200	30	11,962	-55.2		29	33.3
175	30	12,810	-57.9		28	32.4
150	30	13,775	-60.6		29	29.4
125	30	14,902	-63.4		29	23.7
100	30	16,268	-64.5		29	17.8
80	30	17,630	-64.4		29	12.9
70	30	18,447	-63.5		30	9.5
60	30	19,396	-61.9		31	6.5
50	30	20,529	-60.0		34	3.3
40	28	21,928	-57.9		01	2.9
30	27	23,744	-56.0		01	3.1
25	22	24,900	-55.6		34	3.9
20	22	26,323	-55.1		32	5.1
15	21	28,160	-54.2		32	7.2
10	17	30,777	-52.3		29	10.7

EL PASO, TEXAS — 884 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,193	6.9	-2.1	29	.7
1000	30	169				
950	30	594				
900	30	1,047				
850	30	1,522	10.3	-.1	29	1.6
800	30	2,025	8.4	-2.8	27	4.4
750	30	2,558	6.2	-6.3	27	7.3
700	30	3,120	3.3	-10.7	27	7.8
650	30	3,714	.1	-16.3	27	9.2
600	30	4,356	-3.4	-19.9	27	11.1
550	30	5,029	-7.5	-24.1	27	13.2
500	30	5,776	-11.9	-26.7	27	15.0
450	30	6,569	-17.4	-31.2	27	17.0
400	30	7,448	-23.7	-36.4	27	18.7
350	30	8,411	-30.8	-41.9	26	19.9
300	30	9,488	-38.9	-47.6	26	23.5
250	30	10,714	-48.0		26	25.2
200	30	12,155	-57.3		26	27.3
175	30	12,990	-61.4		27	21.9
150	30	13,938	-64.8		26	19.8
125	30	15,042	-67.7		27	18.0
100	30	16,375	-70.0		27	12.5
80	30	17,699	-70.5		27	8.0
70	30	18,494	-69.1		30	4.5
60	30	19,421	-65.6		33	2.7
50	27	20,537	-62.7		03	1.6
40	27	21,923	-59.5		04	1.5
30	27	23,736	-56.7		36	1.1
25	27	24,896	-55.0		34	1.8
20	27	26,326	-53.7		29	4.3
15	25	28,174	-52.4		28	9.1
10	17	30,805	-50.7		27	19.6
7	6	33,100	-49.7			

ELY, NEV. — 810 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,908	-2.7	-8.9	19	3.8
1000	30	202				
950	30	617				
900	30	1,059				
850	30	1,522				
800	30	2,008	2.6	-5.5	20	3.8
750	30	2,530	2.4	-7.5	23	2.8
700	30	3,086	-.8	-10.6	26	3.9
650	30	3,666	-4.2	-14.7	28	7.6
600	30	4,303	-7.7	-16.6	26	11.0
550	30	4,966	-11.6	-21.0	28	12.6
500	30	5,701	-16.3	-26.7	28	13.8
450	30	6,477	-21.8	-31.9	28	14.8
400	30	7,345	-28.1	-37.8	28	16.5
350	30	8,291	-35.0	-42.3	28	18.0
300	30	9,349	-42.6	-46.4	28	19.6
250	30	10,562	-49.9		28	22.8
200	30	12,001	-55.4		28	22.4
175	30	12,847	-58.6		28	21.3
150	30	13,808	-61.5		28	20.4
125	30	14,933	-63.7		28	16.8
100	30	16,299	-65.0		28	11.0
80	30	17,658	-65.0		30	7.5
70	30	18,475	-63.5		31	4.8
60	30	19,425	-61.5		33	3.1
50	30	20,560	-60.0		03	2.9
40	29	21,957	-58.2		05	4.3
30	28	23,776	-56.5		05	6.5
25	28	24,735	-55.8		05	7.6
20	26	26,359	-55.1		05	7.8
15	24	28,198	-54.2		04	7.2
10	19	30,796	-52.8		03	9.8
7	6	33,115	-51.2			
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EMPALME, MEXICO — 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	12	15.8	10.0	01	1.4
1000	29	133	21.3	10.9	36	2.1
950	29	574	22.0	7.1	34	2.3
900	29	1,045	19.5	3.9	30	.7
850	29	1,534	16.4	.6	20	1.8
800	29	2,046	12.8	-2.7	22	3.7
750	29	2,580	9.8	-5.9	24	5.3
700	29	3,154	6.4	-9.4	24	5.8
650	29	3,754	2.8	-13.5	24	6.8
600	29	4,401	-1.0	-17.0	25	7.6
550	29	5,083	-5.7	-21.1	25	8.4
500	29	5,829	-10.6	-24.9	24	9.1
450	29	6,626	-16.4	-29.1	24	9.1
400	29	7,505	-23.2	-34.0	24	10.8
350	29	8,469	-30.3	-41.3	24	11.5
300	29	9,545	-38.8	-48.5	25	13.8
250	29	10,772	-47.7		25	15.1
200	29	12,210	-57.5		24	18.7
175	28	13,043	-61.8		25	16.5
150	26	13,990	-64.9		26	13.1
125	26	15,094	-68.3		25	11.4
100	24	16,423	-70.4		25	7.1
80	20	17,745	-71.4		25	3.3
70	20	18,535	-69.4		27	2.6
60	20	19,463	-66.0		35	.3
50	19	20,579	-62.4		02	1.0
40	18	21,966	-59.0		10	1.7
30	18	23,791	-54.5		28	1.9
25	17	24,965	-52.8		27	4.7
20	17	26,410	-50.8		26	8.5
15	14	28,292	-48.5		27	13.5

* FAIRBANKS, ALASKA — 993 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	135	-10.8	-13.8	36	1.0
1000	30	78				
950	30	478	-8.2	-12.5	10	1.8
900	30	895	-8.5	-13.1	18	2.7
850	30	1,338	-9.3	-14.9	21	4.4
800	30	1,805	-11.4	-16.5	23	6.6
750	30	2,299	-14.0	-19.0	23	7.7
700	30	2,819	-17.0	-21.9	23	8.7
650	30	3,370	-20.4	-26.1	23	9.2
600	30	3,961	-24.0	-30.2	23	10.2
550	30	4,589	-27.8	-34.2	23	11.5
500	30	5,271	-32.3	-39.0	23	12.9
450	30	6,004	-37.3	-42.2	24	13.8
400	30	6,812	-43.0	-43.2	24	16.3
350	30	7,701	-48.9		24	18.6
300	30	8,701	-54.2		25	21.2
250	30	9,867	-55.1		25	22.1
200	30	11,300	-52.5		25	21.5
175	30	12,164	-51.7		25	22.9
150	30	13,166	-50.9		25	21.8
125	30	14,353	-50.6		25	22.1
100	30	15,812	-49.4		25	23.8
80	30	17,275	-49.3		26	22.5
70	30	18,149	-49.7		26	22.4
60	30	19,158	-49.9		26	23.7
50	29	20,348	-49.6		26	25.1
40	29	21,807	-49.9		26	24.1
30	28	23,682	-50.7		27	25.1
25	28	24,669	-50.9		27	25.7
20	28	26,318	-51.7		27	27.6
15	27	28,184	-51.8		27	29.2
10	20	30,664	-50.7		27	32.9
7	13	33,255	-50.8		27	33.4
5	8	35,545	-52.0			

FLINT, MICH. — 986 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	234	.4	-3.1	24	2.8
1000	30	120				
950	30	528	-1.3	-4.6	26	6.6
900	30	961	-3.8	-6.3	28	9.5
850	30	1,411	-5.8	-9.7	28	10.9
800	30	1,885	-7.6	-12.4	28	12.0
750	30	2,386	-9.6	-16.4	28	13.4
700	30	2,917	-11.7	-19.7	28	15.3
650	30	3,481	-14.3	-23.0	28	16.7
600	30	4,086	-17.8	-25.6	29	17.7
550	30	4,729	-21.8	-30.2	29	18.5
500	30	5,427	-26.3	-34.7	28	20.0
450	30	6,177	-31.0	-38.6	28	22.6
400	30	7,009	-36.0	-42.2	28	25.8
350	30	7,925	-41.7		28	27.4
300	30	8,959	-46.8		28	31.1
250	30	10,157	-50.1		27	31.1
200	30	11,612	-50.9		28	29.2
175	30	12,480	-51.9		28	29.0
150	30	13,476	-52.7		28	26.2
125	30	14,647	-55.0		28	23.7
100	30	16,069	-56.2		28	19.1
80	30	17,483	-56.7		28	13.8
70	30	18,328	-56.8		28	11.9
60	30	19,306	-56.5		29	9.6
50	30	20,461	-56.8		29	6.8
40	30	21,675	-56.4		30	6.0
30	30	23,701	-56.2		32	6.6
25	30	24,859	-56.0		33	5.5
20	30	26,278	-55.7		32	7.4
15	27	28,120	-54.0		30	9.5
10	22	30,738	-51.3		29	12.3
7	11	33,126	-47.7			

FORT WORTH, TEXAS — 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	8.4	5.2	26	.6
1000	30	164			33	.5
950	30	595	11.1	2.2	24	2.0
900	30	1,042	10.6	-.1	26	4.0
850	30	1,517	9.2	-2.5	27	5.5
800	30	2,018	7.1	-5.3	28	6.7
750	30	2,550	4.3	-8.4	28	8.3
700	30	3,106	1.9	-11.4	27	10.1
650	30	3,698	-1.3	-13.2	28	13.2
600	30	4,334	-5.0	-16.9	27	15.1
550	30	5,008	-9.0	-21.9	28	18.0
500	30	5,745	-13.8	-25.5	28	19.9
450	30	6,534	-19.3	-29.8	28	22.2
400	30	7,405	-24.9	-36.3	28	24.4
350	30	8,363	-31.9	-42.3	28	27.5
300	30	9,436	-39.7	-48.2	28	30.4
250	30	10,661	-48.1		28	33.9
200	30	12,103	-56.9		28	35.8
175	30	12,940	-60.9		28	31.6
150	30	13,890	-64.1		28	26.8
125	30	14,998	-66.9		28	22.4
100	28	16,336	-69.5		28	17.9
80	28	17,669	-68.9		29	11.4
70	28	18,470	-67.3		29	7.2
60	27	19,404	-64.8		30	3.3
50	27	20,525	-62.1		33	1.9
40	27	21,915	-59.1		32	1.7
30	27	23,730	-56.3		31	2.3
25	25	24,893	-55.0		29	4.5
20	22	26,329	-53.7		27	9.5
15	14	28,191	-51.8		27	17.7

See reference note at end of table

RAWINSONDE DATA

Average monthly values

NOVEMBER 1967

GLASGOW, MONT. 933 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	696	-3.4	-7.2	33	1.7
1000	30	146				
950	30	557				
900	30	985	-.4	-7.6	31	5.6
850	30	1,442	-1.3	-10.3	31	10.5
800	30	1,924	-3.4	-13.1	31	11.3
750	30	2,433	-5.9	-14.8	31	12.5
700	30	2,970	-8.7	-17.6	31	13.9
650	30	3,537	-11.7	-20.4	30	14.5
600	30	4,151	-15.3	-23.4	30	16.0
550	30	4,797	-19.4	-28.8	30	18.1
500	30	5,505	-24.1	-33.6	30	19.4
450	30	6,260	-29.6	-37.8	30	22.7
400	30	7,095	-35.4	-42.5	30	24.6
350	30	8,012	-42.0	-47.3	30	26.5
300	30	9,041	-48.0		30	29.2
250	30	10,232	-51.4		30	30.7
200	30	11,677	-52.2		30	30.3
175	30	12,539	-53.0		30	26.9
150	30	13,531	-53.6		30	24.8
125	30	14,697	-54.9		30	22.0
100	30	16,118	-56.5		31	17.4
80	30	17,534	-56.3		31	13.4
70	30	18,382	-56.2		31	12.0
60	30	19,361	-55.8		32	9.5
50	30	20,522	-55.6		33	8.2
40	30	21,944	-55.4		35	6.9
30	30	23,781	-54.6		36	9.6
25	29	24,945	-55.0		01	10.2
20	28	26,374	-54.8		01	10.5
15	24	28,229	-54.5		02	11.7
10	12	30,943	-51.6			
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* GRAND JUNCTION, COLO. 854 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,474	.9	-6.9	13	2.8
1000	30	186				
950	30	606				
900	30	1,048				
850	30	1,511			13	3.0
800	30	2,005	4.7	-8.6	16	2.9
750	30	2,527	2.2	-10.4	24	3.7
700	30	3,083	-1.4	-12.6	27	7.3
650	30	3,667	-4.9	-16.6	28	9.2
600	30	4,295	-8.5	-21.0	28	12.2
550	30	4,957	-12.5	-25.3	29	14.5
500	30	5,686	-17.3	-30.0	29	17.0
450	30	6,464	-22.5	-32.2	29	19.5
400	30	7,323	-28.2	-38.2	28	21.6
350	30	8,268	-35.3	-43.5	28	24.3
300	30	9,324	-42.8	-47.4	28	27.0
250	30	10,536	-49.4		28	28.6
200	30	11,977	-55.0		28	28.4
175	30	12,825	-57.6		28	26.5
150	30	13,792	-60.6		28	23.1
125	30	14,917	-63.7		29	19.4
100	30	16,281	-64.9		28	14.7
80	30	17,638	-64.9		30	10.0
70	30	18,455	-63.3		31	6.8
60	29	19,403	-62.0		33	3.9
50	28	20,536	-60.3		01	3.4
40	28	21,932	-58.5		03	4.6
30	27	23,748	-56.5		05	5.7
25	26	24,906	-55.7		05	6.2
20	24	26,327	-55.3		05	7.2
15	22	28,171	-54.1		05	6.6
10	20	30,788	-51.7		02	5.9
7	10	33,115	-49.6			
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* GREAT FALLS, MONT. 887 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,123	.2	-6.1	23	4.4
1000	30	151				
950	30	570				
900	30	1,009				
850	30	1,467	1.1	-9.2	25	7.7
800	30	1,953	-1.6	-10.8	27	8.9
750	30	2,465	-4.3	-12.7	28	10.3
700	30	3,005	-7.4	-15.4	29	11.6
650	30	3,579	-10.5	-18.5	29	13.0
600	30	4,191	-14.3	-23.4	29	15.0
550	30	4,844	-18.2	-27.9	29	16.5
500	30	5,552	-22.7	-31.8	29	17.2
450	30	6,312	-28.4	-36.2	29	17.7
400	30	7,152	-34.5	-41.2	29	20.4
350	30	8,073	-40.6	-45.5	29	23.0
300	30	9,110	-46.2		30	26.6
250	30	10,308	-50.9		30	30.2
200	30	11,750	-53.3		29	28.9
175	30	12,608	-54.5		29	27.8
150	29	13,601	-55.0		30	25.2
125	26	14,758	-56.4		30	21.6
100	26	16,166	-58.4		30	16.9
80	26	17,574	-57.7		30	12.3
70	26	18,416	-57.3		31	11.0
60	24	19,398	-57.1		32	10.0
50	24	20,551	-56.8		33	8.0
40	24	21,968	-55.8		34	7.1
30	23	23,804	-54.5		01	7.5
25	22	24,976	-54.7		02	8.6
20	20	26,397	-55.7		01	9.3
15	18	28,244	-54.2		02	12.0
10	14	30,864	-53.5		02	13.6
7	8	33,200	-51.3			
5	5	35,297	-51.3			

GREEN BAY, WIS. 989 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	210	-2.1	-4.2	27	2.4
1000	30	119				
950	30	525	-2.6	-6.1	29	6.7
900	30	954	-4.6	-8.5	31	8.4
850	30	1,403	-6.4	-12.3	30	8.8
800	30	1,876	-7.4	-15.2	30	10.3
750	30	2,375	-9.8	-18.0	30	12.3
700	30	2,907	-12.5	-20.7	30	13.6
650	30	3,466	-15.2	-23.0	30	15.7
600	30	4,072	-18.6	-25.8	30	17.9
550	30	4,712	-22.2	-30.0	30	19.9
500	30	5,411	-26.9	-34.9	30	22.0
450	30	6,156	-32.2	-38.8	30	24.5
400	30	6,986	-37.6	-43.4	30	27.8
350	30	7,897	-42.9		30	29.6
300	30	8,925	-47.7		29	32.9
250	30	10,119	-50.7		29	32.2
200	30	11,571	-51.1		28	30.3
175	30	12,437	-51.8		28	30.2
150	30	13,435	-52.7		28	28.2
125	30	14,607	-54.6		29	23.3
100	30	16,030	-55.7		29	17.7
80	29	17,447	-56.1		29	15.0
70	29	18,294	-56.4		29	12.0
60	29	19,272	-56.5		30	8.8
50	29	20,429	-56.5		31	6.3
40	29	21,843	-56.8		33	4.9
30	29	23,668	-56.1		35	5.8
25	28	24,828	-55.8		35	5.7
20	27	26,243	-55.9		35	5.7
15	25	28,092	-54.5		34	6.5
10	24	30,709	-51.5		33	8.8
7	11	32,921	-51.2			
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GREENSBORO, N. C. 986 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	273	3.8	-.1	27	1.5
1000	30	157				
950	30	575	5.9	-3.4	29	4.5
900	30	1,018	4.2	-5.6	29	7.6
850	30	1,482	2.4	-7.4	29	10.0
800	30	1,971	1.3	-9.6	28	12.3
750	30	2,489	.3	-12.6	28	14.8
700	30	3,042	-1.8	-14.6	28	16.7
650	30	3,625	-4.8	-17.6	28	19.5
600	30	4,254	-8.8	-22.3	27	21.6
550	30	4,919	-12.7	-25.7	27	23.9
500	30	5,646	-17.5	-29.4	27	27.0
450	30	6,422	-23.0	-33.7	27	30.7
400	30	7,280	-29.0	-39.2	27	32.7
350	30	8,222	-36.0	-45.5	27	36.0
300	30	9,277	-43.3		27	38.7
250	30	10,485	-50.4		28	41.0
200	30	11,922	-55.6		28	37.3
175	30	12,769	-57.2		28	31.7
150	30	13,740	-59.6		28	28.0
125	30	14,873	-62.4		27	24.8
100	30	16,245	-63.8		27	19.8
80	30	17,612	-63.5		27	13.8
70	30	18,434	-62.2		28	10.5
60	30	19,388	-61.0		28	7.9
50	30	20,524	-59.5		29	5.5
40	30	21,924	-57.8		30	5.5
30	30	23,747	-55.9		30	5.5
25	29	24,911	-54.9		30	8.5
20	29	26,342	-53.0		28	9.3
15	28	28,205	-50.6		27	16.3
10	11	30,826	-48.3			
7						
5						

GUAM, MARIANA IS. 998 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	111	25.3	23.2	08	4.2
1000	30	90				
950	30	543	23.0	20.3	08	10.2
900	30	1,011	20.3	16.6	08	10.7
850	30	1,503	17.7	12.6	08	9.6
800	30	2,021	15.4	7.4	09	8.0
750	30	2,566	13.2	1.1	09	8.1
700	30	3,144	10.4	-4.2	09	8.9
650	30	3,756	6.7	-7.6	09	8.5
600	30	4,409	2.8	-11.4	09	9.5
550	30	5,105	-1.1	-16.5	09	10.0
500	30	5,862	-5.7	-20.4	09	9.1
450	30	6,678	-10.7	-25.9	08	10.5
400	30	7,577	-16.4	-31.5	08	9.5
350	30	8,568	-23.1	-37.7	07	9.3
300	30	9,679	-31.2	-44.1	06	8.2
250	30	10,944	-41.3	-49.0	06	8.0
200	30	12,419	-53.3		05	6.8
175	30	13,265	-60.1		06	7.4
150	30	14,210	-67.3		07	9.3
125	30	15,287	-75.0		08	11.2
100	27	16,558	-80.9		09	12.4
80	24	17,806	-81.4		09	11.5
70	23	18,560	-76.4		09	9.0
60	23	19,468	-69.6		09	7.1
50	19	20,572	-64.7		09	7.1
40	19	21,952	-59.5		09	10.3
30	18	23,772	-55.1		09	15.3
25	18	24,946	-51.9		09	20.7
20	18	26,404	-46.5		09	23.8
15	14	28,327	-43.3		09	25.8
10	11	31,076	-42.1		09	20.6
7	9	33,491	-42.4			
5	5	35,750	-39.2			

HILO, HAWAII 1015 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	20.9	18.7	25	1.4
1000	30	141	21.7	18.0	30	.7
950	30	583	18.5	15.8	06	3.4
900	30	1,047	15.3	13.5	08	4.3
850	30	1,531	12.4	10.4	09	4.3
800	30	2,038	9.8	7.3	09	4.2
750	30	2,575	7.6	.5	09	4.9
700	30	3,140	6.1	-9.0	09	4.9
650	30	3,741	3.0	-13.8	08	4.8
600	30	4,389	-.6	-17.8	07	4.1
550	30	5,074	-4.9	-21.8	06	2.1
500	30	5,823	-9.6	-24.8	35	1.7
450	30	6,626	-14.9	-28.9	31	3.3
400	30	7,510	-21.3	-34.5	30	5.6
350	30	8,482	-28.6	-40.8	30	8.7
300	30	9,568	-36.9	-49.4	30	11.9
250	30	10,805	-46.3		29	15.2
200	30	12,254	-56.4		29	18.4
175	30	13,093	-61.3		29	18.1
150	30	14,038	-66.0		30	15.3
125	30	15,130	-71.3		31	12.6
100	29	16,438	-74.9		33	8.1
80	27	17,737	-73.5		03	4.1
70	26	18,524	-69.3		06	3.8
60	25	19,451	-65.3		10	4.6
50	25	20,569	-62.5		09	6.6
40	25	21,957	-58.8		09	7.4
30	25	23,785	-53.6		08	8.9
25	25	24,964	-51.1		08	10.1
20	24	26,423	-48.6		09	10.2
15	24	28,326	-46.0		10	8.0
10	20	31,039	-45.2		21	3.1
7	8	33,435	-41.7			
5						

HUNTINGTON W. VA. 990 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	246	2.4	-1.2	20	1.3
1000	30	160				
950	30	576	2.8	-4.1	25	4.8
900	30	1,012	.7	-6.0	27	7.8
850	30	1,470	-1.2	-8.5	27	9.3
800	30	1,952	-3.4	-11.2	27	11.4
750	30	2,464	-4.8	-13.2	28	14.2
700	30	3,003	-6.7	-16.0	28	16.5
650	30	3,576	-9.4	-19.1	28	18.7
600	30	4,195	-12.7	-22.2	28	22.2
550	30	4,849	-16.4	-27.2	28	24.5
500	30	5,566	-20.8	-31.9	28	27.1
450	30	6,333	-26.0	-36.8	26	29.9
400	30	7,180	-32.0	-41.1	27	32.6
350	30	8,112	-38.1	-46.4	27	36.4
300	30	9,159	-44.4		27	40.6
250	30	10,364	-50.1		27	41.7
200	30	11,810	-53.5		27	39.9
175	30	12,666	-55.0		27	37.7
150	30	13,646	-57.3		28	33.6
125	29	14,791	-60.0		27	27.6
100	29	16,179	-61.3		27	23.2
80	29	17,564	-60.8		26	15.7
70	29	18,395	-59.9		28	11.7
60	29	19,360	-59.5		28	8.7
50	29	20,504	-58.5		28	7.2
40	29	21,911	-57.1		29	5.9
30	29	23,733	-56.7		30	5.0
25	29	24,892	-55.2		30	6.4
20	29	26,320	-54.1		30	7.9
15	26	28,176	-52.3		29	10.7
10	18	30,823	-49.1		28	18.5
7	9	33,145	-48.0			
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* INTERNATIONAL FALLS, MINN. 970 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	360	-6.4	-9.7	27	2.0
1000	30	122				
950	30	524	-6.2	-9.6	27	3.0
900	30	946	-7.7	-9.8	28	5.1
850	30	1,390	-8.3	-12.6	30	6.8
800	30	1,859	-9.6	-16.1	30	8.3
750	30	2,351	-11.4	-19.0	30	10.1
700	30	2,883	-13.5	-21.0	30	11.4
650	30	3,434	-16.2	-24.1	30	13.0
600	30	4,042	-19.5	-27.4	30	14.9
550	30	4,678	-23.7	-31.1	30	15.3
500	30	5,373	-28.4	-36.0	30	16.7
450	30	6,112	-33.5	-39.7	30	18.2
400	30	6,939	-39.1	-42.2	30	21.7
350	30	7,844	-44.7		30	23.3
300	30	8,865	-49.4		29	22.6
250	30	10,052	-51.5		29	24.7
200	30	11,501	-51.1		29	23.8
175	30	12,370	-51.0		30	21.8
150	30	13,372	-51.6		30	21.4
125	30	14,551	-53.1		30	19.4
100	29	15,982	-53.5		30	17.0
80	29	17,413	-54.4		30	13.2
70	29	18,267	-54.4		30	12.3
60	29	19,255	-54.7		30	10.7
50	29	20,419	-55.4		31	8.9
40	29	21,840	-55.8		32	8.1
30	29	23,669	-56.0		33	7.4
25	28	24,832	-56.2		33	8.3
20	26	26,259	-55.8		34	8.7
15	23	28,097	-54.9		34	9.3
10	21	30,699	-52.9		34	10.6
7	16	32,962	-51.4		32	15.7
5	8	35,194	-46.5			

JACKSON, MISS. 1009 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	94	7.3	5.4	15	.3
1000	30	164			11	.8
950	30	593	10.6	1.9	28	1.9
900	30	1,042	9.6	-1.9	28	5.6
850	30	1,516	8.4	-5.4	28	8.4
800	30	2,015	6.6	-8.2	28	10.3
750	30	2,543	4.2	-10.2	27	11.9
700	30	3,102	1.4	-12.1	27	13.5
650	30	3,691	-1.7	-14.7	27	14.6
600	30	4,329	-5.1	-18.1	27	16.8
550	30	4,999	-9.1	-22.6	28	19.4
500	30	5,740	-13.7	-26.3	28	22.5
450	30	6,530	-18.9	-30.9	28	24.3
400	30	7,402	-25.0	-36.4	28	27.6
350	30	8,358	-31.8	-43.2	28	31.2
300	30	9,430	-39.9	-49.5	28	34.1
250	30	10,650	-48.7		28	36.8
200	30	12,090	-56.7		28	38.5
175	30	12,928	-61.0		28	37.2
150	30	13,877	-64.1		28	34.0
125	30	14,986	-66.7		28	27.6
100	30	16,327	-68.9		28	21.3
80	29	17,658	-66.7		28	13.5
70	29	18,459	-66.9		29	8.7
60	29	19,395	-64.6		29	5.2
50	29	20,516	-61.5		30	3.8
40	28	21,908	-58.2		31	3.8
30	27	23,730	-55.0		29	5.0
25	27	24,898	-53.6		29	7.0
20	27	26,337	-51.9		27	11.3
15	27	28,209	-49.8		27	16.4
10	24	30,890	-45.8		27	22.8
7	11	33,262	-45.1			
5	5	35,466	-41.9			

* JACKSONVILLE, FLA. 1019 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	11.3	9.2	30	2.0
1000	30	164	14.5	8.0	34	2.3
950	30	598	13.6	5.1	30	2.4
900	30	1,052	11.6	.9	26	4.2
850	30	1,529	10.0	-2.4	26	5.0
800	30	2,031	8.4	-7.2	27	7.0
750	30	2,557	6.1	-10.1	27	9.4
700	30	3,125	3.2	-12.6	27	11.4
650	30	3,718	.0	-14.6	27	13.6
600	30	4,359	-3.5	-18.1	27	14.7
550	30	5,032	-7.7	-23.1	27	17.5
500	30	5,777	-12.4	-27.4	27	20.3
450	30	6,564	-17.8	-31.2	27	23.0
400	30	7,446	-23.9	-36.3	27	25.6
350	30	8,407	-30.7	-42.7	27	30.5
300	30	9,485	-38.4	-48.6	27	34.7
250	30	10,715	-47.4		27	36.7
200	30	12,158	-56.8		27	38.9
175	30	12,996	-61.0		28	38.4
150	30	13,944	-64.9		28	36.3
125	29	15,046	-68.0		28	29.3
100	28	16,382	-69.8		28	22.2
80	28	17,707	-69.9		28	14.8
70	27	18,504	-67.8		28	10.0
60	27	19,438	-64.4		28	6.4
50	25	20,559	-61.0		29	4.5
40	24	21,960	-57.0		30	3.5
30	23	23,795	-53.2		28	5.0
25	23	24,973	-51.0		28	6.8
20	22	26,432	-49.3		27	9.6
15	21	28,328	-46.9		27	12.9
10	16	31,014	-44.7		26	18.0
7	10	33,403	-44.3			

JOHN F. KENNEDY INT. AP NY 1016 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	4.4	-1.9	30	2.5
1000	30	133			30	3.4
950	30	550	2.1	-3.5	28	5.7
900	30	984	-.2	-6.2	28	7.9
850	30	1,440	-2.5	-8.7	28	8.8
800	30	1,920	-4.7	-11.5	27	10.2
750	30	2,428	-6.9	-14.0	27	12.8
700	30	2,963	-8.9	-18.5	27	14.7
650	30	3,538	-11.5	-21.4	26	16.4
600	30	4,146	-14.8	-25.0	27	18.3
550	30	4,800	-18.8	-27.9	27	20.5
500	30	5,505	-23.2	-33.3	27	24.0
450	30	6,266	-28.6	-37.8	27	26.5
400	30	7,105	-34.0	-43.2	27	30.4
350	30	8,030	-39.7	-46.6	27	32.8
300	30	9,072	-45.6		27	35.2
250	30	10,275	-50.2		27	34.4
200	30	11,729	-51.6		27	33.1
175	28	12,586	-52.9		27	31.0
150	27	13,570	-55.1		27	28.5
125	27	14,731	-56.7		26	24.6
100	27	16,140	-56.3		26	20.1
80	27	17,542	-58.8		27	14.4
70	26	18,384	-56.3		27	11.4
60	26	19,356	-56.0		27	9.8
50	26	20,504	-58.0		28	7.4
40	26	21,912	-57.4		29	4.0
30	25	23,732	-56.7		29	5.5
25	25	24,888	-56.4		30	5.9
20	25	26,309	-54.9		29	7.3
15	24	28,155	-52.5		28	10.0
10	17	30,800	-49.9		27	17.4
7	5	33,129	-48.8			

JOHNSTON IS., PACIFIC AREA 1012 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	25.4	22.2	09	7.3
1000	30	109	24.6	21.6	09	8.0
950	30	560	21.0	19.1	09	8.3
900	30	1,026	18.2	15.5	09	8.8
850	30	1,514	15.6	12.5	09	7.6
800	30	2,027	12.9	9.2	09	5.9
750	30	2,570	10.5	4.2	09	4.9
700	30	3,141	7.6	-1.3	08	3.5
650	30	3,745	4.5	-4.9	09	2.8
600	30	4,397	.8	-9.6	08	2.5
550	30	5,085	-3.1	-15.5	06	1.9
500	30	5,840	-7.4	[illegible]	01	2.3
450	30	6,652	-12.8	-25.6	01	2.9
400	30	7,542	-18.9	[illegible]	35	4.9
350	30	8,522	-26.0	[illegible]	32	6.6
300	30	9,620	-34.2	-45.8	[illegible]	7.7
250	30	10,871	-43.3		28	12.8
200	29	12,341	-54.3		29	14.0
175	29	13,184	-60.7		29	13.1
150	29	14,128	-67.1		29	11.0
125	29	15,212	-73.0		32	7.8
100	25	[illegible]	-76.0		35	6.6
80	22	17,778	-77.9		[illegible]	6.0
70	[illegible]	18,549	-74.8		[illegible]	6.7
60	20	19,456	-68.4		[illegible]	7.0
50	[illegible]	20,565	-63.6		09	7.4
40	20	21,945	-60.0		09	8.5
30	[illegible]	23,757	-54.8		08	12.4
25	[illegible]	24,932	-52.0		08	15.7
20	16	26,389	-46.5		09	17.2
15	18	28,290	-45.8		09	15.5
10	14	[illegible]	-44.8			
7	7	33,435	-39.8			

KING SALMON, ALASKA 1002 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	15	-1.6	-4.5	13	2.9
1000	30	27			14	3.1
950	30	438	-.9	-5.0	16	4.8
900	30	868	-3.0	-6.5	18	5.8
850	30	1,320	-5.1	-9.6	20	6.6
800	30	1,794	-7.5	-13.2	21	6.9
750	30	2,292	-10.2	-16.0	22	7.2
700	30	2,824	-13.6	-19.5	22	8.5
650	30	3,382	-17.3	[illegible]	22	9.0
600	30	3,980	-21.1	-26.7	22	10.6
550	30	4,614	-25.4	-31.6	22	12.3
500	30	5,302	-30.4	-36.5	22	14.1
450	30	6,040	-35.5	-38.5	22	15.6
400	30	6,855	-41.1	[illegible]	23	15.4
350	30	7,752	-46.7		24	16.7
300	30	8,765	-50.6		24	18.7
250	30	9,947	-52.4		24	19.6
200	30	11,393	-51.1		24	19.5
175	30	12,263	-50.1		24	17.7
150	30	13,269	[illegible]		24	18.6
125	29	14,456	-49.8		24	[illegible]
100	29	15,917	-49.4		25	16.1
80	29	17,379	-49.4		25	14.9
70	29	18,252	-49.7		25	13.4
60	29	19,261	-49.6		25	13.5
50	28	20,451	-49.5		25	12.5
40	28	[illegible]	-49.9		25	[illegible]
30	27	[illegible]	-48.9		25	9.7
25	25	[illegible]	-49.1		26	[illegible]
20	24	26,456	-49.2		25	12.4
15	23	28,344	-49.1		25	15.9
10	19	30,980	-50.3			
7	9	[illegible]	-49.4			

* KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb.)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	30	27.8	24.1	03	1.9
1000	30	86	27.2	23.4	04	2.1
950	30	534	23.2	18.9	05	3.2
900	30	1,009	20.5	14.6	05	2.7
850	30	1,502	18.0	10.9	05	1.4
800	30	2,020	15.6	6.1	07	1.2
750	30	2,562	12.9	1.6	07	2.1
700	30	3,143	9.9	-2.9	08	2.9
650	30	3,751	6.5	-6.9	09	4.1
600	30	4,409	2.8	-11.2	08	5.2
550	30	5,103	-1.1	[illegible]	09	5.1
500	30	5,864	-5.4	-20.3	09	5.7
450	30	6,677	-10.4	-24.9	09	6.2
400	30	7,583	-15.7	-30.4	09	5.7
350	30	8,577	-22.6	-37.3	09	6.0
300	30	[illegible]	[illegible]	-44.7	10	6.3
250	30	[illegible]	-41.3	-52.4	09	7.4
200	30	12,430	-53.5		09	[illegible]
175	30	13,276	[illegible]		08	10.2
150	30	[illegible]	[illegible]		06	[illegible]
125	30	[illegible]	-75.7		[illegible]	15.9
100	30	16,564	-81.3		09	14.1
80	30	17,819	-78.0		[illegible]	7.9
70	30	[illegible]	[illegible]		[illegible]	2.4
60	30	[illegible]	[illegible]		30	[illegible]
50	29	20,614	-63.5		[illegible]	1.4
40	29	21,994	[illegible]		[illegible]	[illegible]
30	28	[illegible]	[illegible]		[illegible]	18.9
25	27	[illegible]	[illegible]		[illegible]	25.7
20	22	26,420	-47.7		09	41.3
15	13	28,325	-44.4			
10	5	31,064	-38.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

NOVEMBER 1967

KOTZEBUE, ALASKA 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	5	-14.3	-17.8	09	2.5
1000	29	61			09	4.1
950	29	456	-12.0	-15.3	13	2.8
900	29	867	-13.5	-16.3	16	2.6
850	29	1,300	-14.8	-17.7	17	2.4
800	29	1,758	-16.0	-21.1	19	2.2
750	29	2,245	-18.1	-24.1	22	3.3
700	29	2,755	-20.5	-26.8	22	3.9
650	29	3,299	-23.5	-30.2	22	5.2
600	29	3,882	-26.8	-34.4	22	6.4
550	29	4,501	-30.8	-37.7	23	7.0
500	29	5,176	-35.2	-41.9	23	8.4
450	29	5,903	-39.8	-43.8	23	10.3
400	29	6,700	-45.0		24	12.2
350	29	7,582	-50.2		24	13.3
300	29	8,576	-55.3		24	13.5
250	29	9,734	-56.5		24	14.1
200	29	11,158	-53.8		24	16.0
175	28	12,022	-53.3		24	16.5
150	28	13,016	-52.4		24	17.9
125	28	14,196	-51.6		24	19.6
100	28	15,647	-50.7		24	23.1
80	28	17,101	-50.5		24	24.0
70	28	17,970	-50.7		24	26.4
60	28	18,975	-50.8		24	28.1
50	28	20,163	-50.6		24	29.4
40	28	21,616	-50.9		24	30.5
30	27	23,486	-51.5		25	34.5
25	27	24,670	-51.2		25	35.0
20	25	26,135	-51.0		25	34.4
15	22	28,025	-51.5		25	39.1
10	5	30,689	-51.7			
7						
5						
4						
3						
2						

LAKE CHARLES, LA. 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	11.8	10.4	08	.8
1000	30	164	14.9	8.5	12	1.8
950	30	600	13.5	5.9	22	2.8
900	30	1,053	11.6	2.9	25	4.9
850	30	1,529	9.9	-2.9	26	6.0
800	30	2,032	8.3	-6.2	28	7.5
750	30	2,564	6.0	-8.7	27	8.7
700	30	3,126	3.6	-11.7	27	10.7
650	30	3,724	.4	-14.6	27	12.8
600	30	4,362	-3.3	-18.5	27	14.9
550	30	5,041	-7.5	-21.1	28	16.7
500	30	5,781	-11.7	-26.2	28	19.0
450	30	6,576	-17.2	-30.7	27	21.6
400	30	7,454	-23.1	-36.7	27	24.0
350	30	8,417	-30.2	-43.2	27	25.6
300	30	9,496	-38.2	-48.7	27	28.8
250	30	10,727	-46.9		27	31.5
200	30	12,173	-56.4		27	31.6
175	30	13,012	-60.9		27	30.1
150	30	13,961	-64.4		27	28.6
125	30	15,067	-67.8		27	24.7
100	30	16,399	-70.4		28	19.8
80	30	17,719	-71.0		28	12.2
70	29	18,510	-69.4		28	8.0
60	29	19,438	-65.3		29	4.0
50	29	20,557	-61.8		29	2.9
40	29	21,947	-59.0		29	2.6
30	27	23,771	-53.8		28	4.7
25	26	24,947	-52.5		28	6.3
20	26	26,393	-50.7		27	10.1
15	23	28,284	-48.5		27	16.0
10	17	30,964	-46.5		27	25.8
7	5	33,297	-44.5			

LANDER, WYO. 829 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	1,696	-4.8	-9.0	26	.7
1000	30	193				
950	30	605				
900	30	1,036				
850	30	1,496				
800	30	1,977	.5	-9.3	34	.6
750	30	2,493	-.6	-11.7	32	2.3
700	30	3,043	-3.8	-14.8	29	5.6
650	30	3,620	-7.6	-17.5	30	10.0
600	30	4,244	-11.4	-20.9	29	12.5
550	30	4,901	-15.8	-26.5	29	14.9
500	30	5,619	-20.1	-31.1	29	18.3
450	30	6,384	-25.6	-36.6	29	20.6
400	30	7,238	-31.6	-41.6	29	22.8
350	30	8,169	-38.1	-44.6	29	25.6
300	30	9,215	-44.7		29	29.2
250	30	10,419	-50.5		29	33.0
200	29	11,869	-54.8		29	32.0
175	29	12,720	-56.4		29	29.3
150	29	13,692	-59.1		29	27.0
125	29	14,830	-60.8		29	21.5
100	29	16,214	-62.2		29	15.7
80	29	17,594	-61.4		30	10.3
70	29	18,422	-61.1		31	6.9
60	29	19,382	-59.8		34	4.6
50	29	20,525	-58.5		02	4.7
40	28	21,934	-57.4		03	6.3
30	27	23,754	-56.4		03	7.0
25	25	24,908	-56.2		03	8.9
20	24	26,328	-55.7		04	8.6
15	21	28,161	-55.0		02	6.9
10	11	30,739	-52.1			

* LIHUE KAUAI, HAWAII 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	36	22.7	18.4	06	6.0
1000	30	149	22.7	18.2	07	7.7
950	30	592	19.1	16.4	07	9.8
900	30	1,058	15.6	13.2	08	9.4
850	30	1,541	12.3	9.4	08	9.1
800	30	2,049	10.3	2.8	09	8.3
750	30	2,587	8.8	-6.7	09	8.3
700	30	3,154	6.9	-10.9	09	7.1
650	30	3,755	3.5	-13.7	09	5.6
600	30	4,405	-.4	-17.3	10	4.1
550	30	5,089	-5.0	-20.6	09	3.2
500	30	5,838	-9.8	-24.3	07	1.7
450	30	6,643	-15.1	-29.5	34	1.4
400	30	7,524	-21.1	-33.9	30	3.6
350	30	8,495	-28.7	-40.2	29	6.0
300	29	9,584	-37.0	-47.9	30	7.6
250	28	10,817	-46.5		29	11.1
200	28	12,268	-55.4		29	14.0
175	28	13,111	-60.0		29	12.8
150	28	14,062	-65.1		30	11.3
125	28	15,159	-70.4		32	9.2
100	27	16,470	-74.7		34	7.4
80	27	17,763	-74.3		03	4.7
70	26	18,547	-70.8		06	4.5
60	26	19,469	-66.9		08	5.0
50	26	20,582	-62.6		09	5.1
40	26	21,967	-59.5		09	5.5
30	26	23,787	-54.8		08	5.3
25	26	24,958	-52.5		08	5.4
20	26	26,408	-49.5		08	4.2
15	26	28,301	-47.5		15	.3
10	22	30,989	-46.5		24	6.4
7	21	33,373	-44.2		27	11.7
5	16	35,677	-37.9		28	14.5
4	14	37,229	-35.4		27	17.4
3	12	39,261	-31.8			
2	5	42,184	-30.0			

LITTLE ROCK, ARK. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	5.5	1.5	32	.9
1000	30	161	7.4	.8	34	.7
950	30	584	8.2	.2	27	1.1
900	30	1,031	7.0	-3.0	27	4.3
850	30	1,500	5.5	-5.1	28	7.2
800	30	1,995	4.1	-7.4	28	8.5
750	30	2,516	2.0	-9.5	28	11.5
700	30	3,073	-.5	-12.1	28	13.3
650	30	3,656	-3.6	-15.4	28	15.6
600	30	4,291	-7.2	-20.1	28	18.1
550	30	4,957	-11.2	-23.4	28	20.4
500	30	5,691	-15.8	-27.6	28	22.7
450	30	6,470	-20.9	-32.1	28	25.2
400	30	7,339	-26.6	-37.6	27	29.0
350	30	8,290	-33.7	-43.2	28	33.5
300	30	9,354	-41.1	-47.9	28	37.9
250	30	10,573	-48.6		28	40.5
200	30	12,014	-56.2		28	41.5
175	30	12,857	-58.8		28	37.5
150	29	13,818	-61.4		28	31.8
125	29	14,940	-64.3		28	26.7
100	27	16,299	-66.4		29	21.8
80	24	17,653	-66.0		29	14.8
70	23	18,462	-65.0		29	10.1
60	23	19,406	-62.8		29	6.8
50	22	20,535	-60.8		29	4.4
40	22	21,929	-58.4		31	3.1
30	21	23,746	-56.4		31	2.6
25	19	24,911	-55.2		31	3.8
20	18	26,346	-52.9		30	7.0
15	15	28,201	-51.7		29	10.6
10	10	30,862	-48.3			

MCGRATH, ALASKA 995 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	103	-10.4	-14.1	20	.5
1000	30	64				
950	30	464	-8.3	-11.2	13	1.4
900	30	882	-7.8	-11.9	16	2.2
850	30	1,326	-9.2	-13.8	21	4.4
800	30	1,793	-11.4	-15.8	21	5.4
750	30	2,286	-13.9	-18.4	21	7.3
700	30	2,807	-16.5	-21.5	22	8.5
650	30	3,359	-19.6	-25.1	21	8.5
600	30	3,951	-23.5	-29.3	22	9.7
550	30	4,576	-27.5	-34.0	22	9.6
500	30	5,261	-32.1	-36.6	22	10.5
450	30	5,998	-36.6	-40.1	22	11.2
400	30	6,805	-42.3	-43.4	23	10.1
350	30	7,696	-48.4		23	12.4
300	30	8,699	-53.4		23	14.2
250	30	9,867	-54.5		24	16.0
200	30	11,305	-51.8		24	17.3
175	30	12,172	-51.1		24	16.4
150	30	13,175	-50.7		24	19.3
125	30	14,365	-49.6		25	20.3
100	30	15,828	-49.2		24	20.4
80	30	17,293	-48.8		24	21.1
70	30	18,170	-46.9		25	20.9
60	30	19,182	-49.3		25	21.0
50	30	20,377	-49.2		25	21.9
40	30	21,840	-48.9		25	21.9
30	28	23,730	-49.0		25	22.4
25	27	24,927	-49.9		25	23.2
20	26	26,379	-50.1		26	23.9
15	21	28,294	-49.1		27	25.0
10	18	30,911	-49.9		27	30.3
7	6	33,269	-49.8			
5						

• MAJURO, MARSHALL IS. 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	28.8	24.4	08	3.3
1000	30	86	27.5	21.8	08	3.9
950	30	533	23.4	18.1	09	5.1
900	29	1,011	20.5	14.1	09	6.0
850	29	1,504	18.0	9.9	09	5.9
800	29	2,021	15.6	7.1	09	5.1
750	29	2,563	13.1	2.8	08	4.7
700	29	3,145	10.1	-1.1	08	4.6
650	29	3,752	6.8	-5.4	08	4.7
600	29	4,411	2.9	-9.0	08	5.3
550	29	5,103	-.9	-13.7	08	6.0
500	28	5,864	-5.0	-18.0	08	5.9
450	28	6,681	-9.9	-23.5	08	4.3
400	28	7,587	-15.1	-28.8	08	2.3
350	28	8,585	-21.6	-35.9	35	.1
300	28	9,704	-29.7	-43.6	25	2.5
250	28	10,978	-39.8	-52.1	24	3.5
200	28	12,463	-52.4		23	4.7
175	28	13,314	-59.4		23	4.1
150	28	14,263	-66.7		26	4.3
125	28	15,344	-74.4		34	2.5
100	28	16,622	-80.4		06	6.0
80	24	17,889	-78.5		06	5.4
70	23	18,659	-73.3		06	1.7
60	22	19,575	-67.3		25	1.3
50	20	20,687	-64.0		26	.9
40	19	22,062	-60.0		10	4.6
30	13	23,867	-55.0		09	18.2
25	10	25,037	-52.3			
20	5	26,505	-47.9			

• MARCUS IS., N. PACIFIC 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	9	26.3	20.7	08	5.1
1000	30	149	24.3	17.7	08	7.0
950	30	594	20.2	13.5	08	8.4
900	30	1,062	17.1	10.4	08	6.9
850	30	1,548	14.7	6.4	09	4.8
800	30	2,059	13.3	-.8	08	3.7
750	30	2,602	11.3	-5.1	06	2.7
700	30	3,175	8.7	-8.5	04	2.0
650	30	3,783	5.3	-12.3	35	2.0
600	30	4,434	1.2	-15.4	31	3.4
550	30	5,124	-3.0	-20.5	30	3.8
500	30	5,878	-7.4	-25.5	30	4.4
450	30	6,688	-12.7	-30.1	31	5.4
400	30	7,579	-19.0	-35.8	31	7.1
350	30	8,559	-26.2	-41.7	31	9.0
300	30	9,657	-34.2	-47.9	31	12.2
250	30	10,908	-43.5		31	11.6
200	30	12,378	-53.2		31	14.7
175	30	13,227	-58.9		31	13.8
150	30	14,180	-65.3		31	13.0
125	30	15,272	-72.0		31	10.0
100	30	16,563	-76.7		30	6.2
80	30	17,834	-77.0		35	1.8
70	29	18,607	-73.0		06	2.1
60	29	19,522	-67.4		08	4.3
50	29	20,636	-62.0		09	6.1
40	29	22,033	-57.0		09	6.7
30	25	23,878	-51.8		08	5.5
25	23	25,073	-49.5		10	5.6
20	21	26,546	-47.5		12	2.6
15	18	28,460	-44.3		28	1.2
10	9	31,181	-42.4			
7	5	33,568	-42.6			

* MEDFORD, OREG. 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	401	3.6	1.8	28	.2
1000	30	162				
950	30	586	6.3	3.7	08	.2
900	30	1,027	7.6	1.2	16	1.8
850	30	1,498	6.6	-2.6	18	2.4
800	30	1,994	4.1	-6.6	24	3.2
750	30	2,513	1.5	-9.8	27	5.2
700	30	3,070	-1.4	-12.8	28	6.5
650	30	3,658	-4.3	-16.1	28	7.8
600	30	4,286	-8.0	-20.4	28	8.7
550	30	4,954	-12.3	-23.6	28	10.0
500	30	5,679	-17.5	-27.7	28	11.1
450	30	6,454	-22.8	-32.9	28	11.4
400	30	7,315	-29.1	-37.6	27	13.5
350	30	8,257	-35.9	-44.3	28	15.6
300	30	9,313	-43.3	-46.8	28	17.8
250	30	10,522	-50.3		28	19.7
200	30	11,961	-55.2		27	22.5
175	30	12,811	-57.2		27	20.7
150	30	13,783	-58.9		27	17.5
125	30	14,920	-61.3		27	14.4
100	29	16,298	-62.6		28	9.9
80	29	17,676	-61.9		29	6.0
70	29	18,503	-61.0		31	3.8
60	29	19,462	-59.6		34	2.9
50	29	20,604	-58.9		02	3.0
40	28	22,011	-57.0		06	4.7
30	26	23,844	-55.1		06	7.2
25	23	25,000	-54.7		06	8.1
20	20	26,436	-53.3		06	10.3
15	20	28,291	-52.5		06	11.8
10	19	30,921	-51.2		05	11.5
7	15	33,280	-48.8		04	8.7
5	8	35,537	-47.2			

MERIDA, MEXICO 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	11	17.2	16.7	07	2.2
1000	30	158	21.8	19.2	07	4.4
950	30	597	19.4	15.6	06	5.4
900	30	1,066	16.9	11.1	06	4.3
850	30	1,553	15.3	4.5	06	2.5
800	30	2,066	13.9	-3.0	06	2.4
750	30	2,600	11.6	-8.2	04	2.5
700	30	3,182	8.7	-10.5	04	1.8
650	30	3,783	5.5	-14.3	35	.6
600	30	4,441	1.9	-18.4	32	1.1
550	30	5,124	-2.3	-22.3	31	1.6
500	30	5,889	-7.3	-26.1	26	1.8
450	30	6,692	-12.7	-29.9	24	3.9
400	30	7,592	-19.1	-35.3	25	6.2
350	30	8,571	-26.5	-41.1	25	7.7
300	30	9,666	-34.9	-48.6	25	9.8
250	30	10,911	-44.7		25	12.3
200	30	12,364	-56.4		25	16.1
175	30	13,199	-62.6		25	16.6
150	30	14,136	-68.0		26	15.1
125	30	15,219	-72.1		27	12.1
100	30	16,520	-76.2		28	9.5
80	29	17,800	-77.0		30	3.7
70	29	18,571	-74.1		03	1.6
60	29	19,485	-67.1		07	2.8
50	29	20,599	-61.8		10	2.6
40	26	21,995	-56.9		10	4.3
30	26	23,837	-52.1		08	3.4
25	25	25,023	-49.9		08	5.9
20	22	26,493	-46.6		08	7.0
15	22	28,415	-43.6		09	5.3
10	17	31,157	-42.7		15	2.9
7	10	33,553	-42.3			

* MIAMI, FLA. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	16.3	16.2	01	2.1
1000	30	146	20.3	16.3	03	3.0
950	30	591	18.5	14.2	06	3.1
900	30	1,052	15.6	10.8	05	2.2
850	30	1,536	13.5	5.1	03	1.6
800	30	2,045	11.3	-.5	33	1.0
750	30	2,586	9.0	-5.2	30	1.7
700	30	3,152	6.4	-10.6	28	3.7
650	30	3,752	3.5	-16.2	28	6.1
600	30	4,402	-.3	-19.0	27	8.3
550	30	5,088	-4.4	-23.3	28	10.7
500	30	5,838	-6.8	-27.0	28	14.0
450	30	6,642	-14.1	-30.8	28	15.6
400	30	7,532	-20.5	-36.3	28	18.2
350	30	8,506	-28.0	-41.2	28	21.0
300	30	9,594	-36.3	-48.6	28	24.4
250	30	10,834	-45.9		27	26.8
200	30	12,283	-57.1		27	28.6
175	29	13,115	-62.7		28	27.5
150	29	14,053	-67.9		28	25.8
125	29	15,139	-71.4		28	21.6
100	28	16,443	-75.0		29	15.9
80	28	17,740	-73.6		29	9.8
70	28	18,524	-71.1		29	5.7
60	27	19,448	-66.8		30	3.2
50	26	20,561	-62.6		29	1.3
40	25	21,953	-58.5		27	2.9
30	24	23,778	-53.7		31	2.9
25	22	24,957	-51.3		31	2.1
20	21	26,418	-48.7		29	3.7
15	18	28,324	-45.6		28	4.8
10	18	31,048	-42.5		26	14.1
7	9	33,463	-43.0			
5						

* MIDLAND, TEXAS 918 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	874	7.1	4.0	24	.8
1000	30	160				
950	30	587				
900	30	1,035	9.6	3.6	22	2.8
850	30	1,511	10.3	-.9	25	6.0
800	30	2,015	8.9	-4.0	27	6.0
750	30	2,545	6.8	-8.1	28	6.7
700	30	3,111	3.6	-11.4	28	8.9
650	30	3,703	.6	-15.7	27	11.4
600	30	4,348	-3.2	-18.6	28	13.4
550	30	5,024	-7.1	-22.1	27	16.4
500	30	5,768	-11.8	-25.7	27	16.7
450	30	6,556	-16.9	-29.9	27	18.7
400	30	7,441	-23.4	-34.3	27	20.9
350	30	8,404	-30.2	-40.6	27	24.1
300	30	9,483	-38.6	-46.8	27	25.7
250	30	10,710	-47.8		27	25.8
200	30	12,152	-56.9		27	25.3
175	30	12,989	-61.4		28	24.1
150	30	13,937	-64.6		27	20.8
125	30	15,042	-67.8		28	17.7
100	27	16,376	-70.3		28	13.8
80	27	17,700	-70.2		28	8.7
70	27	18,496	-68.5		28	5.9
60	27	19,426	-65.2		29	2.7
50	25	20,544	-62.2		36	.7
40	24	21,932	-59.3		35	1.2
30	24	23,746	-56.5		29	1.7
25	24	24,907	-54.7		29	3.5
20	24	26,342	-52.9		28	5.7
15	23	28,100	-51.6		28	9.6
10	21	30,849	-49.4		27	20.1
7	14	33,211	-47.6		26	23.2
5	7	35,509	-44.7			

MONTGOMERY, ALA. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	7.3	4.1	32	.5
1000	30	170	9.2	4.0	35	.6
950	30	597	9.8	1.3	29	3.4
900	30	1,045	9.1	-1.5	29	5.9
850	30	1,519	8.3	-3.9	28	7.8
800	30	2,019	6.8	-6.2	28	10.4
750	30	2,546	4.5	-9.3	28	12.0
700	30	3,106	2.0	-12.0	27	13.5
650	30	3,699	-1.2	-15.2	27	14.4
600	30	4,335	-5.1	-17.7	27	16.3
550	30	5,008	-9.3	-22.5	27	18.5
500	30	5,745	-13.8	-26.5	27	20.5
450	30	6,534	-19.2	-30.6	27	22.2
400	30	7,405	-24.9	-35.8	28	25.6
350	30	8,363	-31.7	-42.3	28	29.6
300	30	9,436	-39.8	-47.8	28	32.9
250	30	10,659	-48.2		28	34.6
200	30	12,100	-56.6		28	36.2
175	30	12,940	-60.1		28	34.6
150	30	13,895	-63.5		27	32.5
125	30	15,007	-66.2		28	28.6
100	30	16,351	-68.3		28	22.8
80	30	17,690	-68.1		28	15.1
70	30	18,494	-66.5		28	10.7
60	30	19,433	-64.2		28	7.1
50	30	20,557	-61.1		29	5.1
40	30	21,954	-58.0		28	4.7
30	30	23,785	-54.2		28	5.5
25	30	24,957	-53.1		28	7.0
20	28	26,396	-50.9		27	9.7
15	26	28,281	-48.4		27	12.8
10	19	31,003	-44.3		26	17.1
7	11	33,375	-44.2			

* NANTUCKET, MASS. 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	14	4.7	.2	31	2.4
1000	30	129	4.9	-.1	28	3.7
950	30	543	2.6	-2.0	27	7.0
900	30	982	.1	-6.7	27	8.1
850	30	1,438	-2.2	-9.9	27	9.4
800	30	1,918	-4.3	-12.1	26	11.0
750	30	2,425	-6.0	-16.4	25	12.4
700	30	2,963	-8.4	-19.4	25	13.8
650	30	3,532	-11.3	-23.2	25	16.2
600	30	4,146	-14.9	-26.3	25	18.8
550	30	4,793	-19.1	-31.7	26	19.4
500	30	5,502	-24.0	-36.9	26	20.9
450	30	6,256	-29.3	-39.5	25	25.7
400	30	7,096	-34.1	-43.8	25	29.8
350	30	8,021	-39.3	-46.5	25	32.4
300	30	9,063	-45.0		25	33.0
250	30	10,268	-49.7		26	32.2
200	30	11,719	-52.3		26	29.2
175	30	12,582	-53.3		25	28.3
150	30	13,570	-55.1		25	26.4
125	30	14,729	-57.3		25	22.8
100	30	16,136	-58.4		26	19.1
80	30	17,537	-58.5		26	14.1
70	30	18,375	-58.3		26	11.4
60	30	19,346	-58.2		26	10.1
50	30	20,494	-58.1		26	8.8
40	29	21,898	-57.7		27	7.2
30	28	23,719	-57.0		28	5.9
25	28	24,873	-56.9		29	6.8
20	26	26,290	-55.7		30	7.6
15	26	28,135	-53.3		29	9.4
10	22	30,763	-50.5		28	18.8
7	19	33,088	-48.0		28	23.1
5	8	35,305	-45.6			

* NASHVILLE, TENN. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	180	3.7	.8	19	.7
1000	30	166			19	.6
950	30	585	4.8	-2.5	25	2.9
900	30	1,025	3.6	-5.4	28	5.5
850	30	1,488	2.3	-8.0	28	8.3
800	30	1,976	.6	-9.7	28	10.8
750	30	2,493	-1.1	-13.4	28	12.8
700	30	3,042	-3.4	-15.5	28	15.6
650	30	3,622	-6.1	-18.5	28	17.5
600	30	4,249	-9.6	-21.7	28	19.6
550	30	4,912	-13.7	-25.4	28	22.5
500	30	5,635	-18.2	-29.6	28	25.3
450	30	6,409	-23.4	-34.5	28	28.3
400	30	7,267	-28.8	-39.9	27	32.1
350	30	8,210	-35.2	-45.3	27	35.4
300	30	9,268	-42.6	-49.9	28	36.4
250	30	10,480	-49.8		28	41.9
200	30	11,919	-55.4		28	40.0
175	30	12,767	-57.2		28	35.8
150	30	13,735	-60.1		28	33.6
125	30	14,867	-62.3		28	29.8
100	30	16,239	-63.7		28	23.4
80	29	17,605	-64.7		28	17.4
70	29	18,422	-62.8		28	13.1
60	29	19,375	-60.9		29	8.0
50	29	20,512	-59.7		29	6.3
40	29	21,912	-58.0		29	5.1
30	29	23,730	-56.1		30	6.0
25	29	24,891	-54.9		30	5.7
20	29	26,320	-53.5		28	6.9
15	27	28,176	-51.1		28	9.8
10	25	30,837	-48.2		27	14.1
7	22	33,199	-45.8		27	22.5
5	11	35,465	-45.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	NOME, ALASKA 1005 MB						* NORTH PLATTE, NEBR. 919 MB						* OAKLAND, CALIF. 1016 MB						OMAHA, NEBR. 969 MB						+ PAGO PAGO, AMERICAN SAMOA 1010 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	28	5	-8.9	-14.6	07	1.4	30	848	-4.9	-7.8	35	1.8	30	6	11.8	8.7	12	.4	30	403	-.6	-4.2	28	1.4	30	5	28.0	23.3	11	3.0
1000	28	45			06	2.1	30	171					30	138	13.5	7.7	15	.5	30	151					30	88	26.5	20.9	11	3.1
950	28	446	-9.2	-13.4	09	2.3	30	581					30	574	13.0	3.9	06	.7	30	562	1.4	-3.6	30	3.4	30	541	22.5	16.6	09	3.6
900	28	861	-10.8	-15.5	11	2.0	30	1,009	.7	-5.6	33	3.6	30	1,024	11.8	-.3	29	.6	30	999	1.2	-5.8	31	6.6	30	1,009	19.4	13.3	09	2.7
850	28	1,299	-12.5	-18.4	18	1.2	30	1,472	2.8	-7.6	31	6.6	30	1,500	9.6	-2.8	26	1.1	30	1,458	.0	-9.2	31	9.7	30	1,50[illegible]	17.4	8.7	08	2.6
800	28	1,761	-14.4	-22.5	25	1.5	30	1,961	1.5	-10.2	31	7.2	30	2,001	7.2	-6.5	25	1.8	30	1,943	-1.7	-11.5	30	11.6	30	2,016	15.1	5.1	05	2.3
750	28	2,247	-16.6	-24.9	24	2.7	30	2,476	-1.1	-13.4	30	9.1	30	2,531	4.7	-11.1	26	2.3	30	2,451	-3.7	-14.2	30	13.5	30	2,562	12.3	1.2	05	1.6
700	28	2,764	-19.3	-28.2	24	3.9	30	3,026	-4.4	-16.5	30	11.5	30	3,089	1.5	-13.7	26	3.7	30	2,997	-6.1	-17.4	30	15.4	30	3,137	9.4	-3.5	07	1.4
650	28	3,308	-22.5	-31.3	23	5.0	30	3,603	-8.2	-19.3	30	13.3	30	3,678	-2.2	-17.6	27	3.8	30	3,569	-9.1	-21.1	30	18.4	30	3,747	6.0	-5.8	16	.3
600	28	3,896	-26.2	-35.1	23	6.0	30	4,224	-11.9	-22.0	30	16.0	30	4,313	-6.2	-20.9	26	4.4	30	4,190	-12.8	-24.5	29	21.1	30	4,400	2.1	-9.3	27	.9
550	28	4,515	-30.1	-38.3	23	7.5	30	4,880	-15.9	-26.3	29	18.2	30	4,980	-10.8	-23.9	26	5.7	30	4,843	-17.0	-28.3	29	22.4	30	5,092	-1.8	-15.0	28	2.4
500	28	5,193	-34.0	-41.4	23	9.7	30	5,597	-20.4	-31.6	29	20.0	30	5,714	-15.7	-28.5	27	7.0	30	5,559	-21.6	-32.9	29	23.9	30	5,650	-5.9	-21.2	26	4.2
450	28	5,921	-38.9	-44.9	23	10.6	30	6,365	-25.3	-36.3	29	23.4	30	6,494	-21.2	-33.7	27	8.8	30	6,321	-26.9	-37.6	29	27.0	30	6,667	-10.8	-25.8	25	6.3
400	28	6,725	-44.1		23	10.1	30	7,216	-30.9	-40.3	29	26.5	30	7,358	-27.4	-40.2	27	10.1	30	7,169	-32.6	-41.7	29	26.7	30	7,564	-16.7	-31.1	25	8.1
350	28	7,609	-49.9		23	12.1	30	8,152	-37.1	-43.8	29	28.9	30	8,305	-34.5	-44.0	26	11.7	30	8,098	-38.7	-46.7	29	30.6	30	8,554	-23.5	-38.2	25	11.0
300	28	8,605	-54.9		23	13.6	30	9,202	-44.1	-48.6	29	31.6	30	9,365	-42.1	-47.5	27	12.0	30	9,142	-45.0		29	35.2	30	9,663	-31.5	-45.9	25	13.1
250	28	9,766	-55.7		23	14.5	30	10,409	-49.8		29	35.8	30	10,577	-49.8		27	13.0	30	10,344	-50.3		30	40.7	30	10,926	-41.5		25	15.4
200	28	11,197	-52.3		23	17.0	30	11,853	-54.4		29	36.6	30	12,016	-55.3		27	13.2	30	11,786	-53.7		29	39.5	30	12,399	-53.8		24	18.8
175	28	12,062	-51.8		24	18.1	30	12,704	-56.4		29	34.8	30	12,862	-58.2		26	13.2	30	12,640	-55.4		29	37.9	30	13,242	-60.8		24	19.3
150	28	13,063	-51.2		23	18.9	30	13,678	-58.5		29	30.5	30	13,826	-61.0		27	12.4	30	13,619	-57.0		29	33.9	30	14,184	-68.0		24	18.1
125	28	14,250	-50.2		23	20.9	30	14,818	-60.5		29	25.5	30	14,953	-63.0		27	10.5	30	14,768	-58.7		29	29.0	30	15,260	-74.5		25	15.4
100	27	15,708	-49.6		24	22.7	30	16,205	-61.8		29	19.1	30	16,320	-64.7		27	7.9	30	16,163	-60.0		29	21.9	29	16,540	-79.1		24	9.1
80	26	17,168	-49.4		24	24.5	30	17,587	-61.6		30	13.7	30	17,679	-65.0		28	4.0	30	17,553	-60.5		30	15.5	28	17,811	-76.3		20	[illegible].3
70	25	18,041	-49.0		24	26.3	30	18,415	-60.9		31	10.4	30	18,494	-63.7		31	2.2	29	18,388	-59.9		30	12.3	28	18,588	-71.5		10	2.5
60	25	19,054	-48.8		24	26.2	30	19,376	-59.9		32	8.2	28	19,443	-62.6		03	1.7	29	19,352	-58.6		31	8.4	27	19,513	-66.6		10	4.8
50	25	20,252	-48.8		24	27.2	30	20,518	-58.6		33	5.9	27	20,571	-60.3		07	3.6	29	20,498	-58.4		34	5.4	23	20,627	-62.2		09	6.2
40	25	21,716	-49.5		24	28.6	29	21,922	-57.4		35	4.9	26	21,971	-58.1		07	5.7	29	21,904	-57.6		36	4.7	18	22,019	-57.6		09	11.5
30	24	23,602	-50.2		24	33.4	28	23,746	-56.0		03	4.5	25	23,792	-55.8		07	7.0	29	23,724	-56.6		02	5.1	13	23,854	-52.8		09	14.7
25	24	24,792	-49.9		25	35.3	27	24,909	-55.7		03	6.1	24	24,956	-55.0		07	8.1	26	24,883	-56.0		03	5.8	11	25,036	-48.9		09	17.6
20	23	26,241	-50.6		25	35.2	26	26,336	-54.8		03	5.9	22	26,386	-53.6		07	7.8	25	26,306	-55.8		01	5.8	8	26,498	-45.9			
15	18	28,145	-49.9		26	38.1	25	28,181	-53.7		03	5.5	20	28,245	-51.9		06	8.3	22	28,148	-54.3		35	9.0						
10	8	30,910	-48.5				19	30,813	-51.7		03	7.6	15	30,887	-50.3		06	8.1	10	30,759	-52.0									
7							11	33,153	-49.4		34	6.1	9	33,210	-48.5															
5							6	35,304	-46.1																					

Standard pressure surface (mb.)	* PEORIA, ILL. 993 MB						* PITTSBURGH, PA. 974 MB						+ PONAPE, CAROLINE IS. 1004 MB						PORTLAND, MAINE 1012 MB						* QUILLAYUTE, WASH. 1010 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	200	.2	-3.3	25	1.4	30	359	.9	-2.7	24	3.2	30	39	28.2	24.7	08	2.1	30	20	-.6	-3.9	28	1.8	30	58	6.0	5.0	07	1.2
1000	30	144					30	142					30	70	27.8	23.7	08	3.2	30	112	.4	-4.8	28	2.5	30	139	7.1	4.4	07	1.7
950	30	557	.9	-5.4	29	5.5	30	556	.9	-3.0	25	5.9	30	521	24.2	19.2	08	5.4	30	522	-.1	-5.4	28	6.1	30	564	6.9	.6	18	2.2
900	30	990	-.2	-7.9	30	8.2	30	988	-1.6	-4.3	26	9.3	30	996	21.2	15.7	08	6.0	30	956	-2.0	-6.8	27	6.6	30	1,005	4.9	-3.0	22	3.9
850	30	1,447	-1.8	-10.2	30	9.4	30	1,442	-3.9	-7.4	27	10.3	30	1,490	18.7	12.0	08	6.6	30	1,409	-4.0	-10.4	27	7.1	30	1,470	2.7	-5.4	24	4.3
800	30	1,928	-3.6	-12.0	29	11.3	30	1,919	-5.8	-10.5	27	12.1	30	2,009	16.2	8.4	08	6.1	30	1,885	-6.0	-12.7	26	8.4	30	1,958	.3	-7.6	25	5.4
750	30	2,437	-5.7	-14.1	29	13.2	30	2,422	-7.7	-14.7	27	14.1	30	2,553	13.6	4.7	08	5.8	30	2,388	-8.6	-16.0	25	9.0	30	2,472	-2.1	-11.7	26	6.4
700	30	2,977	-7.4	-17.5	29	15.5	30	2,957	-9.9	-17.7	28	16.4	30	3,136	10.6	-.1	08	6.1	30	2,922	-10.9	-18.7	25	10.9	30	3,019	-5.0	-14.6	27	7.5
650	30	3,552	-10.1	-20.9	29	18.4	30	3,524	-12.3	-22.2	28	18.1	30	3,745	7.1	-4.0	08	6.5	30	3,485	-13.7	-23.5	25	12.8	30	3,593	-8.3	-17.8	28	8.8
600	30	4,166	-13.4	-26.0	29	21.2	30	4,135	-15.4	-25.2	28	20.0	30	4,405	3.4	-7.8	08	7.0	30	4,093	-17.2	-26.5	25	15.8	30	4,215	-11.8	-21.2	28	11.1
550	30	4,822	-17.5	-30.1	29	22.0	30	4,786	-19.3	-29.7	28	22.2	30	5,101	-.5	-12.2	08	6.5	30	4,733	-21.1	-30.2	25	16.9	30	4,871	-15.7	-25.4	28	13.2
500	30	5,531	-21.9	-34.3	29	25.0	30	5,490	-23.5	-33.9	28	25.0	30	5,863	-4.8	-16.2	08	7.2	30	5,438	-25.6	-35.4	25	17.9	30	5,588	-20.6	-30.7	28	13.6
450	30	6,298	-27.2	-38.0	29	26.8	30	6,247	-28.4	-37.9	27	27.6	30	6,682	-9.5	-21.1	09	5.5	30	6,185	-31.2	-38.9	25	18.7	30	6,354	-25.9	-35.0	28	15.3
400	30	7,137	-33.2	-43.1	29	29.9	30	7,088	-33.9	-42.7	27	29.5	30	7,588	-14.9	-27.0	08	3.8	30	7,020	-36.9	-43.2	25	20.5	30	7,203	-31.6	-38.9	28	17.7
350	30	8,064	-39.4	-47.5	29	33.5	30	8,012	-39.6	-44.4	28	31.3	30	8,585	-21.7	-33.8	08	2.3	30	7,933	-41.8	-47.5	25	21.6	30	8,135	-38.3	-45.2	27	17.5
300	30	9,103	-46.3		28	36.2	30	9,053	-45.5		27	34.0	30	9,702	-29.9	-42.1	11	1.3	30	8,967	-46.3		25	24.6	30	9,179	-45.5		28	18.5
250	30	10,301	-51.2		28	38.1	30	10,255	-49.9		27	36.4	30	10,975	-39.9	-50.8	16	1.9	30	10,169	-49.6		25	25.8	30	10,375	-51.9		28	20.4
200	29	11,748	-53.1		28	36.4	30	11,706	-51.7		27	36.5	30	12,459	-52.4		15	1.9	30	11,622	-51.0		25	25.4	30	11,809	-54.9		28	18.0
175	29	12,606	-54.5		28	34.7	30	12,569	-53.1		26	32.7	30	13,308	-59.4		14	2.4	30	12,490	-51.6		25	24.7	30	12,662	-55.2		28	17.5
150	29	13,588	-56.7		29	30.8	30	13,557	-55.6		27	31.0	30	14,257	-66.7		10	3.2	30	13,486	-53.1		25	23.6	30	13,643	-56.7		28	16.1
125	29	14,741	-58.1		28	26.0	30	14,713	-57.6		27	26.0	30	15,339	-74.1		07	5.9	30	14,656	-54.8		25	20.7	30	14,795	-58.0		29	13.9
100	28	16,140	-59.7		28	20.6	30	16,117	-58.9		28	21.2	30	16,617	-80.1		08	10.5	29	16,072	-56.2		25	17.7	28	16,201	-59.5		28	10.2
80	28	17,532	-60.3		29	14.9	28	17,518	-58.6		28	14.7	30	17,879	-78.3		08	7.1	28	17,489	-56.3		26	13.9	27	17,598	-56.7		29	7.1
70	28	18,365	-59.5		30	11.8	28	18,356	-58.7		27	11.1	30	18,650	-73.0		06	2.8	28	18,335	-56.8		26	11.5	25	18,437	-57.1		30	6.0
60	28	19,332	-58.5		30	8.8	28	19,324	-58.1		27	9.2	30	19,564	-67.9		27	1.8	26	19,312	-57.3		26	9.6	25	19,413	-56.5		30	5.4
50	27	20,480	-58.1		30	6.0	28	20,473	-57.8		28	7.6	29	20,669	-64.1		25	1.4	28	20,465	-57.1		27	7.6	23	20,571	-55.5		33	4.8
40	27	21,886	-57.8		31	4.3	27	21,883	-57.0		29	6.9	28	22,046	-60.3		09	4.8	27	21,877	-57.1		28	7.2	23	21,995	-54.8		01	5.5
30	27	23,705	-56.7		33	5.7	27	23,704	-56.9		30	6.2	26	23,661	-55.6		09	16.8	27	23,694	-57.4		29	8.3	23	23,843	-52.9		04	5.9
25	27	24,862	-56.0		33	5.4	27	24,860	-56.2		30	7.7	20	25,032	-53.0		09	23.5	27	24,847	-56.8		30	8.7	22	25,027	-52.4		05	6.4
20	27	26,283	-55.4		33	6.0	27	26,282	-54.8		31	7.6	13	26,474	-48.9		09	29.0	26	26,256	-55.8		30	8.0	19	26,477	-52.2		05	9.7
15	27	28,121	-54.1		31	8.8	24	28,136	-52.5		29	9.5	5	28,353	-44.3				23	28,087	-55.0		29	10.1	18	28,330	-52.4		05	13.6
10	27	30,743	-49.8		29	11.1	23	30,774	-49.3		27	14.7							15	30,66[illegible]	-51.8		28	21.9	14	30,952	-52.5		05	14.1
7	23	33,112	-47.3		28	12.7	21	33,134	-46.9		27	18.3							8	32,995	-49.3				6	33,315	-50.4			
5	9	35,351	-45.2				11	35,459	-43.7																					

Standard pressure surface (mb.)	RAPID CITY, S. DAK. 904 MB						ST CLOUD, MINN. 977 MB						ST PAUL IS., ALASKA 997 MB						SALEM, OREG. 1011 MB						SALT LAKE CITY, UTAH 873 MB					
	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	966	-2.7	-9.7	32	3.0	30	316	-3.2	-7.4	29	1.7	30	10	2.1	-.9	08	1.4	30	61	6.2	3.9	19	1.4	30	1,288	2.4	-3.6	16	1.8
1000	30	161					30	132					30	-18			26	2.8	30	151	7.0	3.9	22	.3	30	180				
950	30	573					30	541	-3.6	-7.4	30	4.4	30	394	-.5	-2.4	29	.6	30	574	7.3	2.3	19	1.3	30	60[illegible]				
900	30	1,003			32	3.6	30	965	-4.4	-9.1	30	7.0	30	826	-3.7	-4.8	23	1.6	30	1,018	6.7	-.8	21	3.0	30	1,044				
850	30	1,464	1.1	-8.8	32	7.5	30	1,416	-4.5	-12.0	31	8.8	30	1,275	-6.4	-8.7	23	3.0	30	1,486	4.8	-2.7	24	3.7	30	1,510	5.7	-4.4	18	2.4
800	30	1,950	-.9	-11.2	32	10.0	30	1,892	-6.2	-14.0	30	10.2	30	1,747	-9.0	-12.9	23	3.9	30	1,978	2.2	-5.6	27	4.5	30	2,005	4.2	-7.5	21	3.1
750	30	2,457	-3.7	-14.0	32	11.5	30	2,394	-8.1	-17.8	30	11.7	30	2,244	-12.1	-17.2	23	4.8	30	2,496	-.4	-9.2	27	5.4	30	2,526	.7	-9.8	25	5.0
700	30	3,004	-6.8	-16.9	31	13.0	30	2,930	-10.3	-21.1	30	12.8	30	2,770	-15.4	-21.6	23	5.8	30	3,047	-3.4	-11.6	28	6.5	30	3,078	-2.8	-12.5	27	7.7
650	30	3,572	-10.0	-19.9	30	13.6	30	3,494	-13.2	-24.2	30	14.0	30	3,326	-18.9	-26.2	23	6.9	30	3,624	-6.7	-15.[illegible]	27	8.0	30	3,657	-6.0	-16.5	28	9.8
600	30	4,192	-13.7	-23.6	30	14.5	30	4,103	-16.6	-26.5	30	15.5	30	3,918	-22.7	-30.4	23	7.7	30	4,251	-10.3	-16.5	28	9.9	30	4,284	-9.4	-21.0	26	11.8
550	30	4,839	-18.1	-28.0	30	16.1	30	4,749	-20.6	-30.6	30	18.4	30	4,548	-26.9	-34.4	23	8.4	30	4,912	-14.3	-23.7	28	11.1	30	4,945	-13.7	-22.8	28	13.3
500	30	5,553	-22.8	-32.3	30	18.8	30	5,451	-25.3	-34.4	30	20.8	30	5,232	-31.9	-38.7	23	8.9	30	5,632	-19.0	-2[illegible]	26	12.2	30	5,67[illegible]	-18.3	-27.[illegible]	28	16.6
450	30	6,311	-27.8	-35.9	30	22.1	30	6,202	-30.4	-38.1	30	23.3	30	5,968	-37.2	-41.2	23	9.4	30	6,403	-24.0	-33.3	28	13.6	30	6,441	-23.1	-32.4	26	19.6
400	30	7,154	-33.7	-41.1	29	23.5	30	7,037	-36.3	-41.2	30	26.1	30	6,775	-42.4	-43.2	23	11.0	30	7,258	-30.2	-36.9	28	14.0	30	7,4[illegible]	-29.1	-37.8	28	21.3
350	30	8,079	-39.9	-46.0	29	25.3	30	7,951	-42.8	-46.6	30	28.2	30	7,667	-47.9		23	12.6	30	8,193	-37.6	-43.8	28	15.2	30	8,244	-35.7	-43.0	29	22.2
300	30	9,117	-46.1		29	28.1	30	8,980	-48.3		30	30.2	30	8,673	-51.7		22	16.5	30	9,240	-44.8		26	17.7	30	9,2[illegible]	-43.1	-45.5	29	23.8
250	29	10,323	-50.6		29	31.8	30	10,172	-52.0		30	32.5	30	9,853	-52.1		23	18.3	30	10,441	-51.6		27	20.9	30	10,5[illegible]	-5[illegible]		28	26.3
200	29	11,767	-53.7		29	32.8	29	11,615	-52.9		30	30.6	29	11,304	-50.6		23	20.0	30	11,673	-55.4		27	23.0	30	11,950	-55.[illegible]		28	25.7
175	29	12,622	-55.0		29	31.0	29	12,477	-53.1		30	28.7	29	12,176	-49.6		23	20.8	30	12,722	-57.0		27	20.6	30	12,798	-57.5		28	25.0
150	29	13,603	-57.1		29	27.1	29	13,469	-54.2		30	26.1	29	13,186	-49.1		23	21.0	30	13,695	-58.2		27	18.9	29	13,765	-59.4		28	22.0
125	29	14,752	-56.8		29	23.7	29	14,635	-55.1		30	22.8	29	14,383	-48.8		23	21.2	30	14,636	-60.6		28	14.3	29	14,697	-62.8		28	18.1
100	28	16,144	-59.5		29	18.7	29	16,057	-56.4		30	18.0	29	15,851	-48.1		23	20.9	30	16,220	-61.4		28	11.1	29	16,266	-63.9		29	14.3
80	27	17,538	-59.2		30	14.1	29	17,472	-56.7		30	14.9	29	17,322	-48.1		23	19.7	30	17,[illegible]	-6[illegible].7		29	6.1	28	17,636	-62.9		30	9.8
70	27	18,374	-59.1		31	10.7	29	18,317	-56.8		31	12.7	29	18,201	-48.2		23	19.5	30	18,437	-60.5		3[illegible]	5.[illegible]	28	18,458	-62.4		31	6.9
60	27	19,343	-58.4		31	8.2	29	19,294	-56.9		31	10.1	29	19,217	-47.7		23	16.7	29	19,408	-59.5		33	3.4	28	19,414	-6[illegible]		33	4.3
50	27	20,491	-58.0		34	6.7	29	20,449	-56.3		33	8.1	29	20,420	-48.1		23	15.8	28	20,559	-57.9		01	3.3	26	2[illegible],548	-59.2		35	3.2
40	26	21,903	-57.0		36	6.1	28	21,868	-56.6		33	7.4	28	21,890	-48.0		23	14.1	27	21,968	-56.7		05	4.9	[illegible]	21,949	-5[illegible]		03	5.1
30	24	23,728	-56.3		01	6.1	28	23,691	-56.8		35	6.6	27	23,787	-47.4		23	14.1	25	[illegible]	-54.9		05	6.9	24	23,765	-56.4		05	7.2
25	23	24,888	-56.1		01	7.0	27	24,848	-56.7		35	7.9	27	24,992	-47.3		23	13.4	25	24,[illegible]	-54.5		05	9.0	23	24,926	-55.7		05	7.7
20	21	26,298	-55.9		01	7.9	26	26,265	-56.6		36	8.3	26	26,475	-47.5		23	13.7	23	26,406	-53.8		05	12.3	23	26,349	-55.1		05	8.7
15	19	28,116	-56.8		35	9.6	25	28,100	-55.4		36	9.1	26	28,375	-47.6		24	14.8	17	28,278	-5[illegible]		06	13.6	2[illegible]	28,198	-54.0		05	9.0
10	10	30,639	-55.5				19	30,684	-53.7		36	12.5	19	31,032	-47.9		24	21.4	8	30,973	-49.9				1[illegible]	3[illegible],634	-52.[illegible]			
7							8	33,032	-50.9				6	33,157	-52.1															

See reference note at end of table

SAN DIEGO, CALIF. 1001 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	124	14.0	11.9	06	.8
1000	30	129			04	.8
950	30	565	15.3	7.8	14	1.0
900	30	1,024	15.0	1.9	18	1.6
850	30	1,506	12.5	-1.5	19	2.7
800	30	2,012	9.6	-4.7	19	3.7
750	30	2,540	6.5	-7.6	20	4.1
700	30	3,108	3.8	-12.3	21	4.0
650	30	3,703	.6	-16.6	22	5.5
600	30	4,344	-3.4	-21.1	22	5.9
550	30	5,019	-7.8	-25.2	23	6.1
500	30	5,763	-12.8	-29.5	25	7.4
450	30	6,550	-18.6	-33.4	25	8.7
400	30	7,426	-25.3	-38.5	24	10.6
350	30	8,383	-32.3	-43.9	24	14.8
300	30	9,452	-40.5	-48.5	24	16.6
250	30	10,674	-48.3		24	18.3
200	30	12,116	-56.3		25	15.6
175	30	12,959	-59.3		25	13.9
150	30	13,917	-62.7		25	11.1
125	30	15,031	-66.0		25	12.0
100	30	16,377	-67.4		26	7.4
80	30	17,716	-68.4		27	4.5
70	30	18,519	-67.0		27	2.7
60	30	19,454	-64.5		34	.7
50	30	20,575	-61.7		06	2.8
40	30	21,965	-59.0		07	4.2
30	30	23,779	-56.5		06	5.2
25	30	24,941	-54.8		07	5.1
20	28	26,376	-53.2		06	3.9
15	28	28,235	-51.5		01	3.2
10	23	30,691	-49.6		30	6.2
7	14	33,230	-47.7			
5						

* SAN JUAN, P. R. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	6	24.9	21.5	14	1.3
1000	30	123	24.5	20.6	11	3.8
950	30	571	21.6	18.2	06	6.5
900	30	1,040	18.6	14.5	08	6.2
850	30	1,528	15.6	10.3	08	6.0
800	30	2,042	13.1	6.0	08	5.2
750	30	2,578	10.9	-.3	08	4.3
700	30	3,156	8.2	-5.0	08	3.5
650	30	3,756	5.2	-10.1	07	2.6
600	30	4,415	2.1	-15.3	05	3.6
550	30	5,105	-1.6	-20.5	03	2.8
500	30	5,866	-6.3	-25.7	36	3.0
450	30	6,675	-11.6	-30.9	35	4.1
400	30	7,573	-18.1	-36.3	34	5.0
350	30	8,556	-25.4	-42.3	32	5.3
300	30	9,656	-34.1	-49.3	30	7.2
250	30	10,905	-43.9		31	10.9
200	30	12,366	-55.3		30	12.2
175	30	13,205	-61.6		29	12.6
150	30	14,146	-67.6		28	13.3
125	30	15,228	-73.3		29	11.1
100	30	16,518	-77.3		30	8.3
80	30	17,800	-75.3		32	3.4
70	30	18,576	-72.2		02	1.4
60	30	19,495	-67.2		06	1.8
50	30	20,607	-62.8		07	3.2
40	28	21,999	-57.5		06	5.8
30	27	23,838	-52.3		09	10.7
25	26	25,025	-49.6		09	12.4
20	25	26,492	-46.6		10	15.3
15	25	28,409	-44.3		10	14.7
10	18	31,145	-40.6		08	10.0
7	15	33,602	-34.8		12	1.8
5						

* SAULT STE MARIE, MICH. 985 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	221	-2.0	-3.7	30	.9
1000	30	98				
950	30	502	-3.1	-5.1	28	3.5
900	30	932	-5.5	-6.6	29	6.3
850	30	1,379	-8.0	-10.0	29	8.0
800	30	1,849	-9.8	-13.5	29	8.2
750	30	2,345	-11.9	-15.9	29	9.7
700	30	2,872	-13.7	-19.2	29	10.5
650	30	3,431	-16.3	-21.5	29	11.3
600	30	4,031	-19.7	-25.3	28	11.7
550	30	4,668	-23.4	-29.8	28	13.2
500	30	5,363	-28.1	-34.6	28	14.4
450	30	6,105	-33.4	-37.8	28	15.7
400	30	6,929	-39.2	-41.8	28	16.7
350	30	7,832	-44.5		28	18.5
300	30	8,855	-48.5		28	20.0
250	30	10,048	-50.2		28	20.4
200	30	11,506	-50.3		28	21.7
175	30	12,376	-50.7		28	21.1
150	30	13,380	-51.4		28	19.6
125	30	14,560	-52.8		28	18.4
100	30	15,996	-53.9		28	16.3
80	30	17,427	-54.5		29	13.0
70	30	18,280	-54.8		29	10.7
60	30	19,265	-55.3		29	9.6
50	30	20,427	-55.8		30	8.9
40	30	21,847	-56.0		31	8.4
30	30	23,674	-56.3		32	7.8
25	30	24,831	-56.5		33	7.8
20	30	26,248	-56.0		33	8.5
15	29	28,087	-54.7		32	9.4
10	26	30,703	-51.7		32	11.2
7	23	33,022	-50.0		31	14.3
5	11	35,233	-47.3			

SHEMYA, ALASKA 998 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	27	38	1.5	-1.0	30	2.1
1000	27	19			24	4.9
950	27	428	-1.3	-4.6	29	3.1
900	27	858	-4.6	-7.5	29	4.3
850	27	1,306	-7.6	-10.5	29	4.5
800	27	1,776	-10.8	-14.9	29	5.0
750	27	2,272	-13.9	-19.7	28	5.8
700	27	2,790	-16.7	-25.0	27	6.1
650	27	3,343	-20.2	-29.3	28	6.9
600	27	3,932	-24.0	-33.1	28	8.9
550	27	4,559	-28.1	-36.8	27	9.6
500	27	5,240	-32.9	-41.8	27	10.8
450	27	5,972	-38.6	-45.5	26	11.8
400	27	6,775	-44.4	-47.0	26	13.0
350	27	7,660	-50.1		26	13.9
300	27	8,657	-54.7		26	15.7
250	27	9,822	-54.5		26	17.7
200	27	11,258	-52.0		25	19.5
175	27	12,124	-51.3		25	20.2
150	27	13,126	-50.5		25	21.9
125	27	14,317	-49.8		24	20.8
100	27	15,779	-49.0		24	20.4
80	27	17,244	-48.8		23	19.1
70	27	18,122	-48.3		23	18.6
60	27	19,137	-48.6		23	17.6
50	26	20,336	-49.0		23	15.2
40	26	21,801	-48.9		22	13.9
30	26	23,691	-48.8		22	13.6
25	26	24,890	-48.4		21	13.8
20	26	26,359	-48.4		21	13.0
15	26	28,254	-48.2		21	14.3
10	23	30,938	-47.6		22	15.2
7	15	33,246	-46.9			
5	5	35,509	-45.5			

* SHREVEPORT, LA. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	79	8.4	5.7	15	.3
1000	30	158			12	1.0
950	30	590	11.3	1.6	23	3.0
900	30	1,039	10.2	-.2	26	6.0
850	30	1,513	8.6	-4.1	26	7.6
800	30	2,013	6.7	-6.4	27	9.5
750	30	2,540	4.1	-8.0	27	10.6
700	30	3,099	1.2	-11.4	27	11.9
650	30	3,693	-1.9	-15.4	27	14.1
600	30	4,326	-5.3	-18.4	27	16.5
550	30	5,002	-9.4	-22.4	27	18.8
500	30	5,736	-13.8	-25.7	27	21.4
450	30	6,525	-19.2	-29.3	27	24.6
400	30	7,396	-25.3	-36.4	27	26.7
350	30	8,353	-31.9	-42.5	27	30.8
300	30	9,424	-39.9	-49.0	28	33.7
250	30	10,646	-48.4		28	36.5
200	30	12,087	-56.4		28	37.2
175	30	12,926	-60.5		28	33.7
150	30	13,877	-64.0		28	29.3
125	30	14,985	-66.8		28	25.5
100	30	16,325	-68.9		28	21.7
80	29	17,662	-68.7		28	13.1
70	27	18,462	-67.3		29	8.0
60	27	19,396	-64.9		29	6.0
50	27	20,516	-62.0		30	4.0
40	27	21,905	-59.2		31	2.7
30	26	23,721	-56.1		30	2.6
25	25	24,891	-53.7		29	3.7
20	23	26,334	-52.0		28	6.5
15	20	28,206	-50.1		27	12.7
10	17	30,880	-47.0		27	19.1
7	13	33,245	-45.7		26	22.7
5	5	35,478	-42.4			

SPOKANE, WASH. 935 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	717	.5	-2.2	16	1.2
1000	30	168				
950	30	583				
900	30	1,019	2.0	-3.0	18	1.5
850	30	1,480	1.1	-6.2	22	4.3
800	30	1,966	-1.1	-10.0	24	5.0
750	30	2,475	-3.4	-12.3	26	5.7
700	30	3,021	-6.6	-16.6	27	7.7
650	30	3,591	-9.6	-20.9	28	9.4
600	30	4,211	-13.1	-23.1	28	11.3
550	30	4,862	-16.9	-25.6	29	13.8
500	30	5,579	-21.0	-29.9	29	16.7
450	30	6,341	-26.3	-33.7	29	19.8
400	30	7,191	-32.2	-38.9	29	22.2
350	30	8,121	-38.5	-43.9	30	24.5
300	30	9,165	-45.3		29	26.4
250	30	10,364	-51.2		29	29.4
200	30	11,802	-54.6		29	28.3
175	30	12,657	-54.4		29	25.6
150	29	13,639	-55.3		29	22.0
125	29	14,797	-57.1		29	18.1
100	29	16,202	-58.8		29	14.0
80	29	17,606	-58.0		30	10.3
70	29	18,447	-57.6		30	7.8
60	29	19,421	-56.5		32	6.4
50	29	20,579	-55.8		34	4.9
40	26	22,000	-54.8		36	5.1
30	28	23,846	-53.4		02	6.4
25	27	25,018	-53.4		03	8.4
20	24	26,464	-53.1		04	9.4
15	19	28,325	-53.0		04	10.9
10	12	30,979	-52.5			
7						
5						

SWAN ISLAND, W. I. 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	10	26.0	22.2	03	4.7
1000	30	116	25.1	21.4	03	5.8
950	30	572	21.7	18.9	05	6.6
900	30	1,035	18.9	15.0	05	6.3
850	30	1,525	16.4	9.9	05	5.9
800	30	2,040	13.7	6.1	06	5.1
750	30	2,584	11.3	1.6	07	5.1
700	30	3,157	8.7	-3.1	08	5.6
650	30	3,769	6.0	-8.1	08	5.3
600	30	4,418	2.1	-11.4	09	4.8
550	30	5,109	-2.0	-16.2	09	4.7
500	30	5,867	-6.7	-20.4	08	4.6
450	30	6,681	-12.1	-25.9	08	3.9
400	29	7,574	-18.1	-31.3	08	2.8
350	29	8,558	-25.1	-38.7	03	1.5
300	29	9,659	-33.7	-46.0	30	2.2
250	29	10,911	-43.7		27	5.7
200	29	12,371	-55.6		25	9.3
175	28	13,207	-62.3		26	10.7
150	28	14,144	-68.9		27	10.3
125	26	15,222	-73.5		28	6.5
100	26	16,516	-76.6		33	5.4
80	25	17,791	-77.4		02	3.8
70	25	18,563	-73.8		05	2.8
60	24	19,479	-67.7		07	3.1
50	24	20,591	-62.9		09	4.9
40	22	21,981	-56.1		09	7.4
30	20	23,815	-52.6		09	10.2
25	17	24,999	-50.1		09	13.4
20	16	26,466	-47.4		09	16.0
15	15	28,386	-43.4		09	14.8
10	11	31,133	-42.1			
7						
5						

TAMPA, FLA. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	8	14.5	12.2	04	2.0
1000	30	158	16.3	12.8	05	3.1
950	30	597	15.7	9.8	01	.7
900	30	1,053	13.4	5.9	26	2.8
850	30	1,534	11.8	.4	25	4.2
800	30	2,040	10.3	-6.0	26	5.0
750	30	2,578	8.2	-9.9	27	6.4
700	30	3,142	5.0	-11.8	27	7.6
650	30	3,740	1.9	-15.6	27	9.5
600	30	4,385	-1.6	-19.5	27	11.3
550	30	5,066	-5.4	-23.6	27	13.5
500	30	5,816	-10.0	-28.1	27	15.6
450	30	6,619	-15.3	-31.4	27	19.0
400	30	7,501	-21.5	-34.8	27	23.1
350	30	8,471	-28.5	-41.2	27	26.9
300	30	9,558	-36.8	-48.4	27	28.8
250	30	10,797	-45.9		27	32.2
200	30	12,248	-56.5		27	34.5
175	30	13,084	-61.8		27	31.9
150	30	14,028	-66.4		27	30.5
125	30	15,123	-69.8		28	26.3
100	30	16,443	-72.1		28	18.8
80	30	17,755	-71.7		29	12.0
70	30	18,545	-69.7		29	7.6
60	30	19,471	-66.5		29	4.2
50	30	20,585	-62.4		27	2.7
40	30	21,977	-57.8		27	2.1
30	30	23,815	-52.8		29	4.0
25	29	24,998	-50.3		28	4.4
20	28	26,462	-48.4		28	5.5
15	26	28,367	-45.9		26	9.7
10	10	31,058	-43.5			
7						
5						

TOPEKA, KANS. 987 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	269	1.5	-1.0	28	1.3
1000	30	160				
950	30	573	4.0	-3.1	29	3.9
900	30	1,015	3.3	-5.6	30	5.8
850	30	1,477	1.7	-6.8	29	7.4
800	30	1,965	-.1	-10.3	29	9.7
750	30	2,477	-1.4	-14.0	29	11.8
700	30	3,029	-4.2	-16.7	29	12.7
650	30	3,605	-7.3	-19.2	29	16.0
600	30	4,231	-11.1	-23.3	29	17.7
550	30	4,890	-15.3	-27.5	29	17.7
500	30	5,608	-19.5	-32.1	29	20.8
450	30	6,379	-24.8	-36.4	29	22.9
400	30	7,232	-30.9	-40.9	29	25.5
350	30	8,168	-37.2	-45.2	29	28.4
300	30	9,219	-43.8	-48.7	29	31.4
250	30	10,426	-50.3		29	35.4
200	29	11,866	-54.7		29	36.3
175	29	12,716	-56.9		29	33.9
150	29	13,689	-58.6		29	31.6
125	29	14,828	-61.1		29	25.9
100	29	16,206	-62.9		29	21.2
80	29	17,582	-62.2		29	15.3
70	29	18,407	-61.7		30	10.5
60	29	19,364	-61.1		31	7.9
50	29	20,500	-59.9		32	4.5
40	28	21,898	-58.4		35	4.2
30	27	23,713	-56.6		35	3.8
25	27	24,871	-55.8		34	4.8
20	27	26,295	-54.5		33	5.0
15	24	28,133	-53.1		33	7.1
10	21	30,758	-50.2		30	10.4
7	14	33,101	-48.5			
5	5	35,339	-47.2			

* TRUK, CAROLINE IS. 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	2	28.6	24.4	04	2.0
1000	30	83	27.6	22.8	05	2.6
950	30	532	23.6	17.9	07	3.6
900	30	1,007	20.5	13.5	08	4.5
850	30	1,501	17.9	9.6	09	4.0
800	30	2,018	15.3	5.2	09	4.0
750	30	2,563	12.4	1.5	09	3.5
700	30	3,140	9.7	-2.4	08	3.0
650	30	3,752	6.3	-7.0	07	4.6
600	30	4,405	2.4	-10.4	07	5.4
550	30	5,101	-1.4	-15.2	08	4.2
500	30	5,859	-5.5	-20.2	08	5.6
450	29	6,678	-10.2	-25.4	09	5.1
400	29	7,580	-15.7	-31.0	09	3.4
350	29	8,574	-22.5	-37.9	07	2.0
300	29	9,688	-30.7	-45.5	06	2.0
250	29	10,957	-41.0	-53.6	07	2.2
200	29	12,434	-53.6		07	3.1
175	29	13,280	-60.7		06	2.9
150	29	14,223	-68.1		06	5.8
125	29	15,298	-75.5		06	9.7
100	29	16,570	-81.2		08	11.6
80	29	17,825	-79.1		08	8.1
70	29	18,593	-73.5		07	3.4
60	29	19,507	-68.2		09	1.2
50	29	20,611	-64.4		25	.9
40	27	21,988	-59.7		09	5.2
30	26	23,804	-56.2		09	17.5
25	26	24,969	-53.0		09	25.8
20	25	26,418	-48.3		09	31.8
15	21	28,332	-43.6		09	34.6
10	12	31,073	-38.6			
7	7	33,493	-36.5			
5						

* TUCSON, ARIZ. 926 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	789	11.3	.3	13	3.5
1000	30	141				
950	30	577				
900	30	1,031	15.8	1.4	14	4.2
850	30	1,514	13.6	-1.1	17	2.2
800	30	2,022	10.3	-3.9	22	2.8
750	30	2,552	6.8	-7.5	24	4.5
700	30	3,119	3.6	-12.1	25	5.4
650	30	3,711	.4	-16.5	26	6.4
600	30	4,356	-3.2	-21.2	27	8.4
550	30	5,027	-7.2	-24.1	27	11.0
500	30	5,776	-12.3	-29.0	27	12.5
450	30	6,564	-18.0	-32.1	27	14.7
400	30	7,444	-24.1	-36.7	26	15.5
350	30	8,405	-31.2	-42.6	26	17.9
300	30	9,479	-39.2	-48.9	26	20.7
250	29	10,709	-48.1		26	23.8
200	29	12,150	-56.7		26	22.3
175	29	12,988	-60.8		26	20.3
150	29	13,940	-63.8		27	16.3
125	29	15,048	-67.5		27	13.8
100	21	16,387	-69.2		27	8.5
80	27	17,717	-69.5		26	5.6
70	27	18,515	-67.8		31	3.1
60	28	19,451	-65.1		01	1.9
50	28	20,564	-62.5		04	2.5
40	28	21,955	-59.6		06	3.1
30	28	23,768	-56.3		05	2.8
25	25	24,93[illegible]	-54.8		04	2.0
20	24	26,359	-53.1		34	2.9
15	21	28,215	-52.0		30	4.6
10	19	30,663	-50.0		28	11.8
7	16	33,201	-47.0		27	12.7
5	5	35,474	-44.3			
4						

* VANDENBERG AFB, CALIF. 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	26	100	11.6	9.3	10	.8
1000	28	133	12.7	9.9	07	.9
950	28	570	14.6	6.3	04	1.0
900	28	1,023	13.6	.3	14	1.3
850	28	1,502	11.6	-2.6	16	3.2
800	28	2,007	8.9	-5.2	18	4.2
750	28	2,535	6.5	-12.0	19	3.6
700	28	3,101	3.5	-15.2	21	3.9
650	28	3,693	.1	-17.7	23	4.2
600	28	4,335	-4.1	-20.8	23	5.6
550	28	5,009	-8.7	-25.7	24	6.0
500	28	5,747	-13.6	-29.7	24	7.1
450	28	6,530	-19.5	-32.8	25	7.7
400	28	7,403	-26.1	-38.6	25	9.4
350	28	8,355	-33.7	-44.3	25	9.7
300	26	9,417	-41.9	-47.3	25	11.6
250	28	10,634	-49.0		25	12.9
200	28	12,075	-56.0		25	13.7
175	28	12,918	-59.3		26	13.0
150	28	13,875	-62.5		26	10.2
125	28	14,993	-65.1		26	8.6
100	28	16,343	-67.6		26	6.2
80	27	17,694	-67.7		29	3.6
70	27	18,434	-66.4		30	2.4
60	27	19,436	-64.6		05	1.4
50	27	20,556	-61.9		06	3.9
40	26	21,944	-59.6		07	4.9
30	25	23,752	-57.2		07	6.2
25	25	24,908	-55.8		07	6.3
20	24	26,336	-53.9		06	6.1
15	24	28,188	-52.9		05	5.0
10	22	30,621	-49.5		36	3.7
7	17	33,179	-47.3		36	4.8
5	9	35,431	-46.2			
4						

VICTORIA, TEXAS 1014 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	33	15.2	12.8	03	1.2
1000	30	156	15.8	12.3	07	2.1
950	30	588	14.6	8.6	17	3.0
900	30	1,049	13.1	6.0	21	2.7
850	30	1,529	11.7	1.4	24	3.7
800	30	2,035	9.8	-1.9	25	5.6
750	30	2,566	7.4	-5.1	26	7.1
700	30	3,135	4.7	-10.3	27	8.9
650	30	3,730	1.6	-13.5	27	10.2
600	30	4,377	-2.3	-17.0	27	12.8
550	30	5,057	-6.3	-21.4	27	14.0
500	30	5,802	-11.0	-26.7	27	16.6
450	30	6,599	-16.3	-31.0	27	18.1
400	30	7,480	-22.7	-35.7	27	20.2
350	30	8,446	-30.0	-42.6	27	22.2
300	30	9,526	-38.2	-49.0	27	23.9
250	30	10,758	-47.3		27	26.2
200	30	12,202	-57.1		27	27.4
175	29	13,038	-61.6		27	25.9
150	29	13,983	-65.9		27	24.4
125	29	15,081	-69.2		27	21.3
100	28	16,404	-71.7		27	16.1
80	28	17,717	-72.4		28	10.4
70	27	18,501	-70.6		28	6.3
60	27	19,423	-66.8		27	4.0
50	26	20,536	-62.5		27	2.0
40	25	21,923	-59.3		29	1.7
30	25	23,742	-55.5		28	2.7
25	25	24,908	-53.8		28	4.8
20	24	26,352	-51.9		28	7.9
15	24	28,226	-49.5		27	12.8
10	22	30,895	-47.0		27	20.6
7	11	33,501	-45.8			

* WAKE IS., PACIFIC AREA 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	26.2	23.0	07	6.8
1000	30	120	25.3	22.1	07	7.7
950	30	566	21.5	19.2	07	8.1
900	30	1,039	18.6	14.8	07	8.5
850	30	1,528	15.9	11.4	08	7.6
800	30	2,043	14.5	3.8	08	6.7
750	30	2,585	12.4	-3.0	08	6.3
700	30	3,163	9.6	-7.3	06	5.4
650	30	3,772	6.4	-12.4	08	4.5
600	30	4,427	2.7	-17.7	09	4.8
550	30	5,119	-1.5	-22.6	09	4.5
500	30	5,877	-6.5	-26.1	07	3.4
450	30	6,690	-11.7	-31.0	05	2.0
400	30	7,586	-17.6	-35.0	36	1.2
350	30	8,572	-24.7	-41.0	34	1.9
300	30	9,675	-33.1	-47.7	29	3.4
250	30	10,932	-42.7		26	5.5
200	30	12,403	-53.3		29	7.4
175	29	13,252	-58.9		30	5.5
150	29	14,205	-65.3		31	4.2
125	29	15,297	-72.2		33	2.5
100	29	16,588	-76.8		01	2.5
80	27	17,847	-76.9		07	3.1
70	27	18,612	-74.9		08	5.0
60	27	19,520	-68.4		09	6.7
50	27	20,627	-63.7		09	7.5
40	27	22,009	-59.3		09	9.0
30	27	23,834	-54.0		09	10.9
25	27	25,012	-51.0		09	11.5
20	27	26,473	-48.2		08	12.9
15	26	28,387	-44.5		09	10.9
10	23	31,102	-44.1		09	2.7
7	16	33,505	-41.6		24	5.0
5	14	35,813	-37.0		26	9.3
4	6	37,409	-31.8			

* WALLOPS IS., VA. NASA 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	4.3	.0	30	2.0
1000	30	151	6.4	-1.9	30	3.9
950	30	568	4.5	-4.4	29	6.4
900	30	1,010	2.1	-7.5	28	8.6
850	30	1,469	-.5	-10.5	28	9.4
800	30	1,953	-1.7	-13.9	27	10.8
750	30	2,467	-3.4	-17.2	27	13.1
700	30	3,010	-5.6	-18.9	27	15.4
650	30	3,585	-8.2	-20.1	27	17.7
600	30	4,207	-11.5	-23.9	27	21.6
550	30	4,864	-15.7	-28.0	27	24.2
500	30	5,582	-19.9	-31.9	27	27.7
450	30	6,350	-25.1	-36.5	27	31.7
400	30	7,202	-30.9	-42.4	27	33.5
350	30	8,136	-37.8	-46.5	27	35.0
300	30	9,183	-44.8		27	36.7
250	28	10,378	-50.9		28	37.6
200	28	11,819	-53.9		28	34.7
175	28	12,675	-55.3		27	31.6
150	28	13,653	-57.5		27	29.7
125	27	14,803	-60.2		27	23.7
100	27	16,187	-62.0		26	20.2
80	25	17,569	-62.2		26	15.5
70	25	18,396	-61.2		27	11.0
60	25	19,353	-60.4		27	7.6
50	25	20,491	-59.5		27	5.1
40	25	21,892	-58.1		26	4.7
30	24	23,704	-56.8		29	6.5
25	23	24,864	-55.9		29	7.8
20	21	26,295	-54.2		30	7.3
15	18	28,145	-51.9		28	11.6
10	13	30,775	-49.1			
7	6	33,100	-48.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

NOVEMBER 1967

Standard pressure surface (mb.)	WASHINGTON DULLES INT. AP 1008 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	30	85	1.2	-2.3	29	1.7
1000	30	147			30	2.4
950	30	565	3.2	-4.5	29	7.2
900	30	1,000	.6	-6.6	29	8.9
850	30	1,456	-2.0	-8.5	28	9.9
800	30	1,937	-3.0	-11.2	28	12.2
750	30	2,452	-4.6	-13.7	27	12.8
700	30	2,988	-6.9	-16.2	27	14.6
650	30	3,563	-9.5	-19.9	27	16.9
600	30	4,179	-13.2	-24.0	27	19.8
550	30	4,835	-16.9	-28.4	27	22.5
500	30	5,547	-21.0	-32.6	27	26.6
450	30	6,313	-26.4	-37.4	27	29.3
400	30	7,159	-32.1	-42.2	27	32.1
350	30	8,089	-38.5	-46.3	27	35.6
300	30	9,135	-44.9		27	36.7
250	30	10,338	-50.4		27	39.1
200	29	11,786	-53.1		27	36.0
175	29	12,644	-54.5		27	35.1
150	29	13,626	-56.9		27	30.8
125	29	14,776	-58.7		27	25.0
100	29	16,173	-60.1		27	21.5
80	29	17,561	-60.4		26	14.7
70	28	18,387	-60.3		27	11.8
60	26	19,351	-59.2		27	9.1
50	28	20,495	-58.2		28	6.6
40	28	21,902	-57.5		29	5.3
30	26	23,722	-56.7		29	6.0
25	27	24,877	-56.0		29	8.0
20	26	26,300	-54.6		28	9.2
15	26	28,150	-52.4		28	13.1
10	24	30,774	-50.0		27	20.8
7	17	33,127	-47.9		27	27.2
5	12	35,378	-46.3			

Standard pressure surface (mb.)	WINNEMUCCA, NEV. 871 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	30	1,310	.3	-5.2	16	1.2
1000	30	183				
950	30	601				
900	30	1,047				
850	30	1,506	5.0	-3.7	14	1.3
800	30	2,000	3.8	-6.9	22	2.8
750	30	2,520	1.1	-10.0	26	5.2
700	30	3,074	-1.8	-12.7	27	6.2
650	30	3,652	-5.4	-15.0	27	8.1
600	30	4,283	-8.7	-18.2	28	10.5
550	30	4,944	-12.8	-22.2	28	11.4
500	30	5,673	-17.7	-27.6	28	12.3
450	30	6,446	-23.0	-32.8	28	14.2
400	30	7,307	-28.6	-37.1	28	16.4
350	30	8,249	-35.9	-41.5	28	18.0
300	30	9,303	-43.4		28	20.3
250	30	10,51[illegible]	-50.3		28	22.5
200	30	11,948	-55.3		28	21.3
175	30	12,795	-57.6		27	20.4
150	30	13,762	-60.3		26	18.7
125	29	14,887	-62.5		26	14.5
100	29	16,258	-64.0		26	11.2
80	29	17,628	-63.3		30	6.9
70	27	18,449	-62.2		32	4.2
60	27	19,405	-60.4		36	2.3
50	26	20,542	-59.3		03	3.5
40	25	21,948	-57.7		05	4.5
30	23	23,772	-55.9		06	7.4
25	22	24,935	-55.1		06	8.7
20	21	26,363	-54.1		06	9.3
15	15	28,212	-53.3		06	9.5
10	8	30,836	-50.0			

Standard pressure surface (mb.)	WINSLOW, ARIZ. 853 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	30	1,492	1.6	-7.9	19	1.5
1000	30	[illegible]				
950	30	605				
900	30	1,052				
850	30	1,522			18	1.4
800	30	2,021	7.6	-3.3	26	2.8
750	30	2,547	5.0	-6.3	26	4.4
700	30	3,111	2.1	-10.7	27	4.9
650	30	3,701	-1.4	-14.4	27	6.3
600	30	4,339	-5.3	-17.6	26	7.5
550	30	5,007	-9.3	-21.5	27	9.2
500	30	5,747	-14.2	-25.6	27	10.3
450	30	6,533	-19.2	-29.9	27	12.5
400	30	7,404	-25.7	-35.8	26	14.7
350	30	8,359	-32.9	-43.3	27	18.1
300	30	9,427	-40.6	-47.6	27	21.1
250	30	10,646	-49.1		27	22.5
200	30	12,063	-56.6		27	21.9
175	30	12,924	-59.6		27	20.4
150	30	13,881	-62.9		28	17.2
125	30	14,993	-66.1		28	14.4
100	30	16,337	-66.2		28	11.0
80	30	17,677	-68.0		26	7.3
70	30	18,479	-66.9		30	4.8
60	30	19,415	-64.5		34	2.6
50	3	20,537	-61.7		32	2.1
40	30	21,926	-59.5		05	2.9
30	28	23,739	-56.5		04	3.0
25	26	24,696	-55.9		03	3.6
20	25	26,320	-54.2		02	2.3
15	20	28,160	-53.0		33	5.0
10	9	30,763	-51.2			

Standard pressure surface (mb.)	YAKUTAT, ALASKA 1009 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	30	12	.2	-1.0	09	2.2
1000	30	8[illegible]			10	3.8
950	30	493	1.4	-1.5	14	5.9
900	30	928	-1.2	-3.2	16	6.0
850	30	1,382	-3.5	-7.2	19	5.8
800	30	1,860	-6.1	-10.5	20	6.3
750	30	2,364	-8.8	-13.8	22	6.8
700	30	2,894	-11.9	-17.5	23	7.8
650	30	3,457	-15.0	-21.8	23	9.8
600	30	4,060	-18.9	-25.1	23	10.9
550	30	4,701	-22.9	-28.2	24	11.0
500	30	5,396	-27.6	-33.3	24	12.5
450	29	6,138	-33.2	-38.6	24	13.2
400	29	6,958	-38.9	-43.9	25	15.6
350	29	7,862	-44.7		26	17.3
300	29	8,880	-50.0		27	19.9
250	29	10,061	-53.3		27	20.3
200	29	11,497	-52.7		27	20.1
175	29	12,361	-52.0		27	21.3
150	29	13,360	-51.3		27	21.3
125	28	14,535	-50.6		27	20.1
100	28	15,991	-50.7		27	17.2
80	28	17,443	-51.0		27	16.8
70	28	18,311	-50.7		26	14.9
60	27	19,317	-50.5		27	13.3
50	27	20,504	-51.0		27	12.6
40	26	21,959	-50.7		27	12.8
30	25	23,829	-50.9		26	13.0
25	23	25,018	-50.6		29	11.7
20	22	26,473	-50.7		28	14.6
15	19	28,351	-51.2		28	16.5
10	8	30,977	-52.3			

Standard pressure surface (mb.)	* YAP, CAROLINE IS. 1008 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	29	17	28.1	24.5	06	3.1
1000	29	85	27.2	23.[illegible]	06	4.7
950	29	531	23.3	18.3	07	7.3
900	29	1,008	20.4	14.2	08	7.7
850	29	1,502	17.8	10.[illegible]	08	7.1
800	29	2,019	15.6	5.3	08	6.4
750	29	2,56[illegible]	13.2	-.2	09	6.9
700	29	3,143	10.4	-4.9	09	7.1
650	29	3,752	7.2	-8.4	09	7.4
600	29	4,411	3.3	-11.5	09	8.2
550	29	5,106	-.8	-16.8	09	8.9
500	29	5,866	-5.3	-20.8	09	9.0
450	29	6,682	-10.0	-25.4	08	8.3
400	29	7,587	-15.8	-31.3	09	8.[illegible]
350	29	8,581	-22.4	-37.3	08	7.6
300	29	9,696	-30.6	-44.9	09	8.6
250	29	10,965	-40.8	-52.1	09	7.7
200	29	12,445	-53.0		09	7.4
175	29	13,292	-60.1		08	9.8
150	29	14,237	-67.5		08	12.5
125	29	15,315	-74.9		08	15.[illegible]
100	29	16,591	-80.7		09	15.[illegible]
80	29	17,845	-80.0		09	11.6
70	29	18,607	-75.1		09	7.1
60	29	19,516	-68.8		08	3.9
50	29	20,617	-64.5		09	4.1
40	29	21,994	-59.3		09	9.4
30	27	23,821	-55.3		09	17.5
25	27	24,989	-53.1		09	24.0
20	26	26,442	-48.5		09	29.9
15	1[illegible]	28,345	-44.0		09	33.9
10	11	31,065	-39.7		09	31.8
7	7	33,517	-38.0			

Standard pressure surface (mb.)	YUCCA FLAT, NEV. 883 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	30	1,196	3.0	-6.1	30	.5
1000	30	172				
950	30	596				
900	30	1,045				
850	30	1,510	9.8	-3.3	33	1.1
800	30	2,012	7.5	-6.0	21	1.8
750	30	2,539	4.5	-8.9	23	3.2
700	30	3,100	1.6	-11.9	25	4.1
650	30	3,690	-1.6	-14.6	26	6.3
600	30	4,327	-5.5	-18.9	26	7.5
550	30	4,997	-10.1	-23.3	27	9.2
500	30	5,733	-15.1	-27.7	27	11.3
450	30	6,515	-20.4	-33.1	27	13.5
400	30	7,385	-26.7	-38.3	28	14.7
350	30	8,334	-34.2	-42.3	28	14.6
300	30	9,394	-42.1	-45.8	28	15.1
250	30	10,608	-49.5		27	15.5
200	30	12,048	-55.7		27	16.3
175	30	12,892	-58.8		28	16.7
150	29	13,856	-62.2		28	15.4
125	29	14,974	-64.8		28	13.3
100	28	16,332	-66.8		28	9.2
80	27	17,682	-66.1		30	6.6
70	27	18,493	-64.7		30	4.1
60	26	19,440	-62.5		36	1.9
50	26	20,570	-60.7		05	3.4
40	24	21,969	-58.6		07	5.0
30	23	23,786	-56.2		06	5.9
25	22	24,947	-55.2		06	4.9
20	19	26,369	-54.4		04	4.6
15	12	28,218	-53.6		35	6.3
10	7	30,857	-50.8			

Standard pressure surface (mb.)	YUMA, ARIZ. 999 MB				Resultant Wind	
	No. of observations	Dynamic height	Temperature	Dew Point	Direction	Speed M.p.s.
SURFACE	19	131	13.2	4.4	01	.4
1000	19	126			35	.2
950	19	559	18.0	4.4	06	1.8
900	19	1,025	15.6	1.5	02	1.4
850	19	1,507	12.5	-2.0	35	.9
800	19	2,012	9.1	-5.4	27	1.1
750	19	2,536	6.2	-8.9	25	2.6
700	19	3,107	3.1	-14.0	27	4.5
650	19	3,693	-.2	-18.3	26	5.5
600	19	4,339	-4.1	-21.7	28	7.2
550	19	5,007	-8.5	-24.4	28	8.6
500	19	5,752	-13.6	-28.6	28	10.0
450	19	6,532	-19.3	-32.3	27	11.6
400	19	7,410	-25.7	-37.5	27	14.6
350	19	8,364	-32.8	-42.9	26	16.6
300	19	9,434	-40.0	-48.4	26	18.6
250	19	10,655	-49.0		26	19.3
200	19	12,090	-57.6		25	21.3
175	19	12,927	-60.9		25	13.6
150	18	13,874	-64.1		25	14.2
125	16	14,988	-68.1		26	6.9
100	12	16,325	-69.7		27	4.0
80	9	17,645	-70.1			
70	9	18,441	-66.5			
60	8	19,380	-65.0			
50	8	20,498	-63.0			
40	6	21,877	-60.5			
30	6	23,687	-57.6			
25	6	24,841	-56.7			
20	6	26,262	-55.3			
15	6	28,106	-52.9			
10	6	30,735	-50.7			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. NOVEMBER 1967

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

MADISON, WIS.

	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Nov.									
7-----	M 0.67	M 0.80	M 0.97	M 1.17	M 1.20	M 1.19	M 1.05	M 0.93	M 0.83
15----	----	S 1.09	S 1.23	----	S 1.39	----	----	----	----
17----	I .67	M .81	----	----	----	----	----	----	----
28----	S 1.05	S 1.14	S 1.25	----	S 1.34	----	S 1.23	S 1.11	S 1.00
Averages	0.80	0.96	1.15	1.17	1.31	1.19	1.14	1.02	0.92

TUCSON, ARIZ.

	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Nov.									
1-----	----	----	----	0.70	1.40	1.30	1.16	1.01	0.92
2-----	.93	1.01	1.14	1.30	1.39	1.29	1.14	1.02	.94
3-----	.90	1.01	1.12	1.27	1.37	1.24	1.04	.93	.87
4-----	.93	1.01	1.13	1.29	----	1.30	1.10	1.00	.91
6-----	-----	.92	1.04	1.23	----	----	----	----	----
7-----	.84	.93	1.07	1.23	1.32	1.20	1.00	.84	.73
8-----	.91	1.01	1.13	1.28	1.34	1.27	1.10	.97	.85
9-----	.88	.98	1.12	----	1.39	----	----	.94	----
10----	.70	.80	.93	1.24	1.30	1.29	1.09	.99	.90
11----	.40	.38	.53	1.01	1.30	1.20	1.02	.89	.80
13----	----	----	----	1.25	1.36	1.23	1.12	.97	.86
14----	.98	1.04	1.17	1.31	1.43	1.32	1.19	1.00	.94
15----	.97	1.05	1.18	1.27	1.37	1.33	1.16	1.02	.89
17----	.89	.98	1.09	1.20	1.30	----	----	----	----
18----	.90	.99	1.10	1.26	1.30	1.29	1.08	.97	.87
19----	----	----	----	1.27	1.34	1.27	1.11	1.01	.92
20----	.87	.98	1.12	1.27	1.31	1.27	1.11	1.00	.90
24----	.33	.42	.58	.94	1.26	----	----	----	----
25----	----	----	----	.77	1.13	----	----	----	----
26----	----	----	----	----	----	----	.86	.76	.67
28----	.14	.20	.29	.63	1.01	----	.87	.74	.66
29----	.07	.11	.19	.50	.88	.81	.73	.62	.53
Averages	0.72	0.81	0.93	1.11	1.28	1.24	0.71	0.92	0.83

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Nov.									
1-----	1.17	1.25	1.34	1.46	----	----	----	----	----
4-----	1.20	1.28	1.38	1.50	----	----	----	----	----
10----	1.18	1.26	1.36	1.48	1.62	1.51	1.40	1.29	1.20
12----	1.16	1.25	1.35	1.48	1.58	1.45	1.33	1.25	1.17
14----	1.13	1.22	1.32	1.48	1.56	1.41	1.28	1.18	1.10
15----	1.10	1.18	1.29	1.43	1.53	1.40	----	----	----
19----	----	----	----	----	1.55	1.43	1.30	1.20	1.13
20----	1.23	1.30	1.39	1.52	1.62	----	----	---	----
21----	1.23	1.28	1.37	----	----	----	----	----	----
30----	----	----	----	----	1.61	----	1.38	1.28	1.22
Averages	1.18	1.25	1.35	1.48	1.58	1.44	1.34	1.24	1.16

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
HS Slight haze
HM Moderate haze
* Values corresponding to true solar noon

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

BLUE HILL OBS., MASS.

	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Nov.									
5-----	0.94	1.05	1.11	1.25	1.27	----	----	----	----
6-----	.98	1.06	1.18	1.30	1.33	1.29	1.11	0.96	0.87
8-----	.65	.75	.87	----	----	----	----	----	----
13----	.84	.95	1.06	----	----	----	----	----	----
14----	.93	1.04	1.16	----	----	----	----	----	----
16----	.84	.95	1.10	----	1.23	----	1.10	1.01	.95
18----	.75	.87	1.00	----	1.17	----	----	----	----
20----	.81	.91	1.05	----	1.23	----	1.06	.94	.82
21----	----	----	----	----	1.35	----	1.20	1.04	.91
24----	----	----	----	----	1.22	----	1.06	.91	.79
26----	.70	.79	.96	----	1.13	----	1.04	.87	.72
28----	.86	.95	1.10	----	1.23	----	1.11	.99	.88
29----	.91	1.01	1.16	----	----	----	----	----	----
Averages	0.84	0.94	1.07	1.28	1.24	1.29	1.10	0.96	0.85

OMAHA, NEBR.

	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Nov.									
6-----	HS0.94	HS1.03	HS1.14	HS1.30	HS1.32	HS1.26	HS0.98	HS0.88	HS0.82
7-----	HS .87	HS .98	HS1.10	HS1.26	HS1.28	HS1.29	HS1.12	HS .98	HS .82
8-----	HS .94	HS1.04	HS1.11	HS1.27	HS1.30	HS1.26	HS1.09	HS .97	HS .81
11----	HS .84	HS .96	HS1.06	1.16	----	----	----	----	----
14----	HS .92	HS1.02	HS1.14	HS1.26	HS1.24	----	----	----	----
17----	HS .96	HS1.04	HS1.17	----	HS1.28	----	HS1.12	HS1.00	HS .80
18----	HS .99	HS1.08	HS1.18	----	----	----	----	----	----
19----	.82	HS .95	HS1.07	----	----	----	----	----	----
20----	----	----	----	----	HM1.21	----	.98	.86	.78
21----	----	HS .88	HS1.06	----	----	----	----	----	----
24----	HS .94	HS1.06	HS1.20	----	HS1.32	----	----	----	----
26----	HS .92	HS1.12	HS1.18	----	----	----	HS1.12	----	----
27----	HS1.00	HS1.11	HS1.23	----	HS1.34	----	HS1.22	HS1.14	HS1.00
Averages	0.92	1.02	1.14	1.25	1.28	1.27	1.09	0.97	0.84

GUAM, M. I.

	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Nov.									
11----		pyrheliometer received - "Gilda" approaching station							
14----		pyrheliometer replaced							
16----	----	----	----	----	M 1.33	----	----	----	----
27----	----	S 0.90	S 0.98	----	----	----	----	----	----
Averages	----	0.90	0.98	----	1.33	----	----	----	----

ALBUQUERQUE, N. MEX.

	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
	No observations due to replacement of instruments								

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. NOVEMBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	379	394	399	380	337	175	365	368	372	363	369	331	351	359	359	272	309	329	278	340	231	154	155	349	315	290	78	126	192	296		301
AMES IOWA	37	73	216	114	158	315	290	289	262*	43	255	240	108	270	262	92	246	258	173	160	133	122	114	228	109	195	241	219	24	111		179*
ANNETTE ALASKA	104	55	155	151	24	7	34	28	34	28	56	142	13	15	20	88	16	117	7	28	6	21	75	78	33	18	18	25	60	43		50
APALACHICOLA FLORIDA	28	436	438	271	460	437	420	442	434	424	402	389	407	365	359	403	357	365	415	401	280	296	357	303	100	237	251	363	347	343		351
ARGONNE NAT. LAB.	38	46	87	177	166	246	303	269	287	66	92	126	113	114	251	163	148	68	267	54	74	49	167	168	146	224	213	255	84	89		152
ASTORIA OREGON	319	309	255	171	291	261	76	82	47	32	92	96	45	141	191	189	201	121	203	167	189	97	67	131	112	138	76	21	57	---		144
ATLANTA GEORGIA	34	371	376	386	393	367	370	347	372	353	313	319	336	253	331	332	180	327	345	190	47	58	369	77	331	90	73	146	61	223		259
BARROW ALASKA †	9	15	11	8	8	2	20	1	12	11	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		3
BETHEL ALASKA	39	40	38	37	119	81	23	34	68	22	0	3	11	6	18	39	17	7	11	4	27	10	50	29	9	8	13	29	11	17		27
BISMARCK N.DAK.	201	124	137	138	264	114*	263	252	152	242	228	119	168	109	156	145	222	218	85	181	85	200	87	112	157	179	203	114	73	48		159*
BLUE HILL MASS.	116	103	185	191	226	291	166	175	121	173	187	62	210	233	56	263	120	216	128	243	220	16	22	190	15	210	78	211	199	123		158
BOISE IDAHO	204	290	247	197	284	266	249	183	75	79	146	81	85	89	194	77	151	62	59	129	216	131	184	98	82	209	114	---	---	239		157
BOSTON MASSACHUSETTS	71	56	190	151	253	288	162	186	110	177	171	73	234	231	45	261	102	204	171	239	221	8	11	197	14	201	81	187	208	123		154
BROWNSVILLE TEXAS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	419	240		---
BURLINGTON VERMONT	161	65	96	72	125	168	161	196	102	143	35	41	29	191	86	231	60	60	26	63	229	24	21	76	57	93	190	66	92	161		104
CAPE HATTERAS N.C.	306	151	253	376	380	344	323	386	386	350	261	336	336	300	355	326	254	328	348	238	168	169	119	49	315	293	157	333	322	56		277
CARIBOU MAINE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	86	191	176		151
CHARLESTON S.C.	373	364	374	349	412	396	344	394	398	359	312	361	364	331	348	356	285	349	345	302	280	177	342	182	249	279	65	288	163*	144		309*
CLEVELAND OHIO	51	76	77	165	169	240	267	275	253	120	185	119	28	48	189	146	31	52	47	94	44	77	33	123	201	212	111	164	198	62		129
COLUMBIA MISSOURI	203	41	301	282	205	298	360	338	118	75	313	284	88	315	297	158	306	314	263	81	244	60	294	186	233	258	305	279	42	54		220
DAVIS CALIFORNIA	332	332	320	236	228	272	276	276	256	277	192	81	80	294	231	297	258	160	184	285	292	277	239	196	255	282	155	107	32	104		227
DODGE CITY KANSAS	264	46	345	172	232	320	310	340	341	284	327	304	242	236	311	298	273	314	292	308	301	162	300	300	298	297	290	59	19	95		256
E. LANSING MICHIGAN	40	---	---	150	173	87	209	257	160	143	---	82	77	72	280	123	92	58	99	141	56	41	53	179	200	215	97	---	159	171		131
EL CENTRO CALIF. NOF	358	374	374	355	335	336	350	346	346	341	343	334	345	326	326	242	308	252	253	200	165	235	290	290	269	86	289	242	221	281		294
EL PASO TEXAS	471	463	470	458	372	200	224	402	434	438	432	425	420	417	416	211	396	358	289	300	249	162	258	398	371	98	89	141	373	372		337
ELY NEVADA	386	398	370	265	148	345	363	353	280	317	320	212	156	314	265	274	296	311	186	312	185	303	315	265	312	318	266	161	274	110		279
EPPLEY NEWPORT R.I.	79	80	192	96	269	284	82	209	117	230	183	90	243	229	150	253	128	192	176	237	205	33	19	220	21	208	80	207	209	98		161
FAIRBANKS ALASKA	19	23	58	14	14	74	98	99	62	78	23	3	12	7	26	23	6	5	5	2	6	5	8	15	30	27	7	4	19	7		26
FLAMING GORGE UTAH	281	115	232	353	377	379	349	336	319	229	325	201	244	276	299	300	273	296	273	125	91	308	180	108	294	130	---	237	268	241		256
FORT WORTH TEXAS	232	429	423	442*	382	334	408	185	74	148	398	394	396	385	384	357	160	355	337	171	369	117	331	358	363	239	61	49	37	117		281*
FRESNO CALIFORNIA	352	335	330	264	129	290	295	306	303	301	248	68	184	288	101	201	265	186	119	172	143	175	55	91	33	84	228	236	123	113		201
GLASGOW MONTANA	171	80	234	273	266	255	242	224	125	220	218	76	201	217	202	194	213	175	140	105	50	30	74	140	128	163	191	70	109	95		163
GRAND JUNCTION COLO.	351	237	258	272	294	375	358	351	342	309	322	255	276	---	---	299	284	309	187	159	105	306	166	191	307	307	308	236	73	162		264
GREAT FALLS MONTANA	70	244	149	292	275	277	227	134	137	98	116	45	178	61	190	227	217	158	171	42	196	129	167	74	64	193	200	144	118	165		159
GREENSBORO N.C.	254	173	309	354	359	317	350	336	330	300	236	304	138	301	308	296	248	282	266	220	145	73	289	50	276	266	99	194	272	39		246
INDIANAPOLIS INDIANA	43	104	47	266	141	200	288	347	314	113	27	259	75	81	372	195	135	164	281	67	57	64	130	49	236	148	285	261	71	119		165
ITHACA NEW YORK	200	10	231	30	142	188	213	113	24	148	59	80	58	52	67	247	32	99	2	126	225	20	107	129	184	110	110	170	167	29		112
LAKE CHARLES LA.	254	424	138	441	430	403	320	301	386	222	242	318	362	348	386	370	298	344	353	110	287	140	210	277	339	220	305	53	273	253		294
LAKELAND FLORIDA	330	283	434	455	446	399	432	411	416	359	393	364	407	371	310	334	266	349	374	363	279	355	273	359	237	256	222	336	272	285		346
LANDER WYOMING	269	302	310	373	411	---	396	369	342	288	294	167	195	225	257	326	328	230	70	284	162	164	293	321	285	283	290	264	290	185		266
LARAMIE WYOMING	183	206	289	287	308	306	296	279	274	251	261	162	198	124	238	240	238	210	220	201	142	240	131	129	191	90	238	225	168	197		217
LAS VEGAS NEVADA	390	373	381	327	168	---	356	341	344	324	317	335	315	315	328	221	319	317	116	229	130	306	270	305	305	311	313	36	290	123		283
LITTLE ROCK ARKANSAS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	375	348	278	351	350	170	209	---	145	235	314	271	270	127	69	179		---
LOS ANGELES, CALIF.	412	384	339	358	234	309	297	320	384	325	358	328	342	314	328	260	342	256	227	137	91	306	289	341	348	267	279	347	323	168		300
MADISON WISCONSIN	1	22	132	222	99	158	267	266	277	27	180	153	110	100	279	156	82	88	224	65	36	64	137	214	122	156	129	251	47	73		138
MANHATTAN KANSAS	28	27	203	189	263	343	321	279	237	27	265	246	93	266	252	249	275	288	192	250	232	217	121	249	243	213	255	32	18	183		202
MATANUSKA ALASKA	31	11	21	20	32	79	---	50	42	77	55	3	18	16	43	21	20	3	12	7	11	2	5	58	48	12	37	51	51	53		31
MAUNA LAO OBS.HAWAII	377	325	449	613	497	510	558	541	514	600	591	591	547	577	533	547	390	316	565	564	578	451	415	200	190	204	612	386	464	567		476
MEDFORD OREGON	212	226	186	118	171	169	137	143	177	148	142	166	83	215	115	46	48	41	231	167	144	135	200	141	227	220	99	158	198	172		154
MIAMI FLORIDA	436	206	153	347	416	312	372	143	415	347	128	321	220	418	437	368	358	364	413	432	445	---	407	378	422	408	392	371	270	389		348
MIDLAND TEXAS	410	394	404	405	328	38	53	56	221	360	367	300	345	358	340	353	330	180	198	262	232	298	311	335	324	174	40	78	198	327		267
NASHVILLE TENNESSEE	80	221	164	346	283	351	361	379	350	198	73	338	292	130	322	324	224	341	317	180	40	57	220	36	311	279	242	159	76	166		229
NEW YORK N.Y. U	197	20	226	66	247	272	99	256	35	200	145	127	287	160	248	276	109	70	114	266	207	31	13	216	109	225	167	123	237	23		159
NORTH OMAHA NEBRASKA	84	115	224	200	331	339	312	308	263	99	294	137	184	296	252	116	283	288	183	254	249	201	222	275	211	266	273	156	17	54		216
OAK RIDGE TENNESSEE	44	262	316	142	403	385	333	359	351	302	262	327	270	349	269	327	183	325	334	151	85	56	263	25	298	262	240	150	214	60		245

Note.--Langley is the unit used to denote one gram calorie per square centimeter. Values with an asterisk are interpolated.

† Sun below horizon November 19 - 30, inclusive.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. NOVEMBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OKLAHOMA CITY OKLA.	346	279	393	341	235	369	392	181	104	297	359	332	325	274	342	324	191	345	171	204	282	114	294	329	327	295	298	82	30	55		264
PAGE ARIZONA	127	120	124	107	171	302	369	202	200	183	188	271	342	270	323	261	317	334	322	284	213	167	182	274	275	278	274	186	263	145		236
PALMER AAFS ALASKA	22	10	17	30	40	29	85	41	29	61	41	0	16	16	33	16	12	3	13	6	10	3	6	38	49	21	32	35	35	24		26
PHOENIX ARIZONA	427	413	414	400	318	327	396	395	378	403	393	380	378	379	367	228	350	356	340	355	211	297	236	340	338	249	261	284	339	292		342
PORTLAND MAINE	288	82	233	81	280	283	196	194	167	191	141	30	229	193	38	255	110	128	155	218	224	33	22	219	27	122	138	146	224	210		162
PROSSER WASHINGTON	272	268	119	250	263	118	127	79	81	82	70	84	78	66	195	106	83	110	208	201	208	173	73	198	195	199	72	183	53	60		143
RAPID CITY S.DAK.	65	296	299	233	340	297	293	253	268	244	236	141	200	175	214	210	248	237	155	257	140	244	125	209	203	218	232	165	221	160		219
RENO NEVADA	294	300	269	123	130	266	249	259	188	222	181	129	96	232	194	222	216	139	80	136	147	241	246	237	249	241	202	191	165	105		198
RICHLAND 25 NW WASH.	257	267	239	256	248	115	86	83	86	59	55	77	63	61	131	50	77	190	202	188	189	164	79	188	191	186	61	168	56	87		139
RIVERSIDE CALIFORNIA	362	329	305	272	104	251	272	230	283	273	286	272	282	230	268	190	152	217	55	244	37	239	249	270	252	127	247	181	255	48		226
RUSTON LOUISIANA	144	361	50	341	372	360	350	337	311	244	151	247	332	316	315	315	143	329	264	88	237	180	189	154	289	195	57	40	59	239		234
SAINT CLOUD MINN.	170	209	113	116	109	217	269	219	262	196	124	69	245	183	231	184	196	272	237	213	60	39	34	51	201	166*	135*	181	42	88		161*
SAN ANTONIO TEXAS	453	450	392	455	105	73	89	34	29	95	278	419	421	373	387	163	222	198	306	142	378	264	337	361	362	310	206	36	63	365		259
SANTA MARIA CALIF.	383	335	327	285	202	316	220	249	330	331	284	169	229	308	168	298	175	157	146	236	48	312	308	308	303	306	294	305	236	222		260
SAULT STE MARIE MICH	44	46	74	160	134	107	144	130	54	92	31	60	200	170	220	33	42	75	107	120	107	56	74	40	83	169	159	126	121	156		104
SEATTLE TACOMA WASH.	175	248	239	246	226	200	46	40	61	77	83	115	141	87	80	168	191	97	193	144	139	37	32	167	160	130	67	24	133	30		126
SPOKANE WASHINGTON	240	269	241	266	257	228	42	82	97	51	92	52	141	32	158	91	91	47	127	132	49	164	98	184	161	200	69	50	48	124		132
STATE COLLEGE PENN.	236	43	226	107	169	171	214	235	230	188	203	57	99	---	282	241	24	137	70	250	128	31	78	185	53	200	245	175	229	32		157
STERLING VIRGINA	289	46	343	337	351	313	306	341	307	299	232	243	251	194	331	279	73	215	304	[illegible]	74	87	152	127	259	282	251	301	271	40		239
STILLWATER OKLAHOMA	183	136	338	334	245	335	336	179	184	264	299	282	287	251	291	272	232	299	166	211	242	176	259	284	277	253	279	76	22	30		234
SWAN ISLAND W.I.	519	546	539	516	460	535	275	132	482	153	352	411	348	400	398	445	493	459	172	325	263	462	481	498	471	502	342	404	297	419		[illegible]
TAMPA FLORIDA	253	460	449	467	484	468	465	451	457	413	376	374	439	415	410	398	446	364	437	423	---	387	376	377	216	318	293	357	322	320		[illegible]
TUCSON ARIZONA	366	406	---	---	---	272	374	383	380	379	363	340	373	382	---	194	354	357	353	357	105	172	207	334	268	189	247	337	348	314		314
WAKE ISLAND PACIFIC	491	494	485	470	430	456	463	395	449	419	474	403	448	411	350	456	449	431	388	449	448	241	435	441	432	393	277	394	221	402		417

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

NOVEMBER 1967

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys	-51	-20	-5	-4	-19	-27	-81	-36	-58	-33	-15	-17	-34	-18	-37	-39	-29	-23	-15	-20	-15	-26	-71	-86	-38	-31	-38	-32	-44	-52		-34

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

These data are of an experimental nature and are published as received from the Palmer Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ʌ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

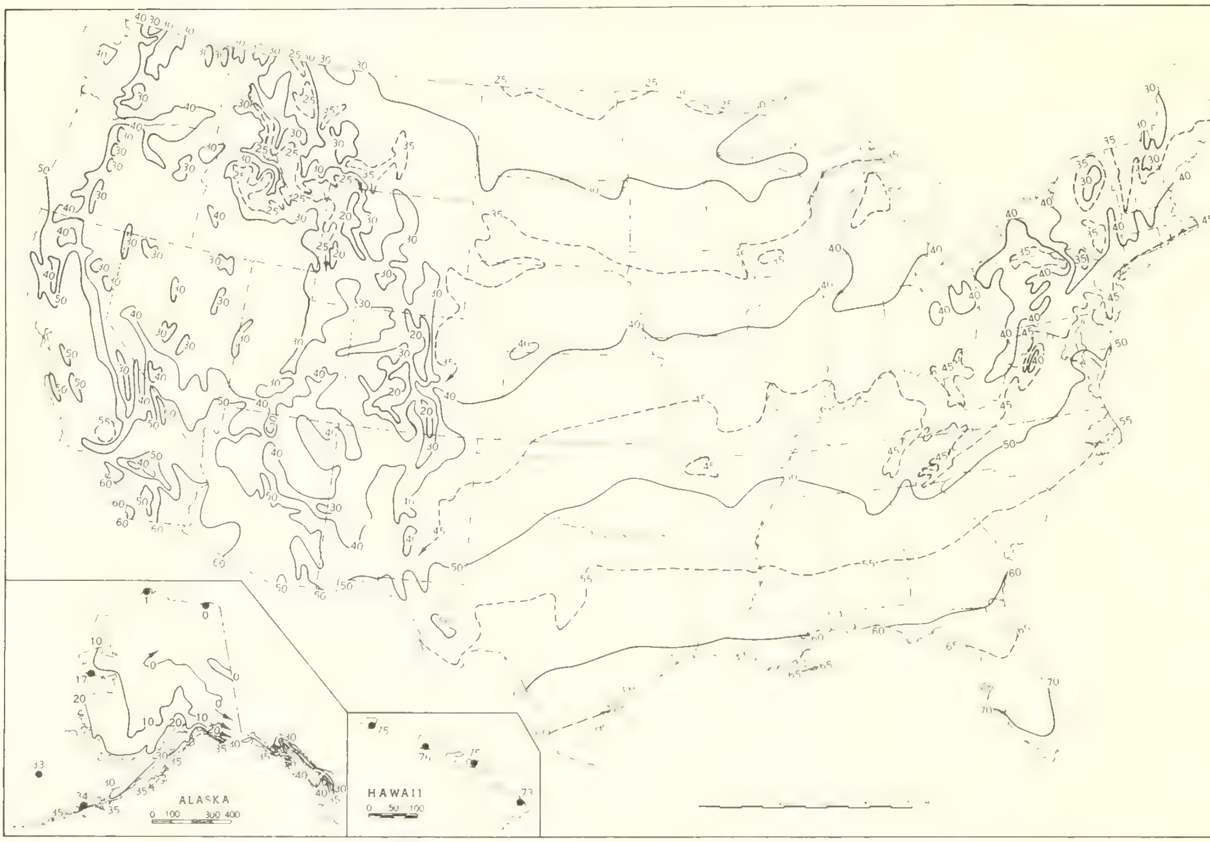
Units: Milli-atmo-cms.

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bedford, Mass.	00272	-----	00268	-----	-----	00295	00323	00365	00309	-----	-----	-----	05314	00358	-----
Bismarck, N. Dak.	04306	04364	04295	04319	00327	03296	00264	00269	00267	00299	00299	05309	02307	04304	00298
Boulder, Colo.	00285	06327	00278	-----	-----	00271	00259	00248	00270	-----	-----	-----	05276	04280	00270
Caribou, Maine	00283	04272	05271	05268	35275	35338	02341	35353	00318	05296	05277	-----	35330	00380	02392
Green Bay, Wis.	-----	05333	05352	00304	00330	00346	00339	00282	00279	06305	00300	00321	00348	05326	00295
Huancayo, Peru	00263	00262	00264	00265	00276	-----	00258	00270	00265	00264	00264	00267	00271	00263	00259
Mauna Loa, Hawaii	00277	06266	00277	00274	-----	00266	00269	00268	00283	00274	00270	-----	00277	00272	00274
Nashville, Tenn.	-----	05304	00279	00283	00304	00301	00334	00274	00273	00282	04278	00293	00292	05311	00288
Tallahassee, Fla.	-----	00291	00279	04303	00293	00296	00298	00296	00295	00299	-----	00299	00300	00327	00307
Wallops Island, Va.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Station	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Bedford, Mass.	00314	06310	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		313
Bismarck, N. Dak.	02341	00334	00305	34350	00328	36370	00349	35347	32339	00351	36378	00350	35338	35359	35327		323
Boulder, Colo.	00277	00315	-----	-----	00301	-----	00345	-----	-----	-----	-----	00302	00301	05310	00296		290
Caribou, Maine	02331	35293	-----	-----	-----	02389	35369	-----	-----	00357	04339	00358	-----	36385	02395		331
Green Bay, Wis.	04297	04346	00381	00368	04364	07371	06403	00353	05374	04331	00360	00362	00334	06335	34344		337
Huancayo, Peru	00264	00260	35252	00275	36263	00269	00274	00275	05269	00271	00278	05267	00268	00269	00265		267
Mauna Loa, Hawaii	00269	00277	05274	-----	00282	00285	00292	00295	04287	00300	-----	00277	00273	00268	00284		277
Nashville, Tenn.	00282	00294	00290	00304	04298	05351	05341	00331	05332	00305	00290	00301	04296	04311	04290		300
Tallahassee, Fla.	00298	00292	00255	00307	00278	00290	00284	00292	06282	05286	05269	05272	00264	00259	00256		288
Wallops Island, Va.	00286	00275	00282	00295	00321	04332	04326	-----	00310	00304	00293	05291	00291	00299	-----		300

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code ʌ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), November



B. Temperature Departure from 30 - Year Mean (°F 1931-60), November 1967.

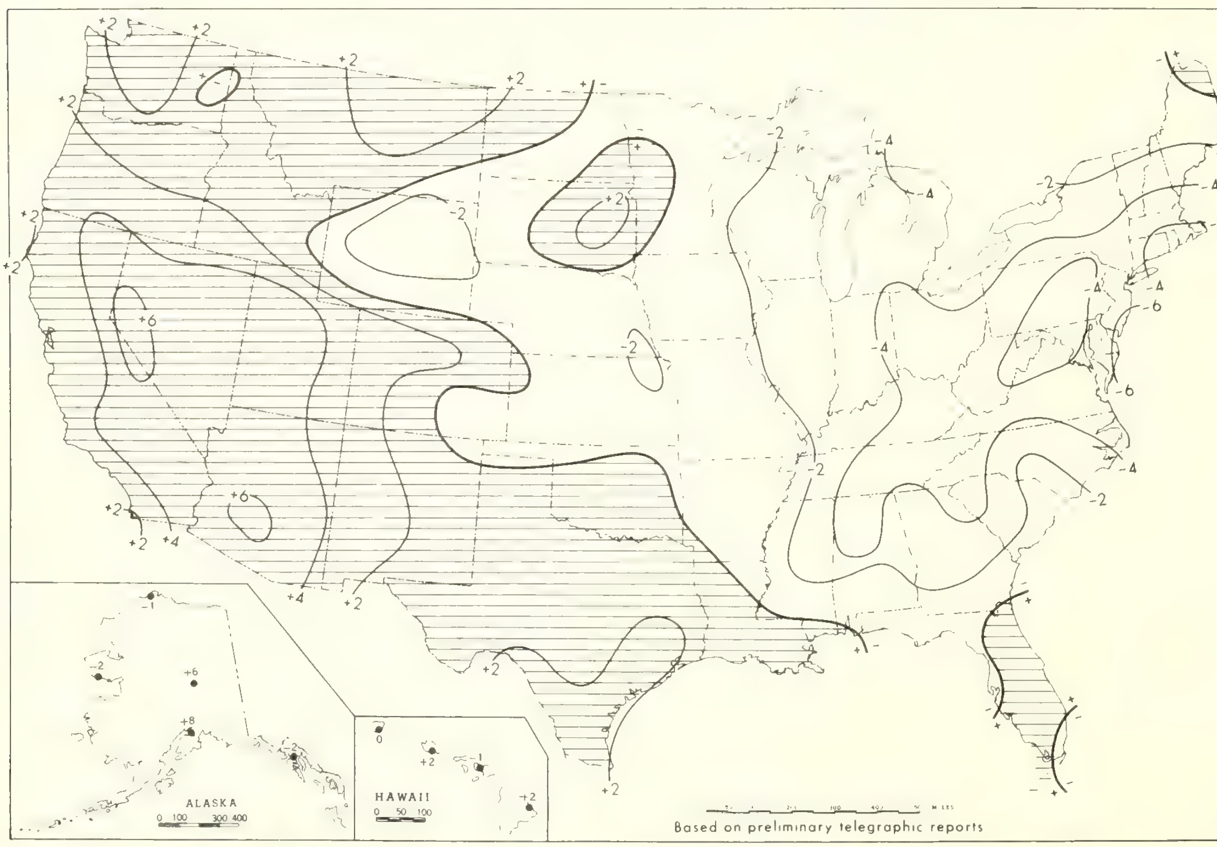


Chart II. Total Precipitation (Inches), November 1967.

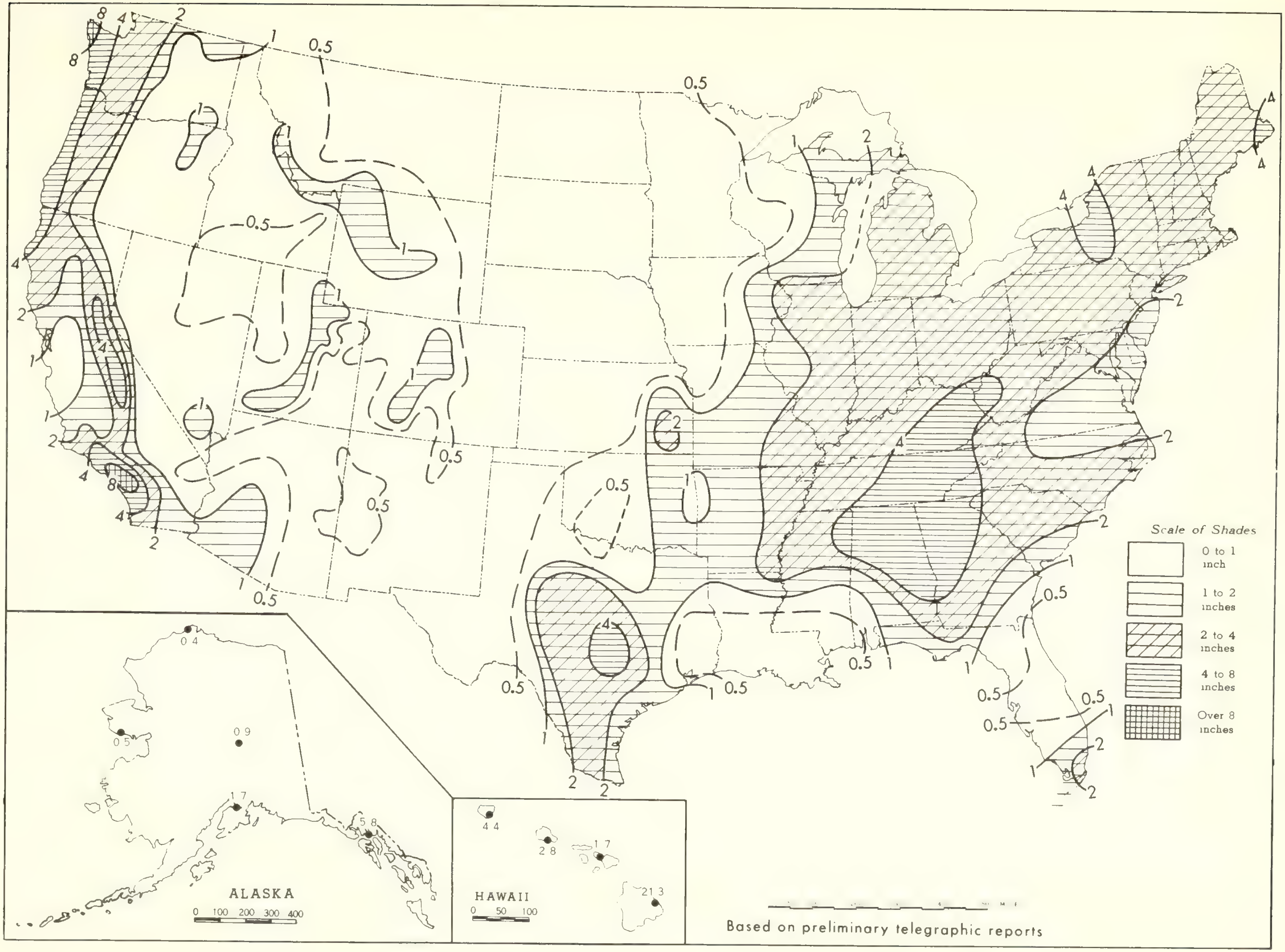


Chart III. Percentage of Normal Precipitation, November 1967.

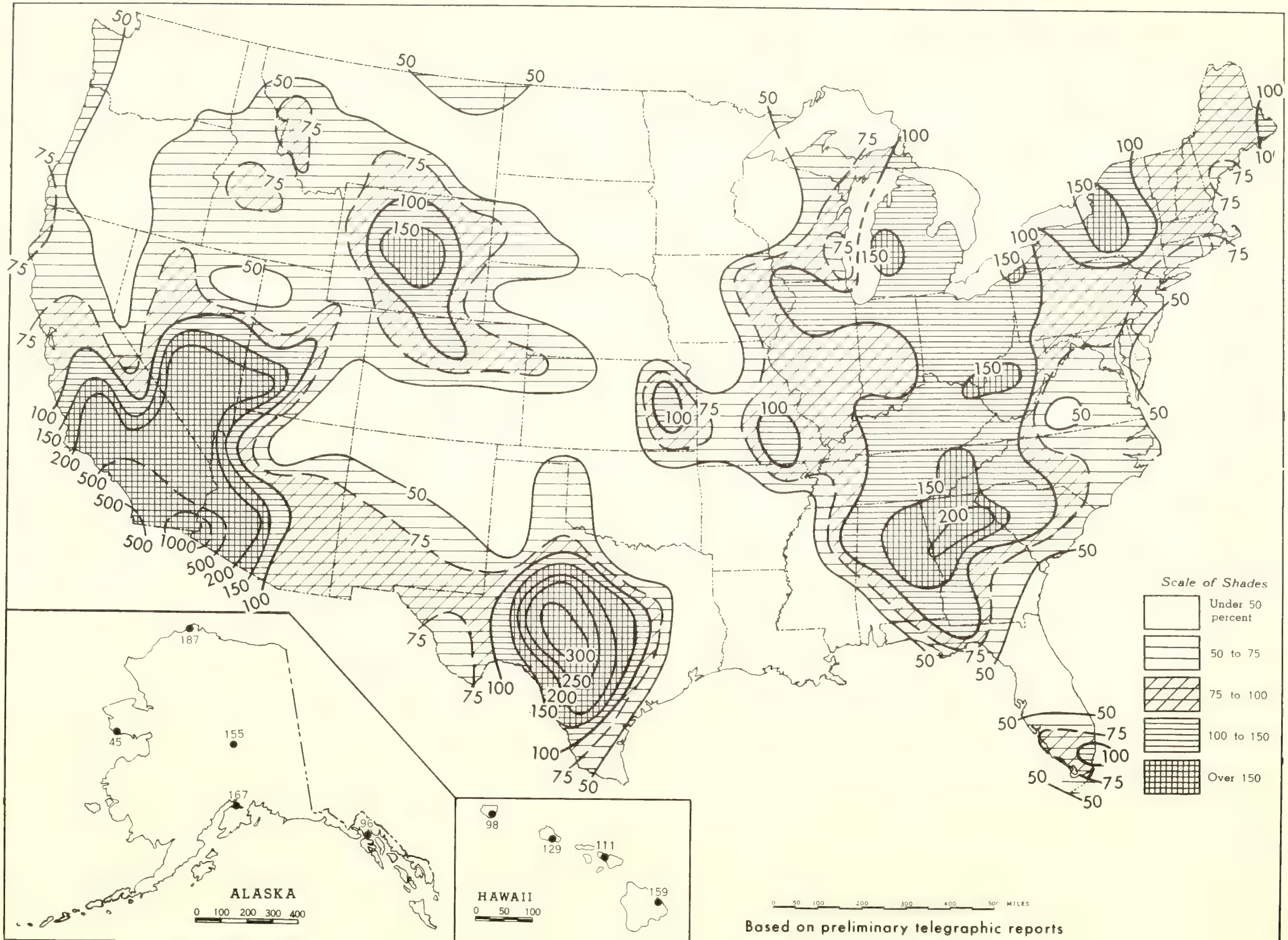
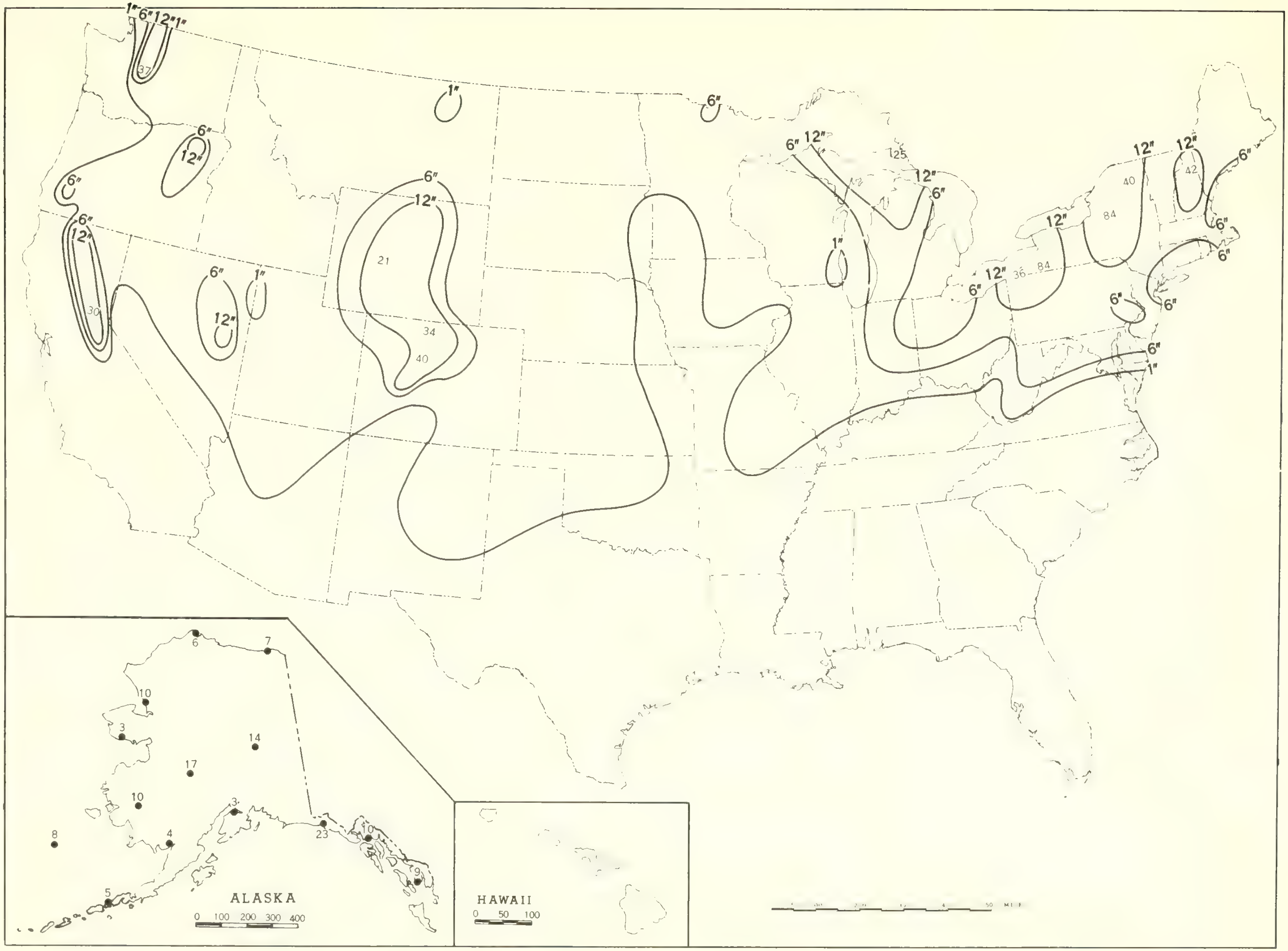
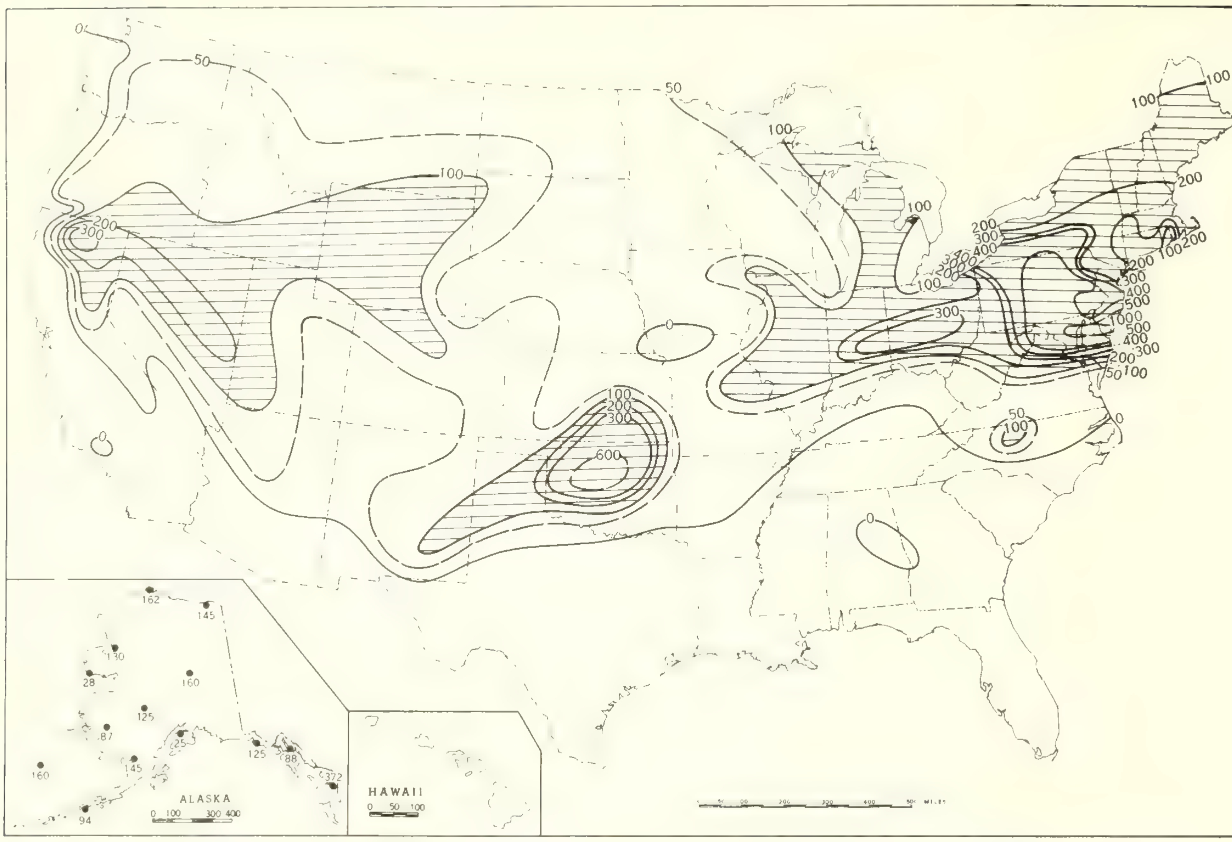


Chart IV. Total Snowfall (Inches), November 1967.

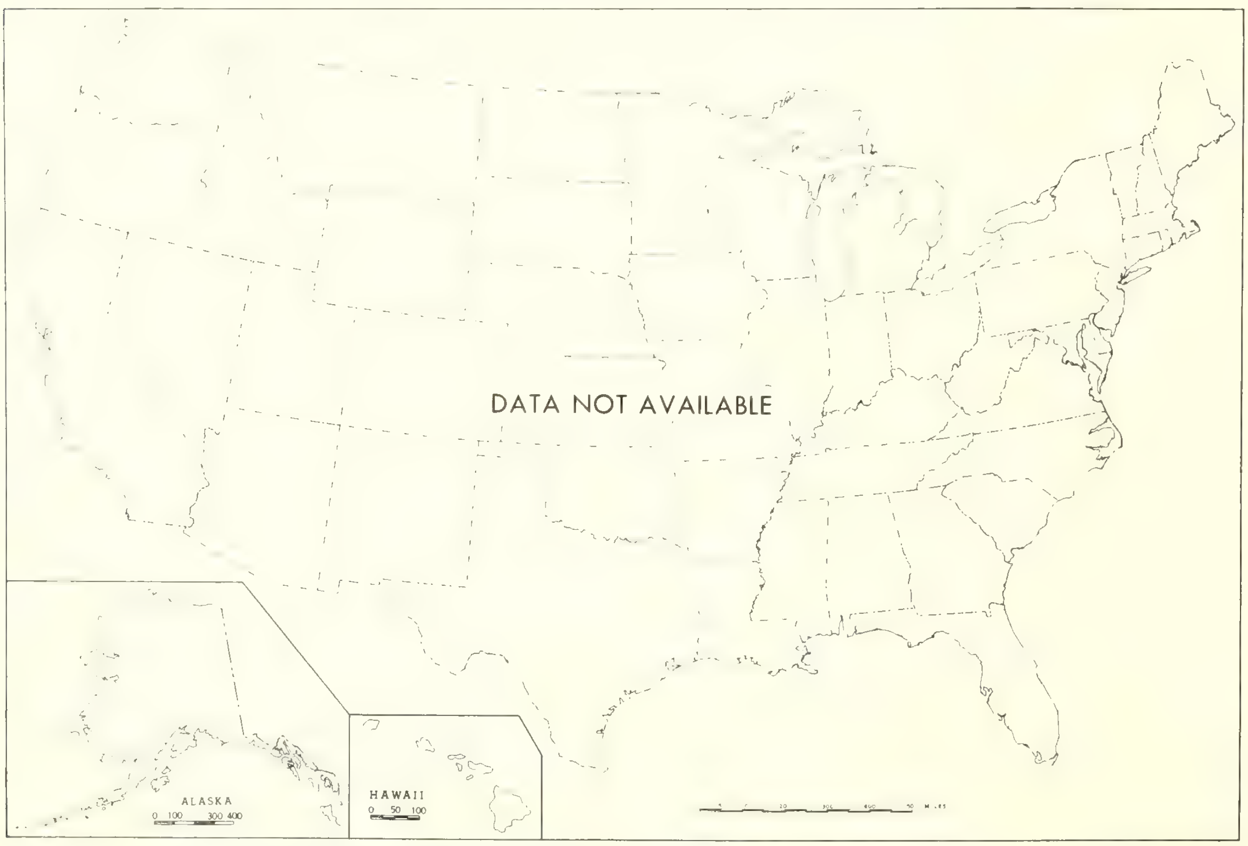


This is the total of unmelted snowfall recorded during the **month at Weather Bureau** and selected cooperative stations. This Chart and Chart V are published only for the months of November through April, although of **course there is some snow at higher** elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, November 1967.

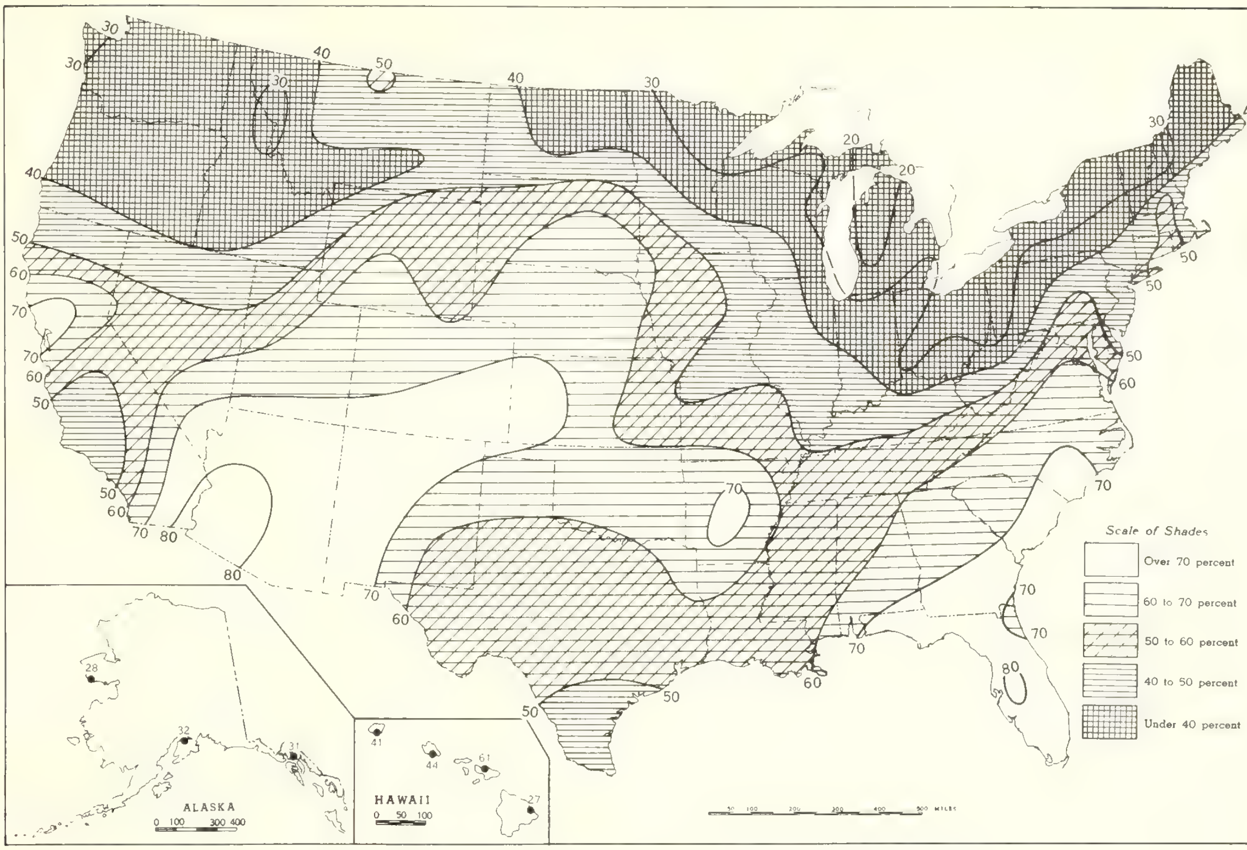


B. Depth of Snow on Ground (Inches), 7:00 a.m. E. S. T., November ,1967

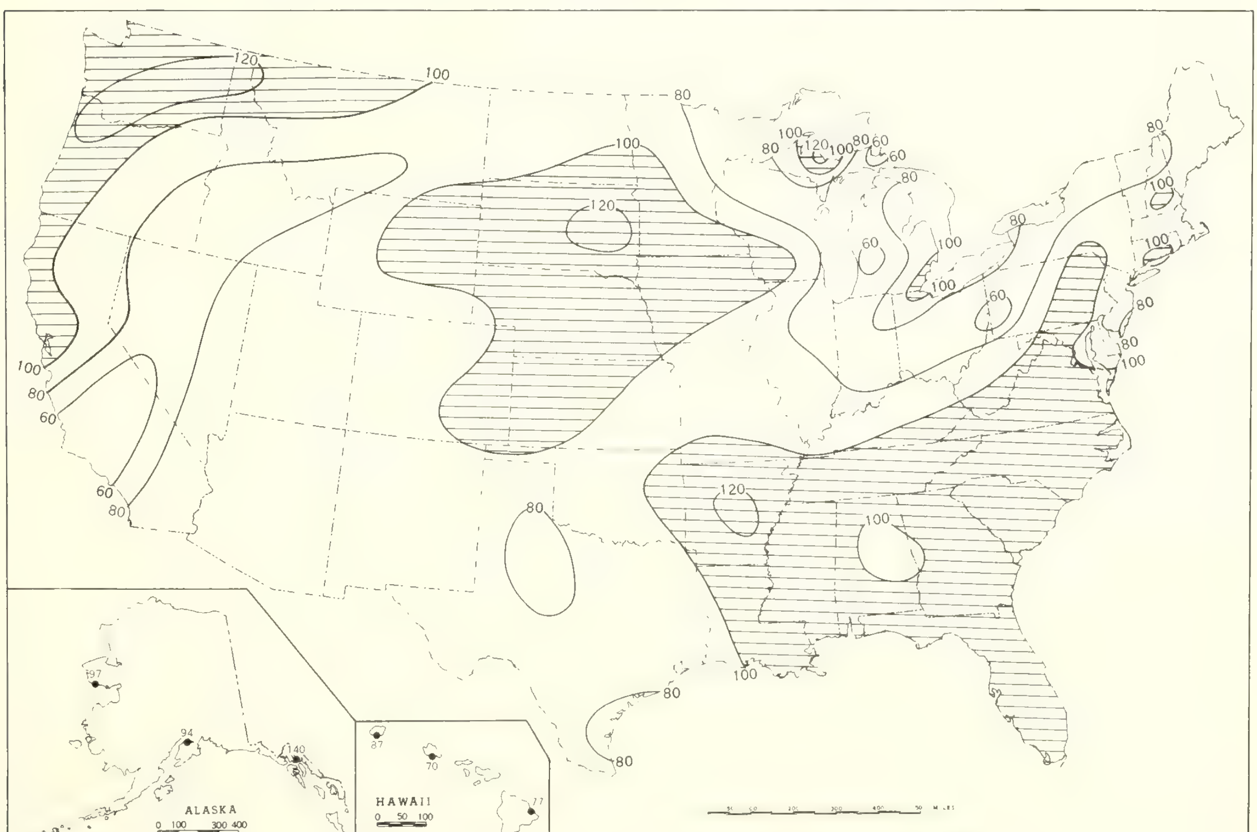


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a.m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and selected cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, November 1967.

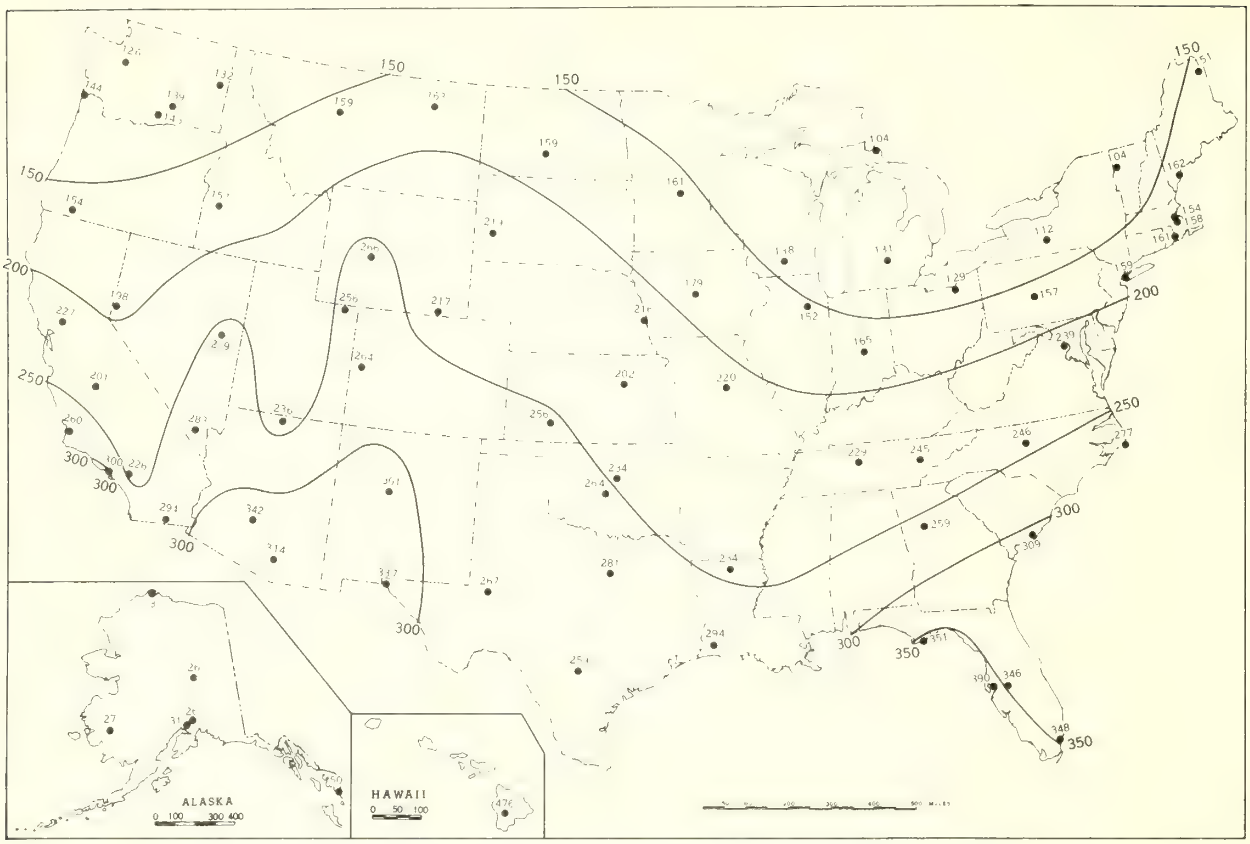


B. Percentage of Mean Monthly Sunshine, November 1967.

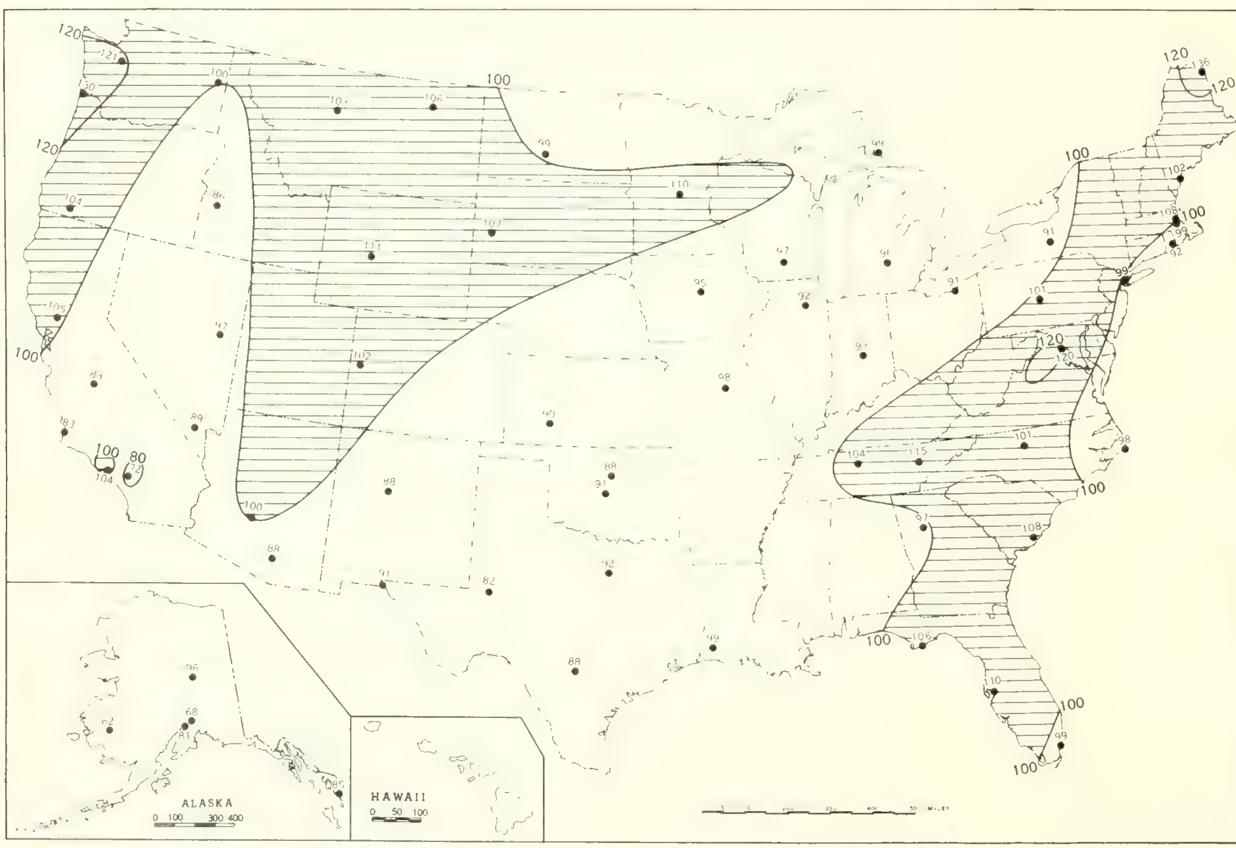


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, November 1967.

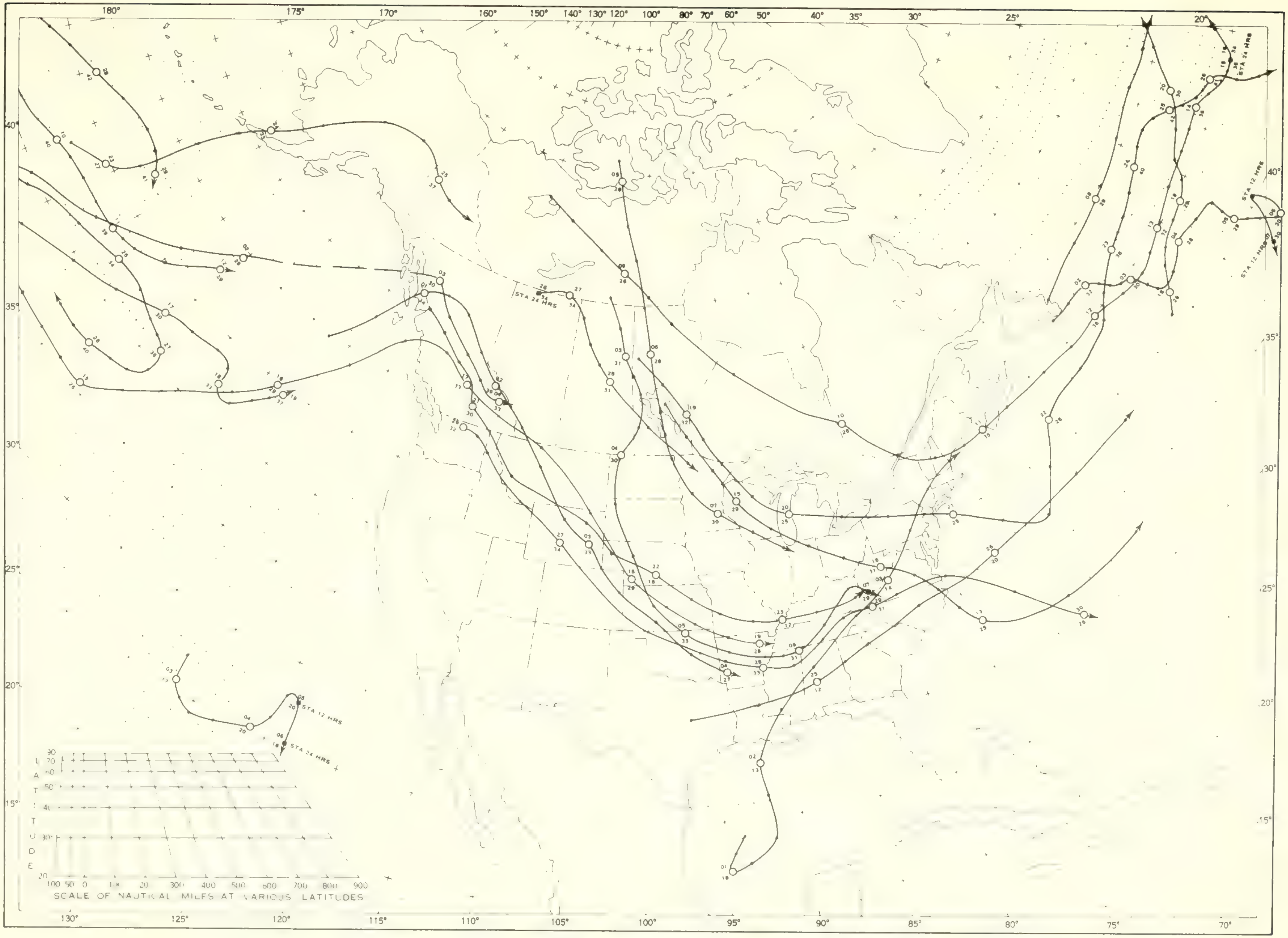


B. Percentage of Mean Daily Solar Radiation, November 1967.



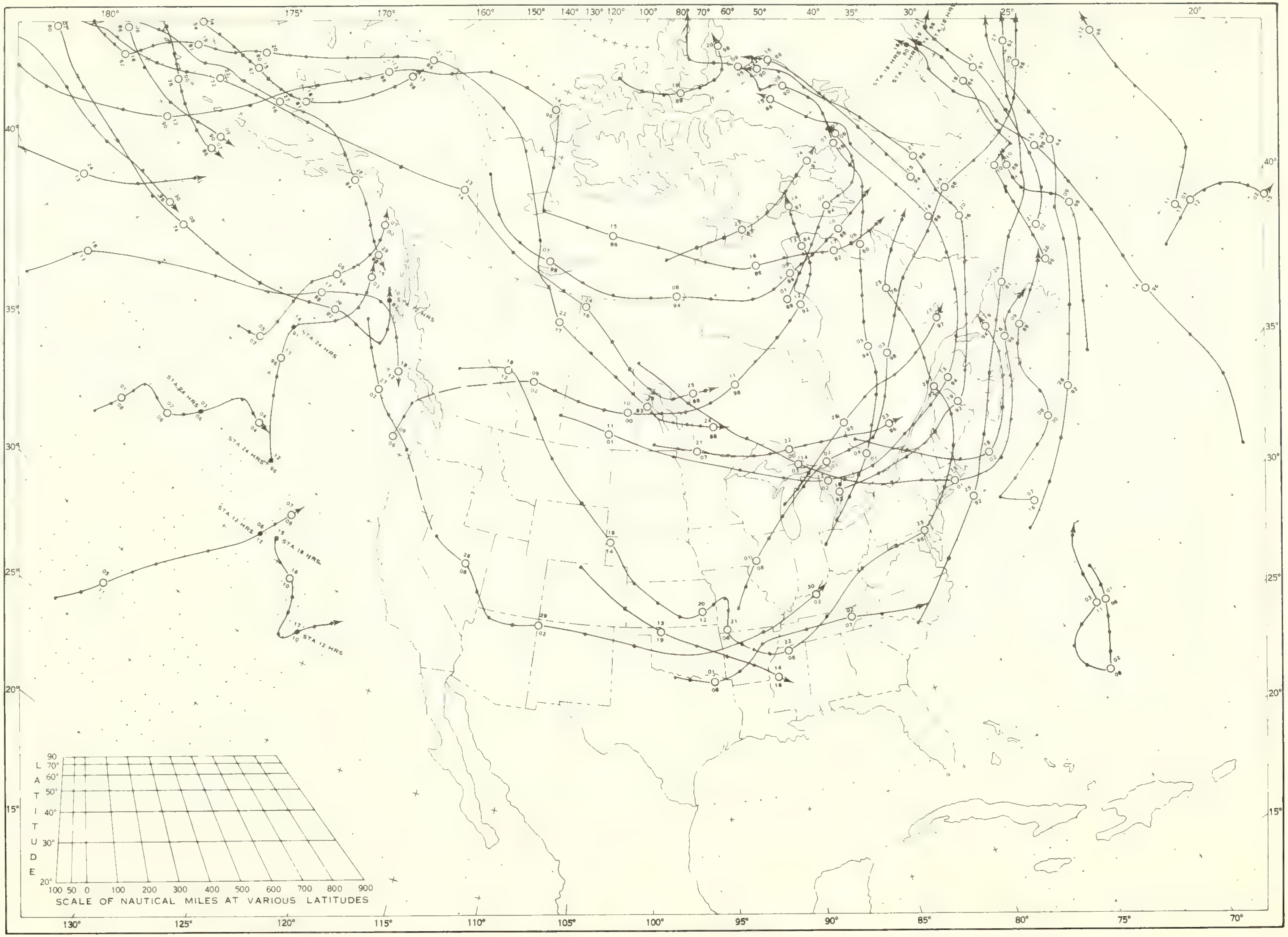
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, November 1967.



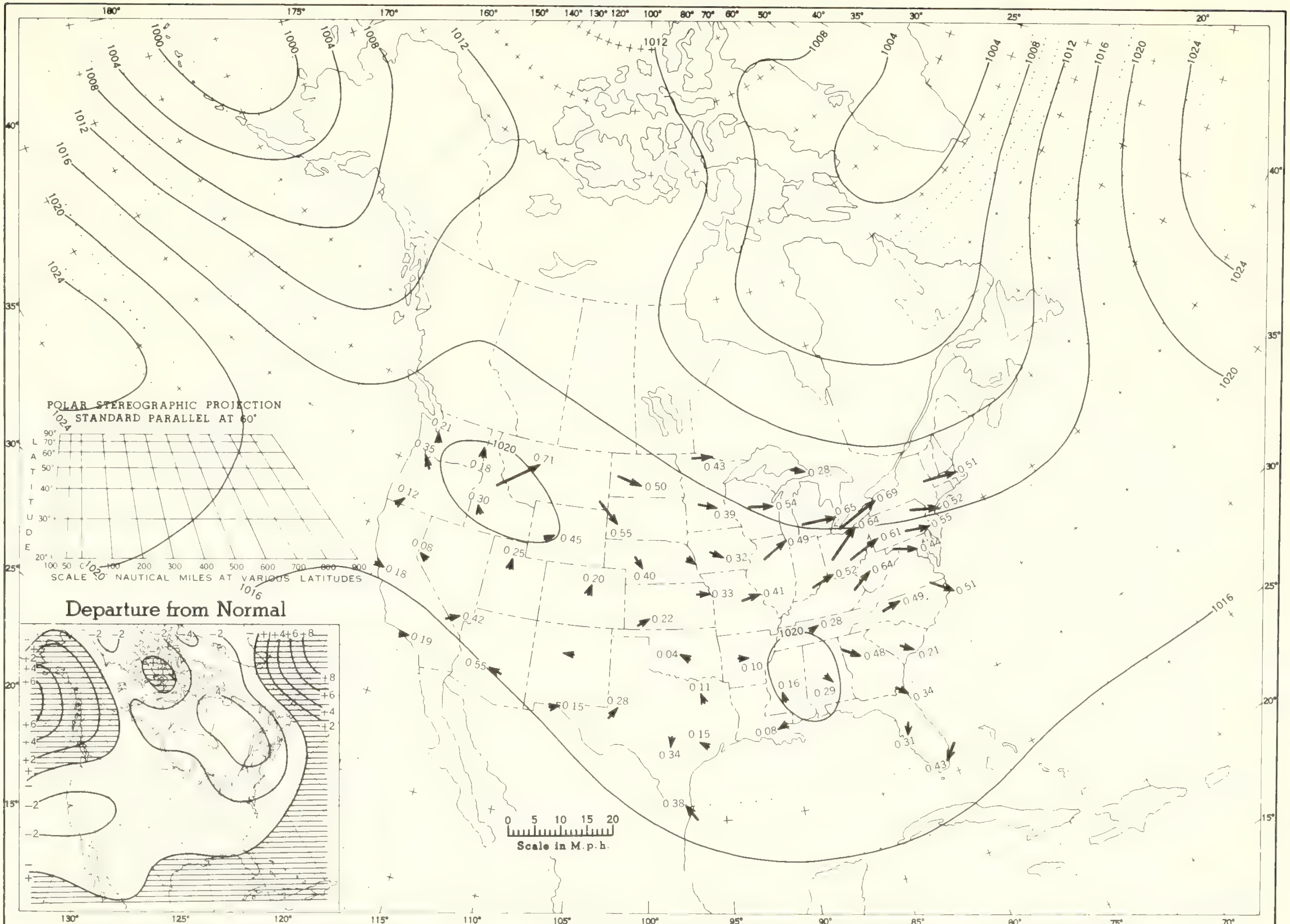
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. **Squares** indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. **Only those centers** which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, November 1967.



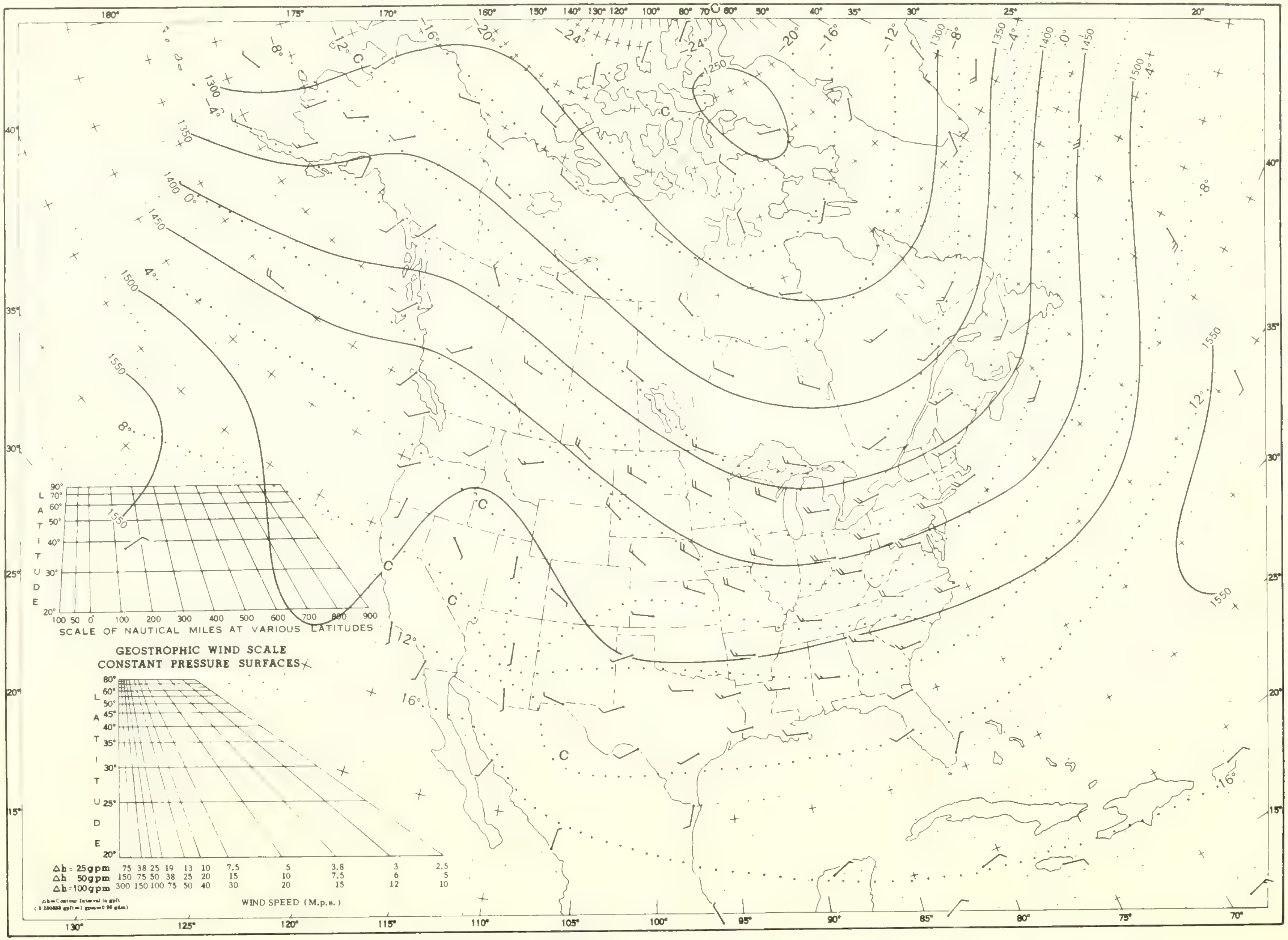
Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, November 1967. Inset: Departure of Average Pressure (mb) from Normal, November 1967.



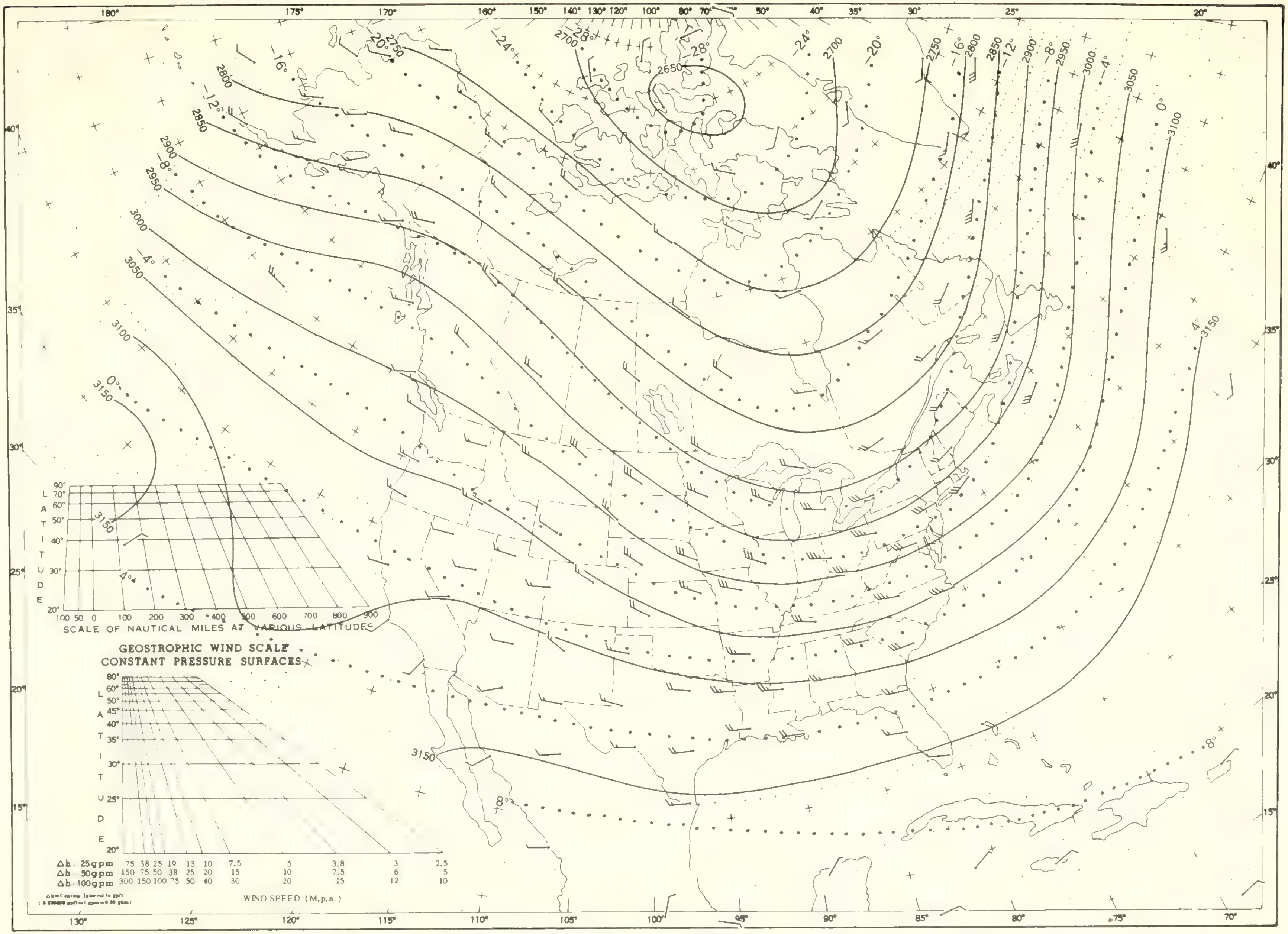
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10 intersections in a diamond grid over the oceans.

Chart XI. 850-mb Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.



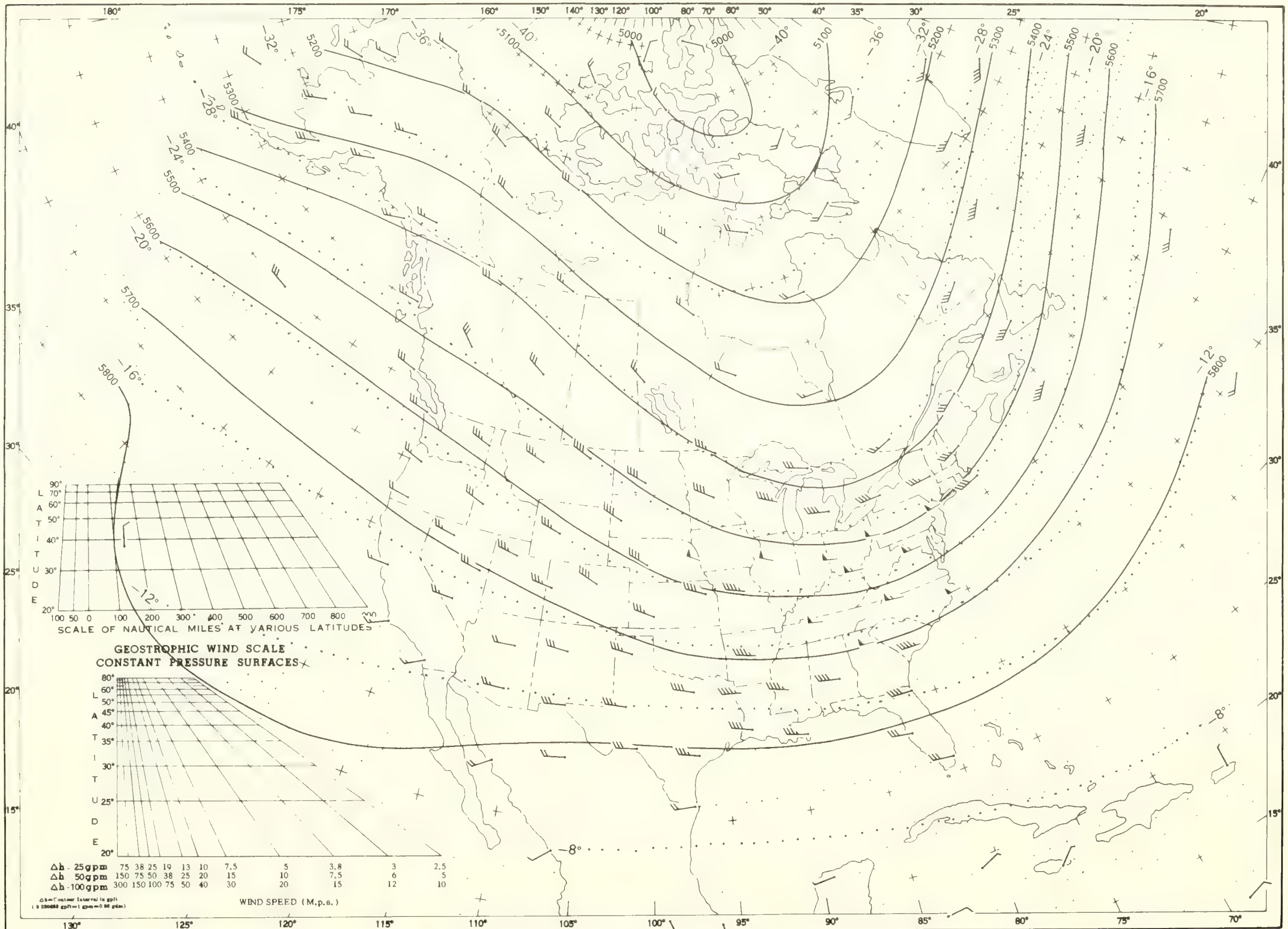
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather **2.5 mps**. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.



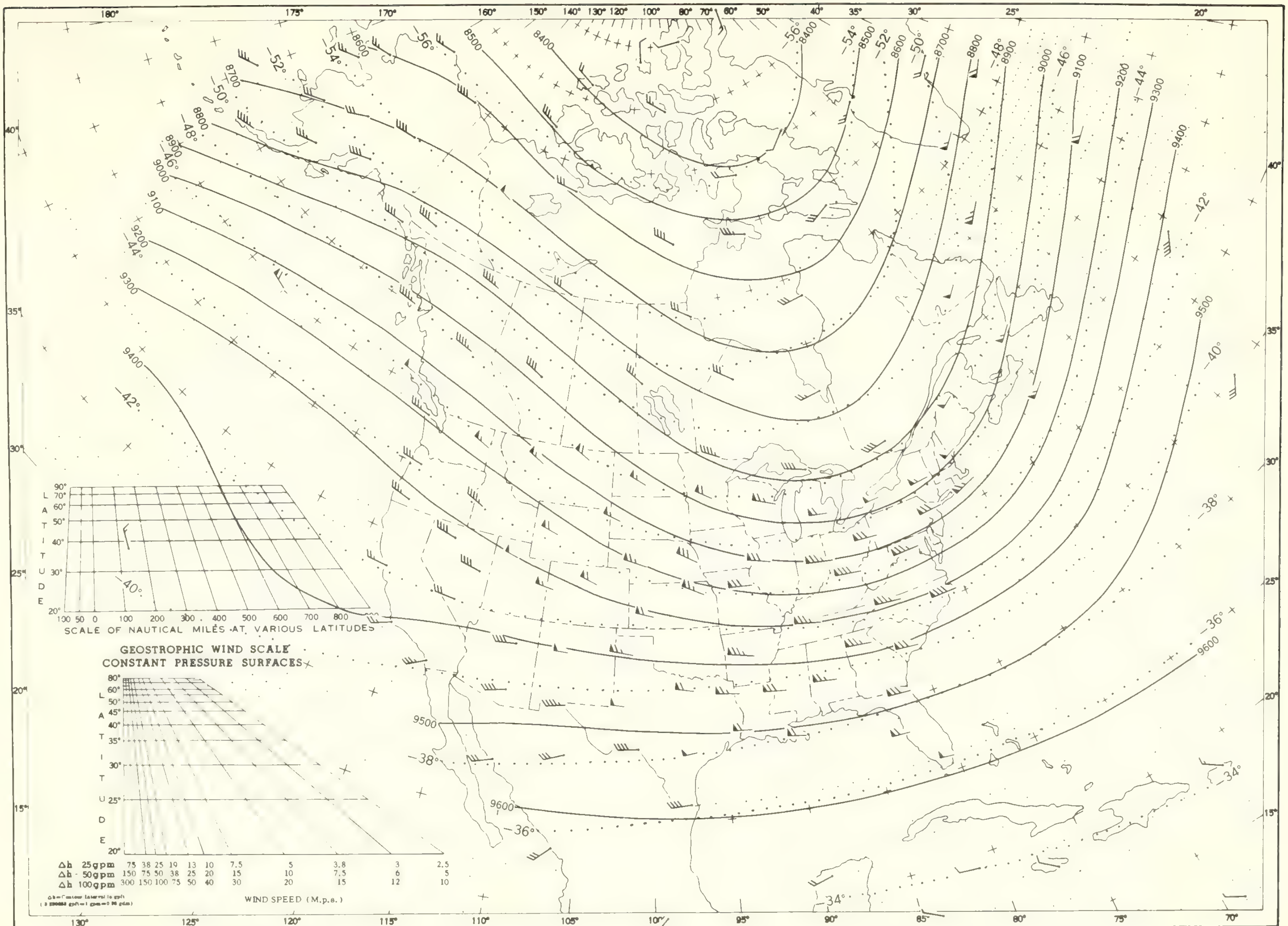
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.



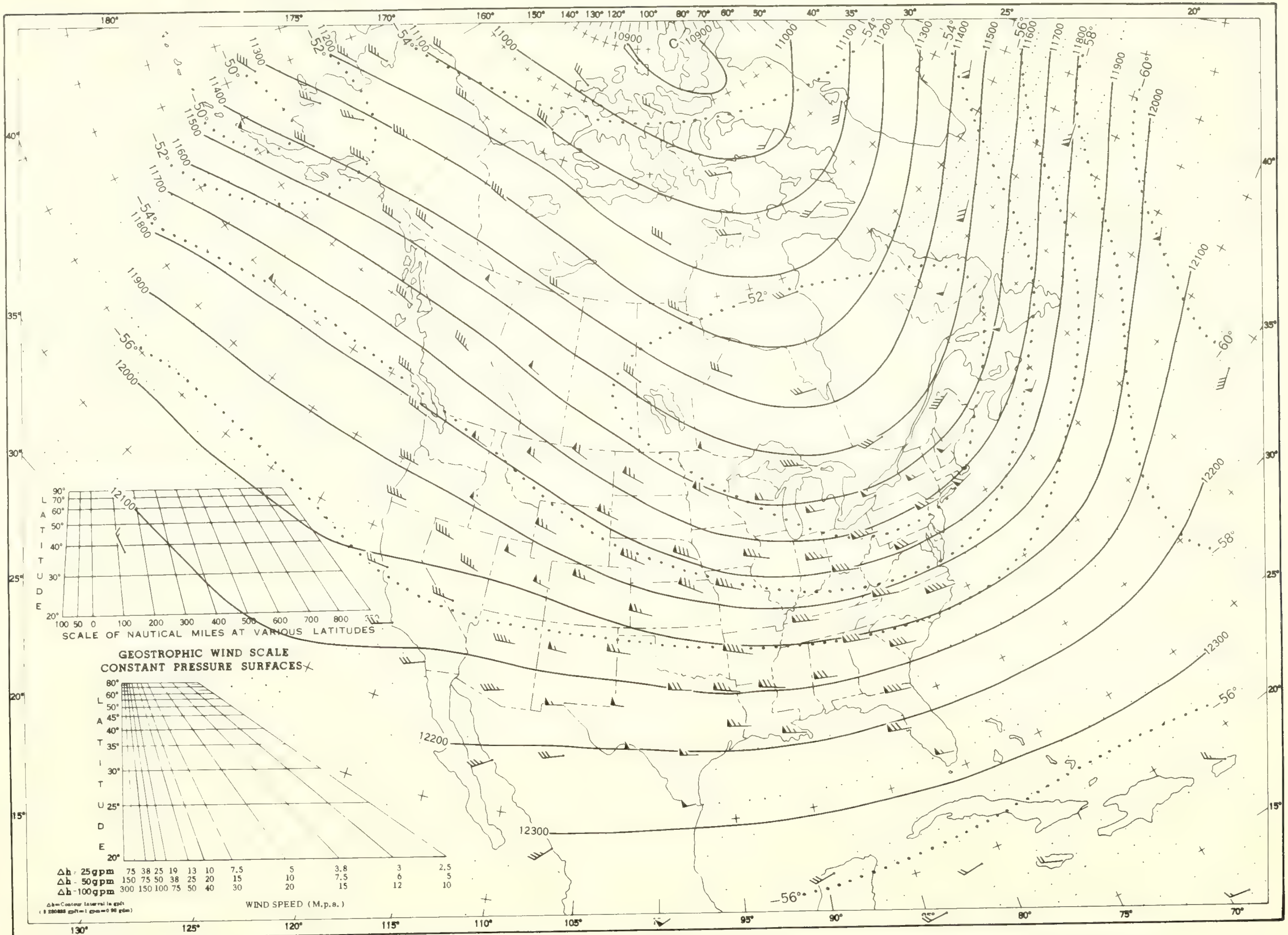
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.



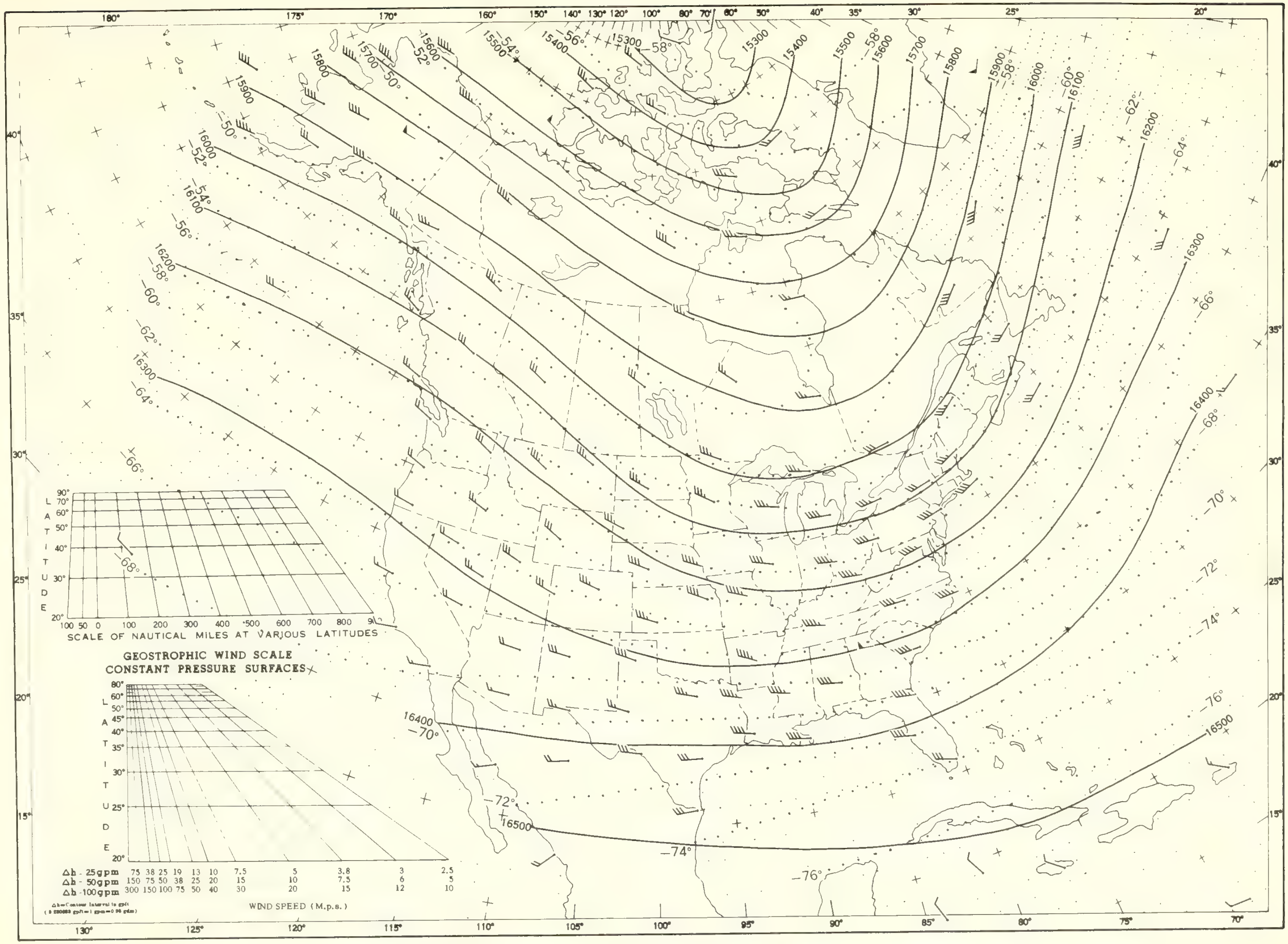
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.



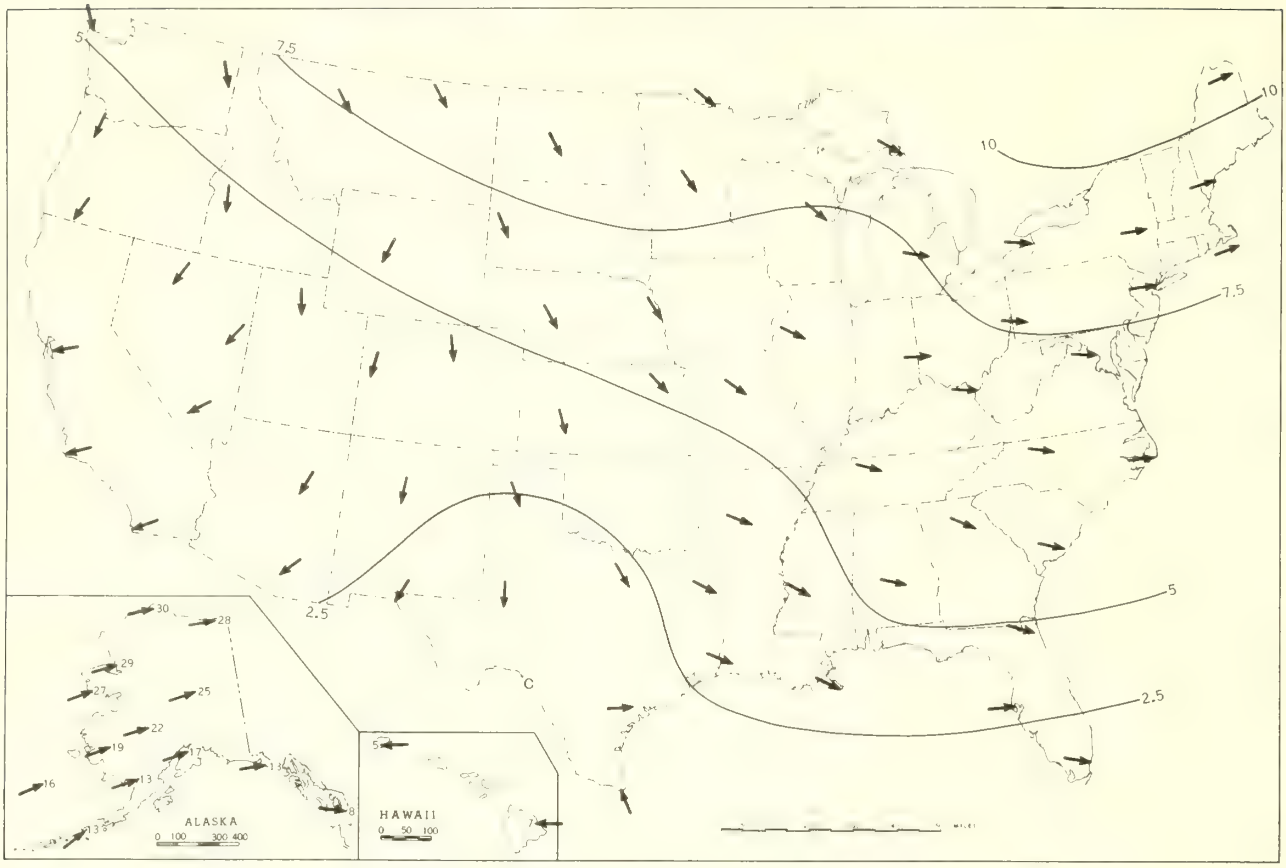
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. **All wind data are based on rawin observations.**

Chart XVI. 100-mb. Surface, 1200 GMT, November 1967. Average Height and Temperature, and Resultant Winds.

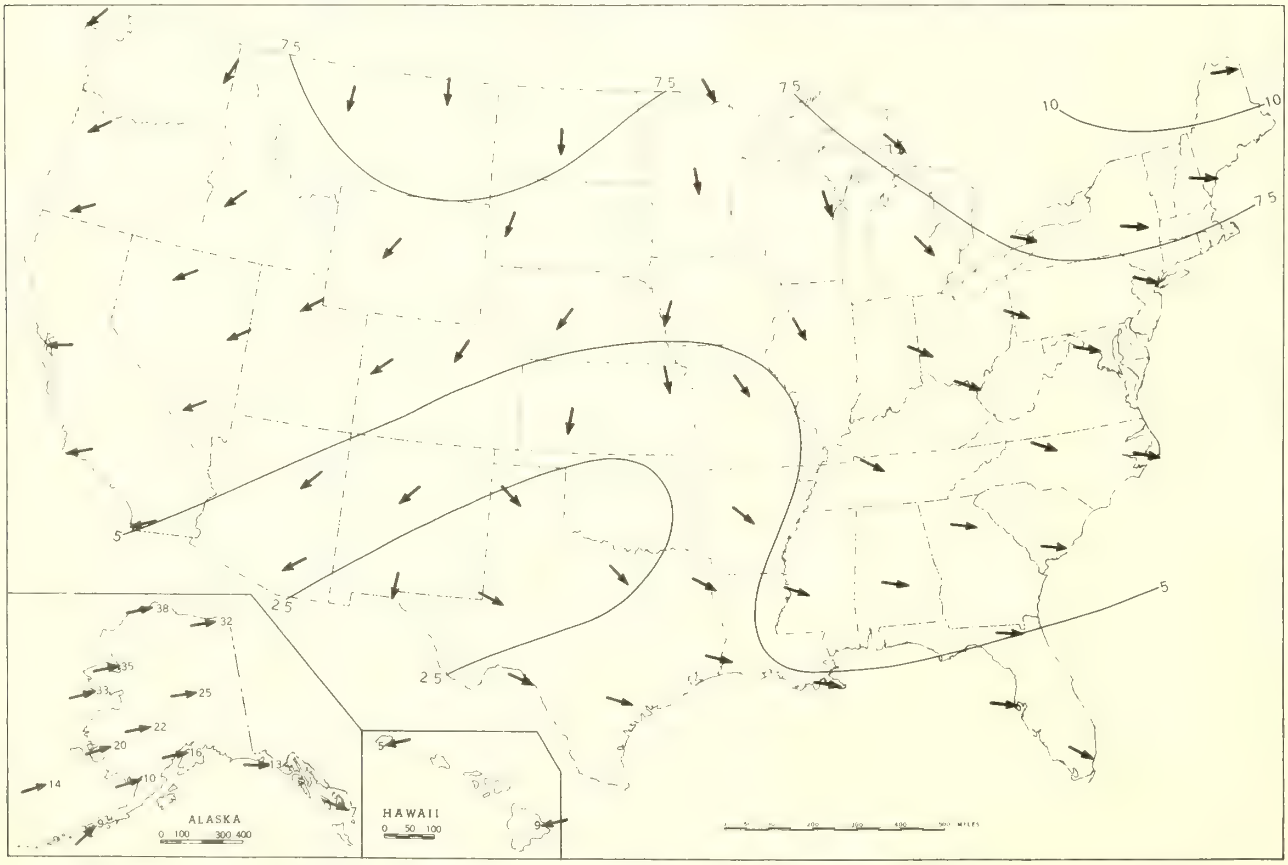


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, November 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, November 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. -2/14/68-1930

U.S. DEPARTMENT OF COMMERCE
C. R. SMITH, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

DECEMBER 1967
Volume 18 No. 12

ASHEVILLE: 1968

C O N T E N T S

NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 12 DECEMBER 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:
1. Record snowfall in Southwest.
2. First monthly temperature pattern change in last 6 months.
3. Mild in West, cold in East.
4. Heavy snowstorm in Northeast 28-29th.

TEMPERATURE.--Temperatures for December averaged below normal from the Great Plains westward and above from the Mississippi Valley eastward. This monthly temperature pattern was the reverse of the pattern for the previous 5 months. In the Southeast this was the first warmer-than-normal month in the past 8.

Temperatures were highlighted by unusually cold weather in an area extending from northeastern Arizona and extreme northwestern New Mexico northward through western Colorado and eastern Utah into south-central Wyoming. Advection of cold air into this area early in the month and a persistent snow cover after midmonth were chief causes of the cold weather. At Winslow, Ariz., the temperature dropped below zero on 9 days and averaged 21.4°, 11° below normal, for Winslow's coldest December on record. A -12° reading on the 22d was the lowest ever recorded at Winslow in December.

Elsewhere in the 48 States, December, relative to normal, was not unusually cold or warm. However, the monthly temperature pattern of above-normal temperatures in the East and below in the West was reversed the last week when temperatures rose to above normal levels in the Far West and dropped below normal from the western slopes of the Rockies to the Atlantic coast. Temperatures fell far below zero in the North-Central Interior and freezing extended to the Rio Grande River and western and central Gulf coast. The lowest temperature of the month in the 48 States was -48° at Burdette, Minn., on the 31st and the highest was 90° at Sarasota, Fla., on the 18th. Bismarck, N. Dak., recorded its lowest temperature for December, -42°, on the 20th.

PRECIPITATION.--Precipitation was unusually heavy in the Rocky Mountains, extreme upper Great Plains, much of the central and lower Mississippi Valley, in the South, and along the north Atlantic coast. In most of these areas precipitation ranged up to 300% of normal for the month. Near record amounts for December were reported by many stations, and Phoenix, Ariz., measured 3.98 inches and Lake Charles, La., 13.27 inches for their wettest Decembers. This was the second consecutive unusually wet month in the extreme lower Colorado River Valley and, central Wyoming, and the extreme lower Appalachian region.

The first decade brought heavy precipitation to the north Pacific coast and Cascades-Sierras where totals ranged from 2 to over 5 inches as at least three fronts moved across the area during the decade. Most of the heavy precipitation in the central Mississippi Valley for the period fell during the passage of a cold front on the 2d. Heaviest amounts in the central Gulf area for the period, more than 5 inches locally, fell on the 9th and 10th during the intensification of an area of low pressure there.

Precipitation was widespread in the course of the period from the 11th through the 17th. Heaviest amounts fell in southern areas. More than 4 inches fell in Arizona during the passage of a storm system from the Pacific on the 14th and 15th. Totals for the period also exceeded 4 inches in the central Gulf States where precipitation fell on several days with heaviest amounts on the 14-15th and 17th.

Precipitation, mostly light to moderate to occasionally heavy, spread across the conterminous United States during the period 18th through the 22d.

After the 22d precipitation was light and limited mostly to northern areas until moderate to heavy amounts fell in the South and East on the 27th and 28th when a storm system moved from the central Gulf coastal area up the Atlantic coast. Light amounts were widespread east of the Rockies with the advection of cold air on the 30th and 31st.

Areas with less then 50% of normal precipitation were limited to parts of central California and the Great Basin, a small section of the Texas coastal area, and southeastern Minnesota with some adjacent portions of Iowa and Wisconsin. Streamflow was deficient in most of Texas and along the north coast of California.

SNOWFALL.--Two outstanding snowfalls occurred in the Far Southwest during the period 12th through the 20th when accumulations up to 4 feet or more were reported in the higher elevations of the southern Rocky Mountain region. Traces of snow fell in San Diego, Calif., on the 13th for the first time since January 10, 1949, and the second time on record. Even La Jolla, Calif., on the immediate coast near San Diego, had its first snowfall on record.

In Arizona falls were particularly heavy. Flagstaff, Ariz., measured 86 inches for a new December record and an alltime record depth of 83 inches on the 19th and 20th. For Winslow, Ariz., December records included a 39.6-inch total, 17 inches in 24 hours, and a 29-inch depth. Yuma had a trace on 3 days, its first snowfall since the cold winter of 1937; the only other snowfall there was in 1932.

New Mexico reported that general snows of the 13th through the 16th continued almost daily until the 20th except in the East. Falls ranged from 1 to over 4 feet in western counties and in the mountains, mostly less than 1 foot in the eastern Plains and southern Rio Grande Valley, tapering off to 2 to 4 inches along the Texas-New Mexico border. Southeast of Albuquerque in Torrance County, 20-foot drifts were reported. Winds exceeded hurricane force locally on the 14th, and full gale force on the 15th.

The other outstanding snowfall occurred over much of the Northeast as a storm system which developed in the northern Gulf of Mexico intensified as it moved up the Atlantic coast. Falls ranged up to 2 feet in West Virginia where Elkins measured 17.8 inches on the 28th for a new 24-hour record. Elsewhere falls ranged up to 20 inches in New Hampshire, 18 inches in Maine and Massachusetts, and 23 inches in Maryland.

At the end of the month the snowpack was two to five times normal in Arizona and mostly above in Colorado and southern Utah, but near to mostly below normal elsewhere in the Far West.

Snowfall generally was below average in the Great

Plains and from the Great Lakes eastward. Some southern sections in the East reported above average amounts. Many stations in the Great Lakes and upper Mississippi Valley had their least snowfall in more than 20 years.

SEVERE STORMS.--Tornadoes were unusually frequent with main outbreaks in Mississippi and Alabama on the 2d; in Indiana, Kentucky, Mississippi and Florida on the 10th and 11th; in Alabama, Georgia, and Mississippi on the 20th and 21st; and the lower Mississippi Basin on the 28th.

One of the most damaging tornadoes occurred in Morgan and Madison Counties, Ala., on the 18th; main damage was in Huntsville. Damage exceeding $1/2 million included 22 houses and 16 mobile homes destroyed, over 100 homes damaged and extensive damage to automobiles and utility lines. The storm was blamed for 2 deaths and 27 injuries.

Another tornado on the 10th struck Fort Walton Beach and Ocean City, Fla., killing one person and injuring 40. Damage to buildings exceeded $1/2 million. In the same State near Panama City on the 10th a tornado killed one person, injured 34, and caused over $1/2 million to buildings.

A tornado in Hawaii on the Island of Kauai the 17th caused about $300,000 damage. Four or five homes were virtually destroyed and 38 severely damaged.

On the 21st tornadoes caused over $1/2 million damage in Clinton County, Ill., and in Iron and Washington Counties, Mo., where three persons were killed and more than 50 injured.

Heavy snowfall in Arizona and New Mexico from the 12th through the 20th damaged buildings, utilities and roads, and stranded many people. Property damage exceeded $1/2 million and crop losses were many thousands. These snowstorms also brought heavy amounts to much of California, closing highways and isolating communities in the Sierras and in the high desert areas of the Southwest. Damage from wind, rain, and low temperatures following the storm caused more than a half million dollars damage to both property and crops.

Heavy snowfall during the Atlantic coastal storm on the 28th and 29th slowed traffic over much of the Northeast, damaged utilities in New England and homes in New Hampshire and Massachusetts, with damage in the latter State alone estimated at more than $5 million.

Glaze caused heavy damage in many parts of the eastern half of the 48 States in the course of the month. Hardest hit was an area including northern Iowa and southwestern Minnesota about midmonth when ice accumulation ranged up to 2 inches and caused over a half million dollars damage in each State. This storm was described as the worst in the past 20 years in southwestern Minnesota.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Chatom 3N	82	19+	2 Stations	16	30+	Vernon	15.95	Pine Level	4.87
Alaska	Data delayed									
Arizona	Bartlett Dam	78	1	Seligman 13SSW	-21	21	Crown King	16.21	Dateland	.07
Arkansas	Arkansas Post	82	21	4 Stations	10	31+	Clinton	9.76	Ozone	3.80
California	6 Stations	83	27+	White Mountain 2	-26	13	Cuyamaca	13.42	Death Valley	.04
Colorado	Wetmore 2S	67	11	Wagon Wheel Gap 3N	-36	21	Wolf Creek Pass 1E	8.55	Brandon	.01
Connecticut	Norwalk Gas Plant	59	20	Falls Village	-3	30	Groton	7.97	Stafford Springs 2	4.43
Delaware	Lewes 1SW	68	22	Middletown 1WSW	2	2	Dover	6.85	Bridgeville 1NW	4.91
Florida	Sarasota	90	18	Fountain 3SSE	20	24	Niceville	13.09	Dania 4WNW	.54
Georgia	Fort Stewart	86	20	2 Stations	14	24+	Clayton	11.01	Brunswick	1.39
Hawaii	Data delayed									
Idaho	Deer Flat Dam	56	4	Stanley 1NNE	-36	13	Powell	6.54	Hollister	.08
Illinois	6 Stations	69	21	Moline WBAP	-17	31	Centralia 2SW	10.78	Galena	.57
Indiana	Evans Landing Dam 43	70	21	2 Stations	-14	31	Rockville	11.19	Monroeville 3ENE	3.09
Iowa	Burlington Radio KBUR	62	21	do	-20	31	Dubuque WBAP	2.28	Saratoga 2E	.15
Kansas	Hugoton	74	1	Oberlin	-16	31	Topeka WBAP	3.11	Tescott	.13
Kentucky	Barbourville	78	19	Tomahawk 1WSW	-3	30	Hickman 1E	10.52	Vanceburg	D 1.42
Louisiana	Amite	86	21	2 Stations	18	30+	Marksville	17.12	Shreveport WBAP	3.92
Maine	Bar Harbor	58	13	3 Stations	-20	27+	Bar Harbor	10.32	Middle Dam	2.62
Maryland	5 Stations	67	22+	Unionville	-5	2	Benson Police Barracks	6.96	Frederick 3E	3.19
Massachusetts	South Wellfleet	64	13	3 Stations	-10	31	Blue Hill WB	8.11	Adams	3.42
Michigan	Bay City Sewage Plant	64	22	Ironwood	-27	31	Fife Lake 4SW	6.25	Ironwood	.27
Minnesota	Winona	58	21	Baudette 22S	-48	31	Isle 8N	2.44	Montgomery	T
Mississippi	State Line	82	20	Booneville	12	27	Quitman 1N	14.63	Sledge	4.47
Missouri	5 Stations	70	22+	Tarkio	-11	31	Ellington	11.66	Oregon	1.13
Montana	2 Stations	60	5	Lambert 3ESE	-42	31	Jardine	7.75	Dodson 3W	.02
Nebraska	Oconto 6SW	66	24	Anselmo	-35	30	Mullen 21NW	2.45	Lamar	.06
Nevada	Sunrise Manor Las Vegas	70	28+	Mountain City RS	-26	13	McGill	2.10	I L Ranch	.00
New Hampshire	4 Stations	60	22	Mount Washington	-19	27	Mount Washington	7.26	Berlin	2.59
New Jersey	Chatsworth	64	22	High Point Park	-6	30+	Burlington	D 8.87	High Point Park	D 3.61
New Mexico	Carlsbad	76	2	Gavilan	-31	22	Luna Ranger Station	5.60	Tatum	.01
New York	2 Stations	66	22	Hinckley	-20	27	White Plains Airport	8.23	Whitney Point	D .92
North Carolina	3 Stations	82	22+	Grandfather Mountain	2	23	Lake Toxaway 2SW	13.58	Banner Elk	3.19
North Dakota	5 Stations	55	5+	5 Stations	-43	31	Minot FAA AP	1.82	Medora 22NNW	.02
Ohio	2 Stations	72	21+	Mansfield 6W	-8	27	Wauseon Waste Wtr Plt	7.38	Canfield 1S	1.49
Oklahoma	4 Stations	75	8+	2 Stations	4	31+	Wister Dam	6.86	Hooker 1N	T
Oregon	Brookings	75	26	Seneca	-28	16+	Valsetz	17.55	Rome 2NW	T
Pennsylvania	Montgomery L and D	72	22	Coudersport 5NW	-13	28+	Maple Glen	D 6.93	Austin	.93
Puerto Rico	2 Stations	92	19+	Cayey 1E	51	25+	Rio Grande El Verde	6.01	4 Stations	.00
Rhode Island	Newport	57	12	Kingston	0	25	Block Island WBAP	8.12	Woonsocket	6.73
South Carolina	6 Stations	82	23+	Caesars Head 1NE	15	23	Caesars Head 1NE	12.06	Rimini	1.60
South Dakota	Phillip	64	5	La Delle 7NE	-40	31	Deadwood	2.62	Redig 11NE	.02
Tennessee	3 Stations	78	22+	Oneida	5	31+	Rockwood 2	9.95	Newbern	2.86
Texas	Harlingen	86	22	Lipscomb	2	28	Kirbyville Forest Service	13.44	2 Stations	.00
Utah	3 Stations	59	27+	Bryce Canyon FAA AP	-24	21	Alta	9.24	Garrison	.12
Vermont	2 Stations	56	22+	Somerset	-17	27	Mount Mansfield	6.06	Bloomfield	2.40
Virginia	3 Stations	76	23+	Timberville 3E	-5	30	Woolwine 4S	7.66	Tangier Island	2.55
Washington	do	63	28	Chesaw 4NNW	-13	20	Spurce	23.96	Sunnyside	.17
West Virginia	Ripley	78	21	Seneca State Forest	-13	30	Pickens 1	7.73	Stoney River Dam	D 1.77
Wisconsin	2 Stations	58	21	2 Stations	-36	31	Plymouth	2.32	Alma Dam 4	.14
Wyoming	3 Stations	58	23+	Bondurant 3NW	-39	13	Moose	3.01	Upton 13SW	.13

\+ And also on an earlier date or dates.

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ⊘	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	997.0	1019.9	58	39	48.5	1.2	73	19	21	24+	0	11	41	77	11.49	6.47	4.64	15	4	T	0	0.8	15	36	SE	2	6	4	21	7.5	34
HUNTSVILLE	624	995.9	1019.6	55	37	45.8	2.2	70	21	19	23	0	15	40	82	11.06	6.15	5.49	14	5	1.4	1	1.0	8	44	18	21	5	7	19	7.5	
MOBILE	211	1011.2	1019.2	67	49	57.9	3.8	80	19	28	24	0	5	51	80	7.50	2.04	4.14	14	5	0.0	0	2.0	14	24	21	2	7	4	20	7.1	
MONTGOMERY	194	1012.5	1020.0	63	44	53.2	5.0	79	19	26	24+	0	7	45	77	8.51	3.70	1.93	14	3	0.0	0	0.8	13	25	S	2	7	4	20	7.0	33
ALASKA												8																				
ANCHORAGE	114	1004.4	1009.3	22	10	16.0	2.5	46	29	-13	3	0	29	7	66	2.40	1.46	0.62	14	0	26.5	15	1.5	4	28	12	12	4	3	24	8.0	26
ANNETTE	110	1007.5	1011.7	40	32	36.3	0.3	48	27	14	21	0	12	30	79	12.11	0.00	2.69	22	0	17.7	9	5.7	12	46	14	2	5	3	23	8.0	
BARROW	31	1015.2	1015.7	- 1	-16	- 8.6	2.6	27	30+	-35	12	0	31	-16	71	0.76	0.59	0.21	16	0	9.2	15	2.4	7	33	8	29	Z	Z	Z		
BARTER ISLAND	39	1014.9	1016.7	- 1	-16	- 8.6	1.8	27	30	-33	1	0	31	-15	70	0.36	0.07	0.11	7	0	5.4	13	4.0	26	40	27	22	Z	Z	Z		
BETHEL	125	1004.4	1010.2	17	3	10.0	5.2	39	28+	-26	5+	0	31	8	87	0.83	- 0.19	0.25	8	0	5.0	6	2.4	8	38	7	12	8	4	19	6.6	
COLD BAY	96	1002.7	1006.5	35	26	30.4	1.6	42	31+	13	10	0	24	26	83	4.49	1.90	1.51	25	0	12.2	8	3.2	13	55	29	2	1	8	22	8.4	
FAIRBANKS	436	996.3	1014.5	5	- 9	- 1.6	6.1	42	13	-41	1	0	31	- 6	76	1.34	0.80	0.43	17	0	16.8	20	0.8	1	16	19	13	5	4	22	8.0	
JUNEAU	12	1010.8	1011.5	32	23	27.3	- 1.1	42	14	9	20+	0	30	25	91	3.25	- 0.97	0.66	18	0	21.1	9	6.7	10	41	13	14	3	2	26	8.7	17
KING SALMON	49	1007.1	1009.1	19	6	12.0	- 1.2	46	28	-23	5	0	28	5	72	2.03	1.01	0.66	11	0	3.5	3	3.3	7	47	9	12	13	4	14	5.4	
KOTZEBUE	10	1011.9	1012.2	9	- 4	2.4	6.0	35	29	-33	2+	0	31	- 3	80	0.37	0.08	0.09	11	0	9.3	15	7.4	11	48	10	13	8	8	15	6.5	
MC GRATH	344	999.3	1013.0	8	- 9	- 0.7	6.3	40	29	-40	4	0	31	- 7	72	1.72	0.71	0.92	13	0	19.4	11	0.6	14	26	22	13	6	3	22	7.6	
NOME	13	1009.5	1010.3	17	3	10.0	3.7	34	29+	-24	2	0	31	2	68	1.02	0.03	0.18	14	0	9.3	13	3.0	7	29	6	12	8	7	16	6.6	30
ST. PAUL ISLAND	22	1002.7	1003.7	34	28	31.2	4.8	41	27	11	9	0	22	27	81	2.70	0.87	0.45	26	0	14.6	3	4.7	15	58	27	2	2	5	24	8.5	
SHEMYA	122	995.3	999.1	36	29	32.6	1.2	44	1	23	14+	0	25	28	83	1.67	- 0.47	0.44	21	0	7.8	2	8.7	22	76	21	30	1	10	20	8.2	
YAKUTAT	28	1006.8	1008.0	30	18	24.2	- 3.9	41	14	- 1	21	0	29	22	89	12.26	- 0.01	3.71	18	0	31.1	25	3.9	10	39	12	14	4	3	24	8.4	
ARIZONA																																
FLAGSTAFF	6993	784.0	1018.2	36	10	23.1	- 7.3	61	11	- 6	21	0	31	14	71	7.30	5.65	2.65	9	0	86.0	83	0.7	14	23	23	5	17	5	9	4.2	
PHOENIX	1117	976.6	1016.1	60	37	48.2	- 3.4	68	5+	29	10	0	5	34	64	3.98	3.13	1.89	7	0	T	T	0.8	11	47Y	S	19	15	7	9	4.5	72
TUCSON	2584	925.8	1015.0	60	37	48.6	- 3.3	70	7	26	10	0	5	33	61	3.44	2.52	1.54	10	0	1.6	1	3.3	16	38	S	13	14	7	10	4.7	68
WINSLOW	4895	851.7	1022.7	33	10	21.4	-11.1	59	7	-12	22	0	31	11	69	3.73	3.21	1.51	6	0	39.6	29	3.1	23	39	22	16	16	4	11	4.5	
YUMA	194	1009.5	1016.7	63	42	52.4	- 2.6	74	26	34	21	0	0	33	52	0.65	0.33	0.30	5	0	T	T	4.5	36	34	N	9	16	4	11	4.0	76
ARKANSAS																																
FORT SMITH	447	1001.7	1018.9	52	31	41.3	- 1.0	73	6	16	26	0	18	32	74	5.26	2.44	1.70	14	4	2.0	1	2.0	2	40	NW	21	9	7	15	6.5	44
LITTLE ROCK	257	1009.1	1018.9	52	33	42.7	0.8	76	20	20	26	0	16	35	76	4.95	0.86	1.55	14	3	1.1	1	0.6	34	34	NW	2	9	5	17	6.6	56
TEXARKANA	391	1005.4	1018.9	57	37	47.0	0.1	78	20	21	28	0	11	37	73	9.17	4.62	3.53	14	4	2.0	1	1.2	17	23	31	21	9	7	15	6.1	
CALIFORNIA																																
BAKERSFIELD	475	1002.0	1019.9	55	36	45.3	- 3.5	66	4	25	14	0	3	35	71	0.54	- 0.43	0.31	4	0	T	0	0.3	6	13	32	7	17	7	7	4.1	
BISHOP	4108	875.0		50	18	34.0	- 5.3	70	10	- 4	21	0	28			0.52	- 0.66	0.27	5		13.2	6						18	8	5	3.4	
BLUE CANYON	5280			42	28	34.9	- 5.4	64	25	9	14	0	20			9.04	- 1.20	2.38	10		44.3	45			39	21	4	16	4	11	4.5	
EUREKA U	43			51	39	45.1	- 3.8	58	26+	30	15+	0	4			4.34	- 2.37	1.34	9		T	0			40	NW	16	8	11	12	6.1	58
FRESNO	328	1007.8	1019.8	53	32	42.6	- 4.4	63	27	21	14	0	16	35	80	1.04	- 0.93	0.51	7	2	T	0	1.6	11	23	SE	18	11	8	12	5.1	58
LONG BEACH	34	1015.9	1017.2	65	45	54.7	- 1.3	80	23	33	14	0	0	37	55	1.06	- 0.91	0.74	4	1	0.0	0	1.7	35	22	6	14	13	12	6	4.2	
LOS ANGELES	97	1012.9	1016.5	62	46	54.1	- 2.8	76	23	38	21+	0	0	36	55	1.05	- 1.34	0.71	5	1	0.0	0	2.4	36	33Y	W	19	16	12	3	3.7	
LOS ANGELES U	270			65	46	55.6	- 2.6	79	23	38	21+	0	0			1.66	- 1.21	1.37	4		0.0	0			20	SW	19	16	10	5	3.2	70
MT SHASTA P	3544			38	22	30.2	- 5.7	54	27	7	19	0	27			6.23	0.01	2.14	10		53.0	30										
OAKLAND	6	1019.6	1019.8	56	42	48.9	- 0.6	73	28	36	31+	0	0	35	63	2.70	- 0.88	1.66	6	1	0.0	0	2.1	2	35	2	13	12	13	6	4.3	
RED BLUFF	342	1007.8	1020.7	58	36	46.5	- 0.6	78	25	22	16	0	15	31	62	2.51	- 1.70	1.51	8	0	T	T	4.8	35	56	SE	17	14	8	9	4.6	68
SACRAMENTO	17	1019.0	1019.8	54	34	44.0	- 2.4	72	28	25	16	0	16	33	72	1.29	- 1.95	0.57	5	0	0.0	0	1.6	1	40	NW	12	14	9	8	4.4	79
SANDBERG P	4517	862.2		42	28	34.9	- 7.8	68	11	12	13	0	20			0.48	- 2.01	0.33	3		5.8	5	8.7	5	48	8	22	18	6	7	3.6	
SAN DIEGO	13	1015.6	1016.5	64	47	55.5	- 1.6	75	25	38	14+	0	0	40	58	1.66	- 0.39	1.33	6	0	T	T	0.7	28	32	3	18	17	8	6	3.5	79
SAN FRANCISCO	8	1019.0	1019.7	56	40	48.1	- 2.0	72	26	31	15	0	1	37	68	3.50	- 0.59	1.20	8	0	0.0	0	1.8	35	49	NNW	13	13	11	7	4.4	
SAN FRANCISCO U	52			57	47	51.9	- 0.6	74	26	37	14	0	0			2.12	- 2.15	0.72	6		0.0	0			38	NE	13					83
SANTA CATALINA	1568	960.0		57	47	52.2	- 3.9	74	26	34	14	0	0			0.87	- 1.70	0.55	4		0.0	0										
SANTA MARIA	236			62	37	49.5	- 2.9	76	26+	21	14	0	5			1.33	- 1.25	0.81	4		0.0	0						19	8	4	2.9	
STOCKTON	22	1019.3	1020.2	52	34	42.7	- 3.2	62	29	27	16	0	15	33	75	1.33	- 1.33	0.55	7	0	0.0	0	1.0	12	38	15	7	12	10	9	4.7	
COLORADO																																
ALAMOSA	7536	767.7		28	- 5	11.6	- 7.6	48	5	-30	22	0	31			1.20	0.95	0.68	11		27.7	16						12	7	12	5.2	
COLORADO SPRINGS	6145	807.0	1018.1	36	15	25.3	- 6.4	59	11	0	21	0	31	9	55	0.67	0.43	0.23	7	0	11.7	9	3.8	1	36	36	26	9	11	11	5.6	
DENVER	5283	832.7	1015.8	41	13	26.5	- 5.1	60	23+	-12	31	0	31	13	61	1.06	0.59	0.42	14	0	13.1	4	1.0	26	42	NW	6	6	9	16	6.7	53
GRAND JUNCTION	4855	852.4	1022.6	28	9	18.3	-10.8	43	1	- 4	24+	0	31	13	78	1.14	0.57	0.36	13	0	16.7	7	1.7	5	24	S	20	5	10	16	6.9	41

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

DECEMBER 1967

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
PUEBLO	4684	853.4	1018.4	37	10	23.5	- 9.7	60	11	- 8	22	0	31	10	62	0.93	0.63	0.35	7	0	15.3	11	2.1	34	43	N	26	10	10	11	5.6	59
CONNECTICUT																																
BRIDGEPORT	7	1018.6	1019.4	43	29	35.9	2.7	57	19	15	1	0	22	29	76	5.60	2.09	1.44	13	1	10.1	4	4.4	32	32	30	14+	6	8	17	6.9	
HARTFORD	169	1012.2	1019.0	40	24	32.1	3.2	57	22+	2	31+	0	24	23	70	6.77	3.30	1.84	12	0	21.7	15	4.9	34	29	NW	15+	4	11	16	7.1	56
NEW HAVEN	6	1019.0		42	27	34.9	2.5	56	19	13	25	0	23			5.31	1.29	1.43	13		13.4	5			29	NW	29	7	5	19	6.8	54
DELAWARE																																
WILMINGTON	74	1016.9	1020.1	45	29	36.8	1.7	61	22	11	2	0	19	29	73	5.24	2.21	1.61	12	0	4.0	6	3.5	31	28	6	11	9	6	16	6.4	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1018.3	1020.5	48	32	39.9	1.8	64	19	16	2	0	17	29	67	5.93	3.15	1.41	11	0	6.3	6	2.4	33	28	NW	23+	10	3	18	6.7	53
FLORIDA																																
APALACHICOLA U	13			65	52	58.3	2.5	74	22+	30	24	0	1			6.53	3.57	4.11	10	3	0.0	0			26	W	28	7	6	18	6.6	42
DAYTONA BEACH	31	1019.0	1020.3	73	53	63.2	2.9	82	19+	35	24	0	0	55	78	2.98	1.03	2.19	7	2	0.0	0	0.5	31	26	31	23	8	10	13	6.3	
FORT MYERS	15	1019.3	1019.5	80	58	69.1	4.1	87	14+	39	24	0	0	60	78	2.91	1.62	1.65	4	2	0.0	0	2.6	9	35	33	23	7	18	6	5.1	
JACKSONVILLE	20	1019.3	1020.4	71	50	60.7	4.6	83	19	31	24	0	1	52	78	4.69	2.47	2.45	10	3	0.0	0	1.0	32	30	NW	23	10	9	12	5.7	51
KEY WEST	4	1017.6	1018.4	79	70	74.4	3.8	83	14+	57	24	0	0	67	78	4.00	2.31	3.12	7	2	0.0	0	7.1	9	36	N	23	9	8	14	6.0	71
LAKELAND U	214			75	57	66.1	3.7	84	15	35	24	0	0			1.87	0.01	1.40	7		0.0	0						10	10	11	5.5	68
MIAMI	7	1018.6	1018.9	77	64	70.3	2.2	81	19+	47	24	0	0	62	76	1.37	- 0.30	0.90	4	0	0.0	0	3.8	10	38	32	23	6	15	10	5.9	
ORLANDO	108	1015.9	1020.3	76	55	65.9	5.0	84	19	36	24	0	0			2.42	0.53	1.89	7	1	0.0	0	0.5	7	27	23	11	11	10	10	5.6	
PENSACOLA	112	1015.2	1019.5	66	50	57.5	3.2	77	18	29	24+	0	3	51	80	6.53	2.31	2.69	12		0.0	0	2.5	10	38	SE	11	8	2	21	7.1	32
TALLAHASSEE	55	1018.0	1020.2	71	47	58.8	4.7	82	18	27	24	0	4	51	79	6.28	2.84	3.21	11	2	0.0	0	0.5	17	24	24	28	8	6	17	6.2	
TAMPA	19	1019.6	1019.7	75	55	64.8	2.5	82	20+	30	24	0	1	56	78	2.04	0.15	0.93	7	2	0.0	0	1.6	9	26	35	23	10	10	11	5.5	65
WEST PALM BEACH	15	1018.6	1019.3	78	60	68.9	0.7	84	11	45	24	0	0	59	72	1.23	- 1.34	0.56	6	2	0.0	0	2.7	10	29	32	23	7	9	15	6.4	
GEORGIA																																
ATHENS	802	990.5	1020.1	57	39	48.0	3.4	76	20	22	24	0	11	40	78	6.58	2.05	1.95	12	3	0.0	0	1.1	29	18	33	23+	8	7	16	6.3	
ATLANTA	1010	982.4	1019.9	57	39	47.7	2.9	72	20	21	24+	0	10	39	76	6.71	2.33	2.09	12	2	0.0	0	0.1	26	30	NW	23	6	5	20	7.2	48
AUGUSTA	145	1014.6	1019.9	65	38	51.2	4.0	82	19	20	24	0	12	41	74	2.93	- 0.40	1.45	10	0	0.0	0	1.3	24	25	27	3	10	4	17	6.3	
COLUMBUS	385			63	42	52.1	4.4	76	19+	24	30	0	9	44	79	4.90	0.34	1.48	11		0.0	0	0.5	28	23	32	28+	7	5	19	7.0	
MACON	354	1006.8	1019.9	63	39	50.9	1.9	79	19+	20	24	0	11	41	74	3.86	- 0.19	1.24	13	0	0.0	0	0.8	24	50	NW	22	9	4	18	6.5	50
ROME	637			58	36	46.9	4.5	73	21	20	30	0	15			7.28	2.15	1.88	18		0.0	0										
SAVANNAH	46	1018.3	1020.2	68	43	55.3	3.9	83	20	25	24	0	7	46	75	2.97	0.16	0.92	9	1	0.0	0	1.1	22	30	NW	23	10	6	15	6.0	62
HAWAII																																
HILO	27	1011.9	1013.0	81	66	73.3	1.8	86	17+	61	12	0	0	65	78	17.10	1.92	5.60	17	0	0.0	0	2.0	20	29	SE	16	7	7	17	6.9	31
HONOLULU	7	1012.2	1012.5	80	68	74.0	0.4	85	6	59	28	0	0	64	73	9.93	6.94	4.33	17	4	0.0	0	3.4	9	31	SE	17+	5	12	14	6.8	52
KAHULUI	48	1010.2	1012.4	78	65	71.4	- 1.3	86	17	55	28	0	0	65	83	5.09	2.39	1.44	14	1	0.0	0	2.6	5	34	N	13	4	12	15	6.6	69
LIHUE	103	1008.1	1013.1	76	64	69.9	- 2.3	79	22+	56	29+	0	0	64	83	12.79	7.61	5.07	20	2	0.0	0	1.8	7	34	SW	23	3	10	18	7.3	40
IDAHO																																
BOISE	2838	918.7	1021.9	35	20	27.8	- 4.4	52	27	2	16+	0	30	20	75	0.50	- 0.82	0.12	12	0	4.3	1	2.6	15	29	SE	5+	8	4	19	6.7	55
LEWISTON	1413			40	27	33.5	- 1.4	52	2	6	15	0	17			1.46	0.09	0.80	13		8.8	3						4	1	26	8.4	
POCATELLO	4454	863.5	1022.2	29	11	19.7	- 7.7	44	4	-12	13	0	30	14	75	0.91	- 0.09	0.36	13	0	13.9	8	5.5	21	30	SW	11	4	4	23	8.0	32
ILLINOIS																																
CAIRO U	314			48	33	40.5	1.0	68	21	6	31	0	13			5.81	2.14	2.64	17		1.6	1			40	SW	2	6	8	17	6.8	40
CHICAGO O HARE	658	993.6	1018.7	37	23	30.3	2.9	61	21	-11	31	0	20	25	79	2.41	0.58	0.99	17	2	2.9	1	3.9	24	29	28	21+	6	5	20	7.5	
CHICAGO MIDWAY	607	995.3		38	25	31.7	2.6	62	21	-10	31	0	20	25	78	3.65	1.75	1.63	16	1	2.7	1	4.0	22	34	W	21	6	6	19	7.4	36
MOLINE	582	996.6	1018.8	36	21	28.5	1.6	59	21	-17	31	0	22	22	75	1.56	- 0.09	0.39	14	0	3.2	2	2.8	24	27	NW	25	4	9	18	7.6	30
PEORIA	652	994.2	1019.2	37	23	29.8	0.7	60	21	-14	31	0	22	25	83	2.63	0.69	0.60	19	3	2.2	2	1.8	23	25	N	2	4	4	23	8.1	28
ROCKFORD	724	990.2	1018.2	35	20	27.7	2.1	56	21	-15	31	0	24	23	82	1.55	- 0.15	0.32	13	3	2.0	2	2.8	25	23	28	21	6	7	18	7.4	
SPRINGFIELD	588	995.9	1019.0	38	25	31.4	- 0.6	63	21	- 9	31	0	24	27	84	6.00	4.11	2.37	16	3	6.4	3	1.4	24	33	NW	25+	4	6	21	7.9	30
INDIANA																																
EVANSVILLE	381	1004.7	1019.4	46	29	37.4	1.3	69	21	0	31	0	19	30	74	5.51	2.43	1.62	14	3	0.9	1	1.3	23	32	SW	11	6	4	21	7.4	38
FORT WAYNE	791	988.5	1019.5	37	23	29.8	1.4	61	21	- 9	31	0	21	25	81	5.45	3.36	1.60	16	2	3.7	3	3.9	24	32	W	22	3	8	20	7.8	37
INDIANAPOLIS	792	989.2	1019.2	41	27	33.7	2.6	67	21	- 9	31	0	19	28	81	4.92	2.24	1.88	18	2	3.5	2	1.1	23	34	S	21	5	8	18	7.5	28

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
SOUTH BEND	773	989.5	1018.6	36	25	30.5	1.8	60	21	-10	31	0	22	26	83	4.08	1.99	1.24	20	2	12.5	4	3.5	23	31	29	21	2	7	22	8.4	
IOWA																																
BURLINGTON	692			37	23	30.1	1.7	62	21	-10	31	0	24	26	84	1.50	- 0.10		14	1	1.4		2.1	26	25	36	31+	5	4	22	7.7	
DES MOINES	938	983.1	1019.0	37	21	28.9	3.6	57	20	- 9	31	0	24	22	79	0.73	- 0.41	0.23	13	0	2.6	2	1.6	29	33	SW	17	5	8	18	7.3	36
DUBUQUE	1056	978.0		33	19	26.0	2.5	56	21	-18	31	0	27			2.28	0.38	0.96	14		2.8	2						4	8	19	7.6	
SIOUX CITY	1095	977.3	1018.7	33	17	24.9	- 0.1	55	3	-12	31	0	29	18	76	0.75	0.01	0.35	7	0	1.3	T	1.9	29	42	NW	25	7	6	18	6.6	47
WATERLOO	868	985.4	1018.4	34	16	25.1	1.9	53	20+	-16	31	0	27	20	80	0.83	- 0.30	0.41	10	1	2.2	1	2.0	26	30	20	17	6	6	19	7.2	
KANSAS																																
CONCORDIA	1470	963.4	1018.1	40	23	31.6	- 0.4	61	20	- 5	31	0	29	23	74	1.15	0.44	0.31	8	0	7.6	3	1.2	27	37	W	20	8	9	14	6.1	48
DODGE CITY	2582	924.1	1017.3	44	23	33.2	- 1.5	67	1	- 1	31	0	29	20	65	0.51	0.04	0.15	10	0	2.9	1	2.7	29	38	N	2	14	3	14	5.3	64
GOODLAND	3650	886.2	1016.9	40	15	27.7	- 2.7	60	23+	- 7	31	0	31	17	69	0.43	- 0.01	0.17	8	0	8.4	3	5.3	28	45	30	6	13	7	11	5.3	
TOPEKA	876	986.1	1018.8	41	25	33.0	- 0.4	62	20	- 6	31	0	23	25	75	3.11	1.72	0.86	9	1	11.1	4	0.6	30	35	NW	25	7	4	20	7.1	37
WICHITA	1321	968.8	1018.1	43	26	34.6	- 1.2	62	20	2	22	0	23	23	66	1.41	0.47	0.43	10	1	9.7	5	0.7	30	37	SW	17	10	6	15	6.2	46
KENTUCKY																																
COVINGTON	869	987.1	1019.4	45	29	36.8	3.5	69	21	5	31	0	17	31	79	3.94	1.19	1.12	17	1	3.1	T	2.4	22	25	25	11	4	6	21	7.8	
LEXINGTON	966	983.4	1019.7	48	30	39.0	3.1	71	21	9	31	0	16	32	75	3.99	0.54	0.95	15	2	10.7	8	3.1	17	28	21	12	5	7	19	7.3	
LOUISVILLE	477	1001.4	1019.3	48	31	39.4	3.1	69	21	10	31	0	17	31	72	3.51	0.29	0.88	16	4	2.7	2	1.1	25	38	NW	25	6	6	19	7.6	38
LOUISIANA																																
ALEXANDRIA	92	1014.6	1018.8	59	40	49.8	- 1.5	77	20	24	29	0	10	44	83	13.09	7.36	5.75	14	6	T	T	0.9	36	29	30	21	6	4	21	7.4	
BATON ROUGE	64	1016.3	1018.9	64	45	54.4	0.7	81	21+	23	29	0	7	48	82	5.95	0.85	1.72	12	2	0.0	0	1.2	9	24	22	2	6	4	21	7.1	
LAKE CHARLES	9	1017.3	1018.2	63	47	55.0	0.4	77	20	30	29	0	3	50	87	13.27	7.51	5.89	13	7	0.0	0	2.8	6	26	28	2	5	7	19	7.2	
NEW ORLEANS	3	1018.0	1018.7	67	50	58.2	2.8	82	19	30	24	0	4	51	77	10.77	6.67	3.45	12	3	0.0	0	1.8	8	30	17	18	6	7	18	7.0	
SHREVEPORT	254	1009.1	1018.4	59	39	48.9	- 0.7	80	20	24	29+		10	41	78	3.92	- 1.02	1.18	14	3	0.7	1	0.3	13	27	32	21	9	6	16	6.3	46
MAINE																																
CARIBOU	624	993.2		26	9	17.3	1.8	41	13	-15	25	0	30			4.58	2.15	1.46	10		31.2	18						5	5	21	7.6	
PORTLAND	47	1015.9	1018.4	37	19	27.8	2.0	53	19	- 1	30	0	29	19	69	6.00	2.15	2.26	12	0	18.9	11	3.4	30	33	NW	14	12	5	14	5.6	54
MARYLAND																																
BALTIMORE	148	1014.6	1020.4	45	29	37.3	1.5	62	22	9	2	0	20	28	70	5.31	2.32	1.48	12	0	4.6	8	3.5	31	29	NW	23	9	6	16	6.4	45
MASSACHUSETTS																																
BLUE HILL OBS R	629			39	25	32.0	2.0	54	22	12	27+	0	25			8.11	4.15	2.96	12		22.8	12			42	NW	15					52
BOSTON	15	1017.6	1018.7	41	29	35.0	1.7	58	22	18	27	0	20	25	67	6.42	2.79	2.27	10	0	14.7	7	5.7	31	37	NE	28	7	10	14	6.2	57
NANTUCKET	43	1017.6	1018.1	45	31	37.7	1.6	55	12	17	31+	0	18	30	75	4.23	0.30	1.18	11	0	4.6	1	5.2	34	49	NW	4	7	7	17	7.1	40
PITTSFIELD	1170			35	19	27.1	1.8	53	22	- 3	31	0	27			4.14	0.89	1.29	13		12.7	7										
WORCESTER	986	980.7	1018.9	37	23	29.8	2.6	56	22	10	27	0	29	21	71	5.72	2.13	1.53	11	0	22.2	15	6.0	30	37	29	15	7	11	13	6.4	
MICHIGAN																																
ALPENA	689	991.2	1017.4	33	18	25.7	1.6	58	21	- 9	28	0	27	19	74	2.39	0.55	0.83	15	0	9.1	3	2.4	22	32	W	22	2	11	18	7.9	34
DETROIT	619			39	28	33.6	3.7	62	21	3	31	0	21	27	76	4.45	2.37	2.13	13	2	3.4		4.7	26	28	28	22					
DETROIT M WAYNE CO	633	993.2	1018.2	37	25	30.9	1.0	61	21	- 5	31	0	23	25	77	5.19	3.27	2.17	15	2	4.5	2	4.1	24	35	W	22	3	4	24	8.2	32
DETROIT WILLOW RUN	711	989.5	1018.5	37	24	30.7	1.3	60	21	- 1	31	0	22	23	74	4.84	2.86	2.36	16	2	4.5	2	4.1	24	35	27	21	3	4	24	8.2	
FLINT	770	989.2	1017.8	37	24	30.7	3.1	60	21	- 3	31	0	23	24	74	2.79	0.99	1.20	12	3	2.4	1	4.6	23	31	24	21	2	7	22	8.2	
GRAND RAPIDS	784	987.8	1017.9	36	24	29.9	2.9	60	21	-11	31	0	25	24	79	3.60	1.57	1.41	18	1	9.6	3	3.1	23	40	NW	21	2	5	24	8.5	31
HOUGHTON LAKE	1149	974.3	1017.8	31	17	24.2		55	21	-12	31+	0	29	20	81	2.41		0.81	14	0	10.6	3	3.0	25	31	27	22	2	11	18	7.9	
LANSING	841	985.1	1017.7	36	22	29.1	1.6	61	21	- 6	31	0	24	25	83	3.45	1.46	1.21	12	3	2.4	1	4.6	24	47	W	21	1	7	23	8.1	30
MARQUETTE U	677			31	19	24.7	0.6	53	21	-10	31	0	29			0.73	- 1.19	0.26	10		6.2	3			34	S	17	4	10	17	7.3	44
MUSKEGON	627	993.9	1017.6	37	27	31.5	1.6	60	21	3	31	0	23	24	72	2.97	0.97	0.78	20	2	20.0	8	2.8	26	26	29	21	0	5	26	9.0	
SAULT STE MARIE	721	989.2	1016.7	29	15	22.3	1.4	44	21	-11	26	0	30	19	84	3.29	1.01	0.78	18	0	25.9	13	1.1	17	30	SW	25	4	8	19	7.8	26
MINNESOTA																																
DULUTH	1428	962.8	1016.7	24	9	16.3	2.3	41	21	-29	31	0	31	9	71	0.91	- 0.25	0.28	12	0	4.3	2	3.5	26	45	SW	17	6	6	19	7.2	34
INTERNATIONAL FALLS	1179	971.2	1016.7	18	- 1	8.8	- 0.6	39	4+	-39	31	0	31	5	79	1.38	0.54	0.87	11	0	12.9	12	3.4	22	28	18	17	7	7	17	6.7	
MINNEAPOLIS	834	986.5	1018.1	30	14	21.8	3.7	51	21+	-22	31	0	29	14	74	0.45	- 0.41	0.18	9	0	2.4	1	2.6	25	38	SW	17	6	6	19	6.9	42
ROCHESTER	1297	968.5	1018.1	30	13	21.8	3.2	51	21	-24	31	0	30	15	77	0.22	- 0.75	0.11	5	0	0.7	T	4.0	25	31	27	21	7	7	17	6.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%
MINNESOTA															
ST CLOUD	1034	977.7	1017.3	27	11	18.8	2.2	42	20	-22	31	0	30		72
MISSISSIPPI															
JACKSON	310	1007.1	1019.3	61	40	50.1	0.7	79	21	21	30+	0	11	45	86
MERIDIAN	290	1008.5	1019.7	62	40	51.3	3.0	78	21	22	29	0	11	44	80
MISSOURI															
COLUMBIA	778	989.5	1018.5	43	27	34.8	1.0	67	20	- 3	31	0	22	27	76
KANSAS CITY	742	990.9	1018.6	43	28	35.4	- 0.4	65	20	1	31	0	21	28	77
ST JOSEPH	811			41	26	33.8	2.3	60	20	0	31	0	20	26	80
ST LOUIS	535	998.3	1019.3	43	27	34.8	0.0	67	21	- 5	31	0	18	29	81
SPRINGFIELD	1268	971.9	1018.4	47	29	38.3	1.6	67	5	5	31	0	21	29	72
MONTANA															
BILLINGS	3567	889.3	1017.3	34	16	24.7	- 3.7	55	5	-12	30	0	29	10	55
GLASGOW	2284	931.9		27	5	15.9	- 1.8	53	10+	-23	31	0	31		
GREAT FALLS	3662	886.2	1018.6	31	13	22.1	- 5.2	51	4	-27	21	0	27	13	68
HAVRE	2582	921.8		30	7	18.8	- 2.1	53	10	-23	21	0	29		
HELENA	3828	880.5	1021.5	30	8	19.0	- 5.2	50	10+	-26	21	0	31	11	70
KALISPELL	2965	911.6	1019.7	30	18	23.8	- 1.2	44	10	- 2	20	0	30	19	82
MILES CITY	2629	921.1	1018.0	30	7	18.1	- 5.1	49	4	-28	31	0	31	10	70
MISSOULA	3190	905.2	1021.3	30	16	22.9	- 0.6	45	24	- 3	21	0	29	17	78
NEBRASKA															
GRAND ISLAND	1841	949.9	1018.4	38	17	27.1	- 0.1	59	23	-17	31	0	30	19	75
LINCOLN U	1150			38	22	29.9	- 0.7	60	20	- 7	31	0	27		
NORFOLK	1544			34	14	24.1	- 1.1	55	24+	-22	31	0	30		
NORTH PLATTE	2775	916.7	1018.3	36	9	22.8	- 4.6	58	4	-25	31	0	31	13	69
OMAHA	977	982.1	1018.6	38	19	28.4	0.2	60	20	-11	31	0	28	20	73
SCOTTSBLUFF	3957	877.8	1018.9	32	8	19.7	- 8.9	48	4	-19	31	0	31	15	77
VALENTINE	2587			33	7	20.0	- 5.1	57	5	-27	31	0	31		
NEVADA															
ELKO	5050	845.2	1021.3	34	13	23.1	- 3.3	48	27	-11	13	0	29	15	70
ELY	6253	807.3	1020.9	32	4	17.6	- 9.2	48	11	-12	21+	0	31	9	72
LAS VEGAS	2162	940.7	1018.9	51	32	41.6	- 3.5	67	26	23	21	0	17	25	57
RENO	4404	867.6	1021.6	42	15	28.3	- 3.6	58	3	0	15	0	31	9	47
WINNEMUCCA	4299	870.0	1022.2	40	14	26.9	- 2.9	53	27+	- 1	19	0	30	19	76
NEW HAMPSHIRE															
CONCORD	342	1006.1	1019.2	37	19	27.8	2.8	56	22	-10	31	0	28	18	65
MT WASHINGTON OBS	6262			20	3	11.6	2.8	45	12	-19	27	0	31		
NEW JERSEY															
ATLANTIC CITY	64	1018.0	1020.3	44	26	35.1	- 1.5	60	13	6	1	0	22	30	81
ATLANTIC CITY U	11			47	34	40.6	2.3	60	13	21	2	0	15		
NEWARK	7	1019.0	1020.0	45	32	38.3	3.6	63	22	20	30+	0	15	28	68
TRENTON U	56			44	33	38.5	3.3	62	22	19	30	0	12		
NEW MEXICO															
ALBUQUERQUE	5311	837.1	1018.3	42	23	32.4	- 4.6	55	6	11	18	0	29	16	55
CLAYTON	4969			42	19	30.3	- 5.7	63	11+	9	31+	0	31		
RATON	6379			38	9	23.8	- 7.4	59	5	-10	22	0	31		
ROSWELL	3617	891.3		49	21	35.3	- 3.7	75	1	8	10	0	30	22	67
SILVER CITY	5373			46	26	36.1	- 5.4	57	12+	10	22	0	25		
NEW YORK															
ALBANY	275	1009.1	1020.1	37	21	28.9	2.4	52	13	- 6	30	0	29	23	76
BINGHAMTON	1590	958.7	1019.4	35	23	28.9	2.1	51	22	7	30	0	27	24	81
BUFFALO	705	992.2	1018.5	39	27	33.0	5.3	65	22+	15	29+	0	22	26	76

State and Station	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																	
ST CLOUD	1.12	0.39	0.77	10		0.8	T						6	10	15	6.8	
MISSISSIPPI																	
JACKSON	8.68	3.38	2.16	15	4	T	0	1.0	14	34	NW	21	5	7	19	7.2	35
MERIDIAN	11.20	5.89	2.85	14	6	T	0	0.5	23	25	22	11	5	7	19	7.2	
MISSOURI																	
COLUMBIA	2.44	0.48	0.56	16	2	6.2	2	0.1	29	34	NW	25+	6	5	20	7.5	40
KANSAS CITY	1.72	0.19	0.69	13	1	7.0	4	0.3	23	26	N	30+	7	5	19	7.1	32
ST JOSEPH	2.03	0.67	0.46	9	1	6.0	4	1.1	31	29	35	30	8	4	19	6.8	
ST LOUIS	6.20	4.23	1.90	15	2	4.2	1	1.2	26	29	NW	25	6	6	19	7.2	35
SPRINGFIELD	5.85	3.66	1.85	15	3	4.6	2	1.8	16	35	N	2	7	6	18	7.1	42
MONTANA																	
BILLINGS	0.79	0.20	0.34	8	0	9.0	6	8.6	26	40	NW	11	5	3	23	7.6	23
GLASGOW	0.26	- 0.19	0.08	9		4.6	2						5	9	17	6.9	
GREAT FALLS	1.47	0.87	0.34	15	0	14.9	6	11.6	23	43	SW	10	3	5	23	7.8	30
HAVRE	0.29	- 0.18	0.08	10		5.1	2			34	NW	31	7	5	19	7.0	48
HELENA	1.39	0.86	0.30	16	0	22.8	11	4.8	27	40	W	11	4	5	22	7.7	33
KALISPELL	1.45	0.12	0.31	14	0	21.3	6	0.1	15	29	1	18	2	5	24	8.5	
MILES CITY	1.33	0.96		13	0	12.6		5.1	29								
MISSOULA	1.71	0.63	0.50	17	0	12.6	4	1.4	13	28	NE	30	2	5	24	8.7	17
NEBRASKA																	
GRAND ISLAND	0.46	- 0.10	0.15	8	0	4.3	3	2.4	29	38	33	25	11	4	16	5.8	
LINCOLN U	0.68	- 0.22	0.33	9		1.9	1			42	S	17	6	9	16	6.5	42
NORFOLK	0.74	0.01	0.41	7		4.9	3						8	8	15	6.3	
NORTH PLATTE	0.15	- 0.25	0.12	2	0	3.4	3	3.4	34	37	NW	24	9	6	16	6.2	52
OMAHA	0.79	- 0.01	0.24	12	0	5.7	5	1.3	32	40	NW	25	6	8	17	6.9	45
SCOTTSBLUFF	0.82	0.42	0.20	9	0	12.9	3	6.3	31	35	31	6	5	10	16	6.8	
VALENTINE	0.38	0.04	0.20	7		5.9	3			43	S	16	8	7	16	6.5	58
NEVADA																	
ELKO	0.66	- 0.35	0.26	6	1	8.5	6	1.2	25	29	2	14	5	12	14	6.9	
ELY	0.69	0.01	0.89	7	0	11.8	11	2.9	20	45	SE	18	4	12	15	6.6	61
LAS VEGAS	0.82	0.42	0.70	3	0	2.0	2	2.8	29	37	NW	12	19	6	6	3.2	77
RENO	0.55	- 0.53	0.45	6	0	1.9	1	0.4	18	54	NE	13	13	6	12	5.3	73
WINNEMUCCA	0.32	- 0.62	0.16	4	1	4.5	3	0.1	12	38	SW	4	7	12	12	6.1	36
NEW HAMPSHIRE																	
CONCORD	3.82	0.57	1.42	11	0	15.0	10	4.4	31	31	NW	15	10	7	14	6.3	57
MT WASHINGTON OBS	7.26	0.95	2.12	19	0	40.0	4			117Y	W	15	7	6	18	7.3	40
NEW JERSEY																	
ATLANTIC CITY	5.57	2.35	1.43	12	1	3.9	8	3.5	31	29	31	4	9	8	14	6.3	40
ATLANTIC CITY U	4.93	1.45	1.33	11						44	NNW	4					
NEWARK	4.65	1.43	1.43	12	0	3.9	3	4.6	31	25	35	29+	7	8	16	6.8	
TRENTON U	5.83	2.96	1.81	12		5.0	6			28	NW	29+	8	9	14	6.3	47
NEW MEXICO																	
ALBUQUERQUE	0.56	0.10	0.27	5	0	2.8	1	2.3	6	57	E	13	13	6	12	5.1	64
CLAYTON	0.33	- 0.02	0.16	5		7.0	5						9	11	11	5.5	
RATON	0.95	0.69	0.45	8		12.2	8						13	7	11	5.4	
ROSWELL	1.07	0.53	0.48	8	0	6.4	5	1.6	33	33	N	27	13	5	13	5.3	49
SILVER CITY	1.75	1.10	0.70	10		13.0	8						14	4	13	4.8	
NEW YORK																	
ALBANY	3.90	1.31	1.54	12	0	17.8	12	4.6	30	33	NW	14	3	6	22	8.1	39
BINGHAMTON	2.49	- 0.07	0.60	17	0	15.3	9	2.8	25	33	NW	3	1	6	24	8.6	31
BUFFALO	2.16	- 0.84	0.57	20	2	10.4	5	6.1	24	56	SW	22	1	3	27	8.7	25

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
J.F. KENNEDY	13	1019.0	1019.7	43	31	36.7	1.8	56	19	18	2+	0	17	26	66	5.70	2.47	1.46	11	0	4.3	3	4.2	33	38	36	3	5	9	17	6.8	
NEW YORK U	132	1015.9	1019.3	44	33	38.2	2.3	62	22	20	30+	0	14	25	61	6.08	2.82	1.46	14	0	5.5	3	3.3	33	31	NE	28+					45
NEW YORK LA GUARDIA	11	1018.0	1019.8	44	33	38.6	2.2	60	22	21	30+	0	14	26	63	5.82	2.43	1.55	13	0	3.4	2	4.4	33	37	NW	4	5	8	18	6.9	
ROCHESTER	547	999.0	1019.8	39	26	32.3	3.6	56	22	8	29	0	26	24	72	1.52	-0.86	0.38	16	1	6.9	2	4.6	23	36	SW	12	1	4	26	8.8	25
SYRACUSE	410	1004.1	1019.5	39	26	32.7	4.9	55	22	7	1	0	23	24	71	2.66	-0.49	0.66	17	0	14.4	6	2.6	26	31	W	26	1	5	25	8.5	24
NORTH CAROLINA																																
ASHEVILLE	2140	942.4	1019.8	53	31	41.8	3.9	66	20+	18	30+	0	22	35	82	6.13	2.51	1.29	11	1	1.9	2	1.8	35	38	33	3	7	6	18	6.7	49
CAPE HATTERAS R	7	1020.0	1020.2	60	43	51.6	3.4	75	22	24	25	0	4	44	77	4.71	0.12	1.49	7	3	T	T	3.7	32	42	SW	28	8	9	14	6.2	
CHARLOTTE	736	991.9	1020.0	56	37	46.3	3.6	71	19	21	24	0	14	37	72	5.53	1.91	1.66	11	0	T	0	1.0	30	27	SE	18	9	5	17	6.2	55
GREENSBORO	897	987.8	1020.2	55	35	45.1	5.2	72	19	21	24	0	15	37	76	6.34	3.21	1.67	8	1	T	T	1.1	33	27	NW	3	10	3	18	6.4	48
RALEIGH	434	1003.7	1020.1	57	36	46.3	4.4	75	22	16	24	0	15	36	71	4.93	1.91	1.12	12	0	1.4	1	0.9	30	23	25	12+	10	6	15	5.7	52
WILMINGTON	28	1019.3	1020.5	64	41	52.1	3.9	81	19	25	24	0	8	42	72	4.67	1.25	1.58	10	3	T	0	1.2	29	33	S	11	9	10	12	5.4	60
NORTH DAKOTA																																
BISMARCK	1647	955.0	1017.9	25	1	12.8	-5.0	52	4	-43	31	0	31	6	74	0.95	0.59	0.49	5	0	13.1	9	5.2	30	38	N	24	7	7	17	6.6	57
FARGO	896	982.7	1017.3	24	6	15.1	0.7	52	3	-32	31	0	31	8	74	1.36	0.78	0.82	9	0	10.3	8	3.6	26	36	N	21	9	7	15	6.0	45
WILLISTON	1899	945.5	1017.4	25	1	13.1	-3.1	48	4	-33	30	0	31	7	74	0.56	0.06	0.27	10	0	5.6	5	4.8	29	36	NW	17	7	10	14	6.1	68
OHIO																																
AKRON	1208	973.6	1019.2	41	27	34.2	3.7	65	21	7	27	0	20	27	77	2.41	0.14	0.87	15	0	4.4	3	3.5	22	29	24	12	1	6	24	8.7	
CINCINNATI OBS	761			45	30	37.1	1.8	69	21	7	31	0	17			3.81	1.04	1.04	17		1.6	1			23	W	21					28
CLEVELAND	777	989.2	1019.2	41	28	34.7	4.2	65	21	8	27	0	20	25	69	2.46	0.12	0.84	19	1	2.8	2	5.2	21	27	W	18	1	6	24	8.7	24
COLUMBUS	812	988.8	1019.9	42	27	34.3	2.8	64	21	10	31+	0	21	28	77	2.55	0.21	0.57	14	0	5.2	3	2.1	21	31	W	12	4	6	21	8.0	33
DAYTON	1002	982.4	1019.4	43	27	34.7	3.4	65	21	5	31	0	19	28	78	3.58	1.21	1.38	16	0	4.0	4	2.6	21	30	S	21+	5	5	21	7.8	34
MANSFIELD	1295			40	26	33.1	3.9	63	21	2	31	0	20	26	75	2.76	0.11	0.94	15	0	8.2	3	5.8	21				2	9	20	8.1	
TOLEDO	669	993.2	1019.2	39	25	31.6	3.3	63	21	0	31	0	22	26	79	6.81	4.86	3.53	17	2	5.1	1	4.1	24	32	SW	21	3	5	23	8.2	30
YOUNGSTOWN	1178	975.3	1019.4	38	26	31.8	2.4	64	21	7	27	0	20	27	83	1.92	-0.76	0.62	17	0	8.0	3	3.3	22	28	25	12	2	5	24	8.7	
OKLAHOMA																																
OKLAHOMA CITY	1285	970.9	1018.2	50	30	39.8	-0.5	68	8	16	26	0	18	29	70	1.04	-0.37	0.29	10	0	1.2	1	1.2	33	45	NW	2	11	6	14	6.0	57
TULSA	650	993.6	1018.6	50	29	39.7	0.1	70	19	12	31	0	19	27	65	1.12	-0.50	0.33	11	1	1.6	1	1.1	23	42	SW	18	8	6	17	6.3	45
OREGON																																
ASTORIA	8	1018.3	1019.1	46	37	41.2	-1.9	53	24+	23	13	0	11	39	89	9.04	-4.61	2.20	27	4	0.8	T	3.3	17	32	18	22	3	3	25	8.5	
BURNS U	4151	874.0	1021.3	36	15	25.5	-3.6	57	27	-8	19	0	30	18	74	1.03	-0.40	0.35	10		12.0	9	2.2	30				7	8	16	6.6	
EUGENE	359	1007.1	1020.7	48	37	42.4	0.6	60	23	24	14+	0	9	37	83	4.99	-1.62	1.38	16	0	1.1	1	4.0	16	29	16	1	2	2	27	8.8	
MEACHAM	4050	876.4		31	22	26.5	-3.3	44	25	2	15	0	27			5.84	1.31	1.70	19		23.1	16			22	30	11	3	6	22	8.1	
MEDFORD	1298	973.9	1022.7	42	28	35.3	-1.6	53	3	14	14	0	23	28	78	3.40	0.02	1.63	11	0	4.3	3	0.6	13	29	14	17+	3	2	26	8.5	
PENDLETON	1482	965.1	1020.3	44	29	36.8	0.3	57	25+	4	15	0	17	28	73	0.45	-1.04	0.13	7	0	2.5	3	4.5	23	32	19	3	5	5	21	7.5	
PORTLAND	21	1019.0	1020.4	46	35	40.4	-0.9	58	23	13	20	0	10	35	82	4.75	-1.63	0.78	18	0	5.7	5	4.4	15	33	SW	3	2	5	24	8.6	22
SALEM	196	1012.9	1020.4	48	36	42.0	0.5	59	23	19	13	0	8	34	76	5.45	-1.92	1.25	17	0	1.0	1	5.8	18	30	18	2	2	4	25	8.5	
SEXTON SUMMIT R	3836	884.5	1020.3	38	28	32.8	-4.0	57	24	14	14+	0	23			2.96	-1.80	0.85	15		25.5	19			39	16	21	10	2	19	6.7	
PACIFIC AREA																																
JOHNSTON	7	1011.5	1012.3	81	73	77.1	-1.0	85	8+	65	31	0	0	66	71	2.99	-0.01	1.49	11	1	0.0	0	8.0	6	41	W	17	16	11	4	4.2	74
KOROR R	94	1006.1	1009.9	87	75	81.0	0.1	90	24+	72	25	2	0	74	84	12.23	0.51	3.02	22	3	0.0	0	3.4	7	21	SE	31+	0	5	26	9.1	74
KWAJALEIN	8	1008.8	1009.5	86	76	81.2	0.4	88	11+	72	19	0	0	74	77	7.17	-1.79	2.18	22	1	0.0	0	16.6	6	35	8	3	2	7	22	7.8	
MAJURO	10	1009.1	1009.5	85	78	81.5	1.2	87	26+	72	10	0	0	74	77	6.48	-4.64	2.04	15	0	0.0	0	11.9	7	31	E	2	2	12	17	7.7	59
MARCUS ISLAND	20			80	70	74.8	-0.9	83	12+	65	27	0	0			3.20	0.06	1.67	14		0.0	0			33	NE	1					56
PAGO PAGO	12	1007.8	1007.8	85	75	80.0		89	9	68	19	0	0	73	81	16.36		4.26	23	3	0.0	0	4.1	11	31	E	15	5	7	19	7.7	39
PONAPE R	123	1003.7	1009.1	87	75	81.2	1.0	90	5	71	2	1	0	74	80	12.60	-5.74	3.46	23	1	0.0	0	8.2	8	22	NE	11	1	6	24	8.7	27
TAGUAC GUAM R	361			83	70	76.8	-1.9	85	16+	61	21	0	0			2.51	-3.60	0.44	21		0.0	0			21	E	14+					
TRUK MOEN ISLAND	5	1008.8	1009.1	86	77	81.6	0.8	88	17+	72	27	0	0	74	79	14.17	0.93	9.43	21	3	0.0	0	9.5	5	23	E	29	0	9	22	8.5	52
WAKE	11	1014.6	1014.9	85	74	79.7	0.8	87	14+	71	23+	0	0	68	71	1.85	0.03	1.12	10	1	0.0	0	14.8	7	31	NE	15+	15	12	4	4.1	61
YAP R	62	1007.5	1009.5	85	76	80.5	-0.5	88	22+	73	12+	0	0	74	83	7.48	-2.68	2.60	25	1	0.0	0	5.6	6	25	NE	1	1	7	23	8.6	42
PENNSYLVANIA																																
ALLENTOWN	387	1005.8	1020.2	40	25	32.6	1.3	55	19+	2	2	0	26	25	74	5.13	1.86	1.30	10	0	8.4	7	4.0	31	37	34	3	5	6	20	7.2	
ERIE	731	991.5	1019.0	40	28	34.0	3.3	65	21	13	27	0	22	26	72	2.21	-0.40	0.64	21	2	13.3	5	6.6	21	32	15	10	2	4	25	8.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
HARRISBURG	338	1007.1	1020.4	42	27	34.8	1.8	60	13	9	2	0	19	25	67	4.27	1.36	1.06	11	2	13.0	11	2.8	31	29	N	3	6	5	20	7.2	41
PHILADELPHIA	5	1019.3	1020.3	46	31	38.5	4.6	62	22	17	2	0	15	28	68	5.88	2.94	1.60	12	1	5.6	5	3.0	32	31	NE	28	8	7	16	6.5	42
PITTSBURGH	1137	974.3	1019.7	42	28	34.8	4.1	67	21	9	30	0	21	26	73	2.22	- 0.18	0.49	14	0	7.9	6	2.6	24	30	24	12	1	3	27	8.7	26
READING U	266			44	31	37.2	2.5	60	13	13	2	0	15			5.00	1.86	1.56	10		5.4	5			41	NW	3	7	6	18	6.7	41
SCRANTON	930	985.1	1020.4	39	25	31.7	2.3	54	13	- 1	30	0	25	24	72	2.45	- 0.02	0.71	13	0	13.8	10	2.3	29	29	N	3	3	6	22	7.8	35
WILLIAMSPORT	524	1000.7	1020.4	41	26	33.5	3.1	56	13	2	30	0	22	25	74	2.71	- 0.33	0.75	12	2	10.4	6	2.6	29	23	29	15	3	7	21	7.8	
RHODE ISLAND																																
BLOCK ISLAND	110			43	31	36.8	0.9	54	12	18	31+	0	15			8.12	4.53	4.39	10		3.7	3						6	11	14	6.6	
PROVIDENCE	51	1016.6	1019.0	42	27	34.5	2.5	56	22+	8	25	0	24	24	66	7.36	3.74	2.41	13	0	19.0	6	4.5	31	35	35	4	7	9	15	6.3	55
SOUTH CAROLINA																																
CHARLESTON	40	1018.3	1020.1	66	41	53.4	3.4	82	19	25	24	0	8	45	75	2.79	- 0.06	1.76	8	0	0.0	0	1.2	27	47Y	S	3	6	14	11	5.8	69
CHARLESTON U	9			64	49	56.1	4.4	81	19	31	24	0	1			2.46	- 0.28	1.27	9		0.0	0			32	S	28+					
COLUMBIA	213	1012.2	1020.4	62	37	49.6	3.2	79	19	21	24	0	17	41	79	2.59	- 0.93	1.08	7	0	0.0	0	1.6	28	23	22	22	10	7	14	5.8	63
GNVLE-SPARTANBURG	957	985.1	1020.2	57	38	47.2	3.6	71	19+	20	24	0	11	37	72	7.40	3.37	1.91	12	0	T	T	1.4	34	23	NE	28	10	3	18	6.4	49
SOUTH DAKOTA																																
ABERDEEN	1296	968.8	1017.9	28	5	16.5	- 1.6	55	4	-39	31	0	31	11	78	0.47	- 0.14	0.20	6	0	9.1	6	2.8	28	32	36	24	9	7	15	6.0	
HURON	1282	969.2	1017.9	31	10	20.9	2.1	55	11	-23	31	0	31	11	66	0.47	- 0.09	0.22	6	0	4.3	3	2.7	27	37	NW	24	8	6	17	6.2	55
RAPID CITY	3162	902.5	1017.5	34	12	22.5	- 4.7	60	5	-19	31	0	31	8	55	0.89	0.59	0.29	11	0	9.1	3	5.6	32	57	NW	6	5	9	17	6.8	47
SIOUX FALLS	1418	964.4	1017.9	32	12	21.9	0.8	51	5	-20	31	0	31	15	75	0.91	0.17	0.69	8	0	2.5	1	3.3	27	32	24	17	10	4	17	6.2	
TENNESSEE																																
BRISTOL	1507	964.8	1020.3	51	30	40.8	2.5	71	21	14	24	0	20	34	80	5.62	2.41	1.73	13	1	4.1	1	0.9	33	25	27	12+	6	7	18	7.0	
CHATTANOOGA	665	994.6	1019.8	54	37	45.8	3.3	72	21	21	24	0	14	40	82	7.89	2.70	2.27	13	2	T	T	0.3	27	25	NW	22+	5	4	22	7.9	31
KNOXVILLE	980	983.7	1019.3	54	35	44.6	3.0	74	21	21	27+	0	18	38	80	6.95	2.72	1.99	14	2	T	T	1.0	35	30	SW	12	2	11	18	7.7	27
MEMPHIS	258	1009.1	1019.7	55	35	45.0	2.5	75	21	20	29	0	13	36	71	7.37	2.44	2.92	12	2	T	T	0.7	15	35	W	2	9	7	15	6.4	48
NASHVILLE	590	997.3	1019.3	53	32	42.6	1.2	73	21	16	31	0	17	35	76	5.88	1.69	1.44	14	3	8.4	4	2.1	21	34	S	21	5	8	18	7.4	45
OAK RIDGE R	905			53	36	44.2	4.1	71	21	21	27	0	13			7.94	2.04	2.40	14		0.2	T			34Y		11	3	7	21	7.9	
TEXAS																																
ABILENE	1762	955.3	1018.1	54	34	43.7	- 2.4	72	8	21	26	0	16	31	65	2.43	1.17	1.92	6	0	4.0	2	1.8	26	29	S	20	15	4	12	4.9	64
AMARILLO	3604	890.3	1016.1	46	25	35.4	- 3.9	70	1	12	31	0	27	21	63	0.51	- 0.26	0.34	5	0	6.1	2	4.8	29	40	NW	2	10	9	12	5.5	49
AUSTIN	597	996.3	1018.7	60	39	49.4	- 3.3	78	1	28	26+	0	5	39	71	3.41	0.88	2.34	12	0	0.0	0	3.5	1	33	NW	10	11	3	17	6.3	42
BROWNSVILLE	19	1016.3	1016.9	71	52	61.3	- 1.6	82	21	34	24	0	0	54	78	1.10	- 0.62	0.50	8	1	0.0	0	1.0	34	31	W	10	6	6	19	7.0	34
CORPUS CHRISTI	41	1016.3	1017.7	66	46	56.1	- 3.1	80	1	28	23	0	3	49	78	0.84	- 1.24	0.25	8	0	0.0	0	3.5	4	31	N	21+	3	6	22	7.6	34
DALLAS	481	1001.0	1018.6	56	39	47.5	- 0.6	76	6	26	29+	0	8	34	65	2.64	- 0.03	0.88	11	0	T	T	1.2	33	32	NW	21	13	3	15	5.5	55
DEL RIO	1026	981.4	1018.1	60	39	49.5	- 2.8	75	9+	25	28	0	4	36	64	0.76	- 0.06	0.43	11	1	T	0	1.2	2	30	32	27	9	5	17	6.4	
EL PASO	3918	882.2	1016.5	52	31	41.5	- 2.6	69	1	18	10	0	18	26	60	0.78	0.29	0.39	8	0	5.6	4	0.7	28	50	W	17	15	4	12	4.6	67
FORT WORTH	537	998.0	1018.8	57	37	47.0	- 0.7	76	6	25	29	0	8	35	68	2.30	- 0.05	0.80	12	0	T	0	1.5	32	29	32	2	12	4	15	5.8	
GALVESTON U	7			64	51	57.5	0.3	73	21+	36	28	0	0			2.50	- 1.39	0.82	13		0.0	0			30	N	21					31
HOUSTON	50	1015.9	1018.1	64	47	55.4	- 0.3	81	1	30	23	0	3	46	76	5.02	0.66	2.52	17	2	0.0	0	2.2	2	35	29	2	8	3	20	7.3	35
LUBBOCK	3254	903.5	1017.2	49	25	36.8	- 4.2	70	1	13	22	0	27	22	63	0.52	- 0.13	0.25	7	0	3.0	1	3.7	29	32	36	27	12	6	13	5.2	
MIDLAND	2851	916.7	1016.8	54	30	41.9	- 4.0	73	12	21	28+	0	20	26	62	0.78	0.12	0.40	6	0	1.2	1	1.7	29	33	24	12	14	6	11	4.7	
PORT ARTHUR	16	1017.6	1018.4	65	46	55.5	0.7	79	20	28	29+	0	2	49	83	4.55	- 0.54	1.42	16	3	0.0	0	2.7	5	48	NW	2	5	7	19	7.1	34
SAN ANGELO	1903	949.9	1017.9	57	33	45.2	- 2.5	75	12+	20	28	0	13	34	68	1.14	0.29	0.73	7	1	1.9	1	2.1	26	26	33	27	13	8	10	5.0	
SAN ANTONIO	788	989.8	1018.4	62	41	51.0	- 2.7	78	9	26	23	0	7	40	70	1.38	- 0.37	0.60	9	0	0.0	0	3.3	36	28	N	9	8	6	17	6.7	42
VICTORIA	104	1013.9	1017.8	65	45	54.8	- 2.4	83	1	29	23	0	2	46	76	0.55	- 2.06	0.12	11	1	0.0	0	3.1	3	30Y	N	2	5	6	20	7.3	
WACO	501	1000.3	1018.6	58	40	49.4	- 0.9	75	12+	28	29	0	7	40	74	2.91	0.17	0.97	12	0	T	0	2.4	30	28	31	19	13	4	14	5.5	
WICHITA FALLS	994	981.0	1018.5	54	32	43.0	- 1.6	75	8	22	22	0	19	30	67	1.44	- 0.01	1.02	7	0	T	T	1.8	31	37	33	2	11	4	16	6.1	
UTAH																																
MILFORD	5028	846.3		31	8	19.6	- 8.6	46	11	-16	21	0	31			0.83	0.12	0.28	8		14.7	6						9	12	10	5.5	
SALT LAKE CITY	4220	872.7	1021.0	34	17	25.1	- 5.0	50	4	4	21	0	29	17	69	1.64	0.40	0.51	10	1	27.1	10	2.9	17	40	[illegible]	18	1	8	22	8.3	40
WENDOVER	4237	872.3	1021.5	36	19	27.3	- 2.5	55	27+	10	24+	0	29			0.15	- 0.14	0.04	5		1.0	T										
VERMONT																																
BURLINGTON	332	1006.1	1019.2	33	18	25.5	4.0	49	22	- 8	30	0	28	16	67	2.61	0.48	1.09	13	0	17.1	12	1.4	27	33	SW	18	3	6	22	8.0	44

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F		F.				F	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VIRGINIA																																
LYNCHBURG	916			50	32	40.7	2.2	70	19	14	24	0	19			5.95	2.81	1.64	10		4.0	3			24	SW	12+	12	2	17	6.0	50
NORFOLK	22	1019.6	1020.5	53	35	44.0	1.5	76	22	21	24	0	14	34	69	4.84	2.10	1.53	10	0	2.0	1	2.0	34	33	S	3	9	8	14	6.1	54
RICHMOND	164	1014.6	1020.6	53	31	41.9	2.2	71	14+	14	24	0	19	33	75	6.48	3.51	1.63	10	0	5.6	4	1.1	36	27	SW	12	11	4	16	6.2	53
ROANOKE	1149	977.3	1020.1	51	32	41.3	2.9	72	19	13	30	0	17	28	61	4.84	1.86	1.40	10	0	14.8	8	2.7	30	29	30	3	10	7	14	6.1	
WALLOPS ISLAND	0			47	32	39.4		63	19	20	24	0	19			5.24		2.34	9		2.0	2			39Y	WSW	12	10	7	14	5.9	
WASHINGTON																																
OLYMPIA	195	1011.5	1018.9	45	34	39.4	- 1.3	54	27	12	13	0	12	36	88	5.94	- 3.11	0.95	20	0	7.9	7	5.7	20	31	20	4	5	0	26	8.3	
QUILLAYUTE	179	1009.8	1017.4	45	36	40.3	- 0.9	53	9	21	15	0	9	38	91	19.27	2.46	5.21	23	2	1.8	1	3.4	15	36	SE	5	4	1	26	8.5	12
SEATTLE TACOMA	400	1002.4	1019.0	46	38	41.6	0.8	55	9	25	14+	0	10	35	79	4.72	- 1.57	0.90	20	0	3.6	2	4.7	18	30	20	10+	4	1	26	8.8	15
SPOKANE	2356	932.6	1018.8	32	23	27.8	- 2.3	43	10	5	14	0	25	23	84	2.02	- 0.41	0.48	14	0	12.7	8	3.9	18	30	SW	2	4	2	25	8.3	21
STAMPEDE PASS R	3958	878.1		30	23	26.4	- 0.6	43	25	8	21+	0	26			16.06	- 0.13	2.53	26		50.7	30						3	1	27	8.8	
WALLA WALLA U	949			44	32	38.1	0.3	57	4	13	21	0	14			1.24	- 0.61	0.26	12		5.4	3			28	SE	7+	6	2	23	7.8	20
YAKIMA	1052	980.4	1020.0	41	23	31.5	0.0	57	27	9	16	0	29	23	74	0.55	- 0.57	0.22	8	0	4.7	2	3.3	27	29	20	2	7	9	15	6.7	
WEST INDIES																																
SAN JUAN P.R.	13	1014.9	1017.2	83	72	77.5	1.3	86	11	64	25	0	0	68	74	3.13	- 2.32	2.17	16	0	0.0	0	6.6	7	28	E	21	6	20	5	5.4	60
SWAN ISLAND	28			84	76	79.6	0.9	85	15+	71	25+	0	0			6.01	0.37	1.69	20		0.0	0						1	18	12	7.0	
WEST VIRGINIA																																
BECKLEY	2504	929.2	1020.3	46	28	36.9		63	20	8	30	0	19	29	76	4.96		1.57	15	0	19.3	12	3.9	20	31	26	12+	7	5	19	7.2	
CHARLESTON	939	984.8	1019.7	49	29	38.9	1.8	71	21	11	30	0	20	31	75	4.72	1.47	1.05	16	0	16.6	11	1.7	22	25	17	18	5	6	20	7.3	
ELKINS	1970	947.2	1020.0	47	24	35.8	2.8	67	18	2	30	0	25	30	81	4.47	1.39	1.51	17	4	23.2	17	2.9	26	26	27	12	3	7	21	7.8	
HUNTINGTON	827	989.2	1020.0	48	30	38.9	1.5	72	21	5	30	0	19	32	77	3.55	0.74	0.62	15	0	13.2	10	1.4	23	23	24	25	4	8	19	7.6	
PARKERSBURG U	615			47	30	38.4	2.6	70	21	11	30	0	17			2.26	- 0.58	0.54	14		7.0	6			30	W	22					37
WISCONSIN																																
GREEN BAY	682	991.5	1018.0	30	15	22.5	0.5	52	21	-19	31	0	30	18	81	1.17	- 0.01	0.37	11	1	3.7	3	3.9	27	31	SW	21	7	5	19	6.9	30
LA CROSSE	651	993.2	1018.6	33	18	25.3	3.5	55	21	-17	31	0	26	18	75	0.51	- 0.64	0.34	5	0	1.5	1	2.1	23	24	31	25	5	8	18	7.3	
MADISON	858	985.8	1018.3	33	17	25.1	3.0	54	21	-16	31	0	29	21	82	1.89	0.58	1.17	12	2	2.4	1	3.0	26	27	N	25	5	8	18	7.4	42
MILWAUKEE	672	992.2	1018.3	36	22	28.9	4.3	57	21	-10	31	0	22	21	73	1.33	- 0.30	0.53	11	2	1.2	T	4.5	26	32	SW	21	5	7	19	7.4	43
WYOMING																																
CASPER	5338	834.1	1018.5	27	7	17.4	- 9.9	42	3	-19	30	0	31	9	66	0.82	0.34	0.21	14	0	17.8	4	11.0	23	36	22	31	1	8	22	8.4	
CHEYENNE	6126	807.3	1017.0	34	11	22.5	- 7.0	51	4	-15	20	0	30	10	57	0.46	0.01	0.09	12	0	4.8	2	9.4	30	50	W	6	4	10	17	6.9	50
LANDER	5563	825.9	1020.0	25	5	15.1	- 8.0	43	5	-15	21	0	31	6	70	1.12	0.70	0.40	11	0	26.3	14	2.2	23	38	W	11+	2	5	24	8.0	34
SHERIDAN	3964	876.4	1018.9	32	6	19.4	- 6.9	54	3	-25	31+	0	31	9	63	0.98	0.36	0.44	14	0	20.6	9	5.2	30	41	NW	11	3	7	21	7.6	39

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.
Z Sun continuously below horizon.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
ALABAMA																																
BIRMINGHAM	189	997.0	1019.9	14.4	3.9	9.2	0.7	22.8	19	- 6.1	24+	0	11	5.0	77	292	164	118	15	4	T	0	0.4	15	16.1	SE	2	6	4	21	7.5	34
HUNTSVILLE	190	995.9	1019.6	12.8	2.8	7.7	1.2	21.1	21	- 7.2	23	0	15	4.4	82	281	156	139	14	5	55	25	0.4	8	19.7	18	21	5	7	19	7.5	
MOBILE	64	1011.2	1019.2	19.4	9.4	14.4	2.1	26.7	19	- 2.2	24	0	5	10.6	80	191	52	105	14	5	0	0	1.9	14	10.7	21	2	7	4	20	7.1	
MONTGOMERY	59	1012.5	1020.0	17.2	6.7	11.8	2.8	26.1	19	- 3.3	24+	0	7	7.2	77	216	94	49	14	3	0	0	0.4	13	11.2	[illegible]	2	7	4	20	7.0	33
ALASKA												B																				
ANCHORAGE	35	1004.4	1009.3	- 5.6	-12.2	- 8.9	1.4	7.8	29	-25.0	3	0	29	-13.9	66	61	37	16	14	0	673	381	0.7	4	22.5	12	12	4	3	24	8.0	26
ANNETTE	34	1007.5	1011.7	4.4	0.0	2.4	0.2	8.9	27	-10.0	21	0	12	- 1.1	79	308	0	68	22	0	450	229	1.5	12	20.6	14	2	5	3	23	8.0	
BARROW	9	1015.2	1015.7	-18.3	-26.7	-22.6	1.4	- 2.8	30+	-37.2	12	0	31	-26.7	71	19	15	5	16	0	234	381	1.1	7	14.6	8	29	2	2	7		
BARTER ISLAND	12	1014.9	1016.7	-18.3	-26.7	-22.6	1.0	- 2.8	30	-36.1	1	0	31	-26.1	70	9	2	3	7	0	157	356	1.5	26	17.9	27	22	2	2	2		
BETHEL	38	1004.4	1010.2	- 8.3	-16.1	-12.2	2.9	3.9	28+	-32.2	5+	0	31	-13.3	87	21	- 5	6	8	0	127	152	1.1	8	17.0	7	12	8	4	19	6.6	
COLD BAY	29	1002.7	1006.5	1.7	- 3.3	- 0.9	0.9	5.6	31+	-10.6	10	0	24	- 3.3	83	114	48	38	25	0	310	203	1.4	13	24.6	29	2	1	8	22	8.4	
FAIRBANKS	133	996.3	1014.5	-15.0	-22.2	-18.7	3.4	5.6	13	-40.6	1	0	31	-21.1	76	34	20	11	17	0	427	503	0.4	1	7.2	19	13	5	4	22	8.0	
JUNEAU	4	1010.8	1011.5	0.0	- 5.0	- 2.6	-0.6	5.6	14	-12.8	20+	0	30	- 3.9	91	83	- 25	17	18	0	536	229	3.0	10	18.3	13	14	3	2	26	8.7	17
KING SALMON	15	1007.1	1009.1	- 7.2	-14.4	-11.1	-0.7	7.8	28	-30.6	5	0	28	-15.0	72	52	26	17	11	0	89	76	1.5	7	21.0	9	12	13	4	14	5.4	
KOTZEBUE	3	1011.9	1012.2	-12.8	-20.0	-16.4	3.3	1.7	29	-36.1	2+	0	31	-19.4	80	9	2	2	11	0	236	381	3.3	11	21.5	10	13	8	8	15	6.5	
MC GRATH	105	999.3	1013.0	-13.3	-22.8	-18.2	3.5	4.4	29	-40.0	4	0	31	-21.7	72	44	18	23	13	0	493	279	0.3	14	11.0	22	13	6	3	22	7.6	
NOME	4	1009.5	1010.3	- 8.3	-16.1	-12.2	2.1	1.1	29+	-31.1	2	0	31	-16.7	68	26	1	5	14	0	256	330	1.3	7	13.0	6	12	8	7	16	6.6	33
ST. PAUL ISLAND	7	1002.7	1003.7	1.1	- 2.2	- 0.4	2.7	5.0	27	-11.7	9	0	22	- 2.8	81	69	22	11	26	0	371	70	1.1	15	25.9	27	2	2	5	24	8.5	
SHEMYA	37	995.3	999.1	2.2	- 1.7	0.3	0.7	6.7	1	- 5.0	14+	0	25	- 2.2	83	42	- 12	11	21	0	178	51	4.9	22	34.0	21	30	1	[illegible]	[illegible]	8.2	
YAKUTAT	9	1006.8	1008.0	- 1.1	- 7.8	- 4.5	-2.2	5.0	14	-18.3	21	0	29	- 5.6	89	311	0	94	18	0	790	635	1.7	12	17.4	12	14	4	3	24	8.4	
ARIZONA																																
FLAGSTAFF	2131	784.0	1018.2	2.2	-12.2	- 4.9	-4.1	16.1	11	-21.1	21	0	31	-10.0	71	185	144	67	9	0	2184	2106	0.3	14	20.5	25	5	17	5	9	4.2	
PHOENIX	340	976.6	1016.1	15.6	2.8	9.0	-1.9	20.0	5+	- 1.7	10	0	5	1.1	64	101	80	48	7	0	T	T	0.4	11	21.0Y	[illegible]	19	15	7	9	4.5	72
TUCSON	788	925.8	1015.0	15.6	2.8	9.2	-1.8	21.1	7	- 3.3	10	0	5	0.6	61	87	64	39	10	0	41	25	1.5	16	17.0	S	13	14	7	10	4.7	68
WINSLOW	1492	851.7	1022.7	0.6	-12.2	- 5.9	-6.2	15.0	7	-24.4	22	0	31	-11.7	69	95	82	38	6	0	1006	737	1.4	23	17.4	22	16	16	4	11	4.5	
YUMA	59	1009.5	1016.7	17.2	5.6	11.3	-1.4	23.3	26	1.1	21	0	0	0.6	52	17	8	8	5	0	T	T	2.0	36	15.2	N	9	16	4	11	4.0	76
ARKANSAS																																
FORT SMITH	136	1001.7	1018.9	11.1	- 0.6	5.2	-0.6	22.8	6	- 8.9	26	0	18	0.0	74	134	62	43	14	4	51	25	0.9	2	17.9	NW	21	9	7	15	6.5	44
LITTLE ROCK	78	1009.1	1018.9	11.1	0.6	5.9	0.4	24.4	20	- 6.7	26	0	16	1.7	76	126	22	39	14	3	28	25	0.3	34	15.2	NW	2	9	5	17	6.6	56
TEXARKANA	119	1005.4	1018.9	13.9	2.8	8.3	0.1	25.6	20	- 6.1	28	0	11	2.8	73	233	117	90	14	4	51	25	0.5	17	11.3	31	21	9	7	15	6.1	
CALIFORNIA																																
BAKERSFIELD	145	1002.0	1019.9	12.8	2.2	7.4	-1.9	18.9	4	- 3.9	14	0	3	1.7	71	14	- 11	8	4	0	T	0	1.1	6	5.8	32	7	17	7	7	4.1	
BISHOP	1252	875.0		10.0	- 7.8	1.1	-2.9	21.1	10	-20.0	21	0	28			13	- 17	7	5		335	152						18	8	5	3.4	
BLUE CANYON	1609			5.6	- 2.2	1.6	-3.0	17.8	25	-12.8	14	0	20			230	- 30	60	10		1125	1143			17.4	21	4	16	4	11	4.5	
EUREKA U	13			10.6	3.9	7.3	-2.1	14.4	26+	- 1.1	15+	0	4			110	- 60	34	9		T	0			17.9	NW	16	8	11	12	6.1	58
FRESNO	100	1007.8	1019.8	11.7	0.0	5.9	-2.4	17.2	27	- 6.1	14	0	16	1.7	80	26	- 24	13	7	2	T	0	0.7	11	10.3	SE	18	11	5	15	5.1	59
LONG BEACH	10	1015.9	1017.2	18.3	7.2	12.6	-0.7	26.7	23	0.6	14	0	0	2.8	55	27	- 23	19	4	1	0	0	0.8	35	9.8	6	14	13	12	6	4.2	
LOS ANGELES	30	1012.9	1016.5	16.7	7.8	12.3	-1.6	24.4	23	3.3	21+	0	0	2.2	55	27	- 34	18	5	1	0	0	1.1	36	14.8Y	W	19	16	12	3	3.7	
LOS ANGELES U	82			18.3	7.8	13.1	-1.4	26.1	23	3.3	21+	0	0			42	- 31	35	4		0	0			8.9	SW	19	16	10	5	[illegible]	[illegible]
MT SHASTA R	1080			3.3	- 5.6	- 1.0	-3.2	12.2	27	-13.9	19	0	27			158	0	54	10		1346	762										
OAKLAND	2	1019.6	1019.8	13.3	5.6	9.4	-0.3	22.8	28	2.2	31+	0	0	1.7	63	69	- 22	42	6	1	0	0	0.9	2	15.6	[illegible]	13	12	13	6	4.3	
RED BLUFF	104	1007.8	1020.7	14.4	2.2	8.1	-0.3	25.6	25	- 5.6	16	0	15	- 0.6	62	64	- 43	38	8	0	T	T	2.1	35	25.0	SE	17	14	8	9	4.6	68
SACRAMENTO	5	1019.0	1019.8	12.2	1.1	6.7	-1.3	22.2	28	- 3.9	16	0	16	0.6	72	33	- 50	14	5	0	0	0	0.7	1	17.9	NW	12	14	9	8	4.4	72
SANDBERG R	1377	862.2		5.6	- 2.2	1.6	-4.3	20.0	11	-11.1	13	0	20			12	- 51	8	3		147	127	3.9	5	21.5	8	22	18	6	7	3.6	
SAN DIEGO	4	1015.6	1016.5	17.8	8.3	13.1	-0.9	23.9	25	3.3	14+	0	0	4.4	58	42	- 10	34	6	0	T	T	1.3	28	14.3	S	18	17	8	6	3.5	79
SAN FRANCISCO	2	1019.0	1019.7	13.3	4.4	8.9	-1.1	22.2	26	- 0.6	15	0	1	2.8	68	69	- 15	30	8	0	0	0	0.8	35	21.9	NW	13	13	11	7	4.4	
SAN FRANCISCO U	16			13.9	8.3	11.1	-0.3	23.3	26	2.8	14	0	0			54	- 55	18	6		0	0			17.0	NE	13					63
SANTA CATALINA	478	960.0		13.9	8.3	11.2	-2.2	23.3	26	1.1	14	0	0			22	- 43	14	4		0	0										
SANTA MARIA	72			16.7	2.8	9.7	-1.6	24.4	26+	- 6.1	14	0	5			34	- 32	21	4		0	0						19	8	4	2.7	
STOCKTON	7	1019.3	1020.2	11.1	1.1	5.9	-1.8	16.7	29	- 2.8	16	0	15	0.6	75	34	- 34	14	7	0	0	0	0.4	12	17.0	[illegible]	7	12	1	9	4.7	
COLORADO																																
ALAMOSA	2297	767.7		- 2.2	-20.6	-11.3	-4.2	8.9	5	-34.4	22	0	31			30	24	17	11		704	406						12	7	12	5.2	
COLORADO SPRINGS	1873	807.0	1018.1	2.2	- 9.4	- 3.7	-3.6	15.0	11	-17.8	21	0	31	-12.8	55	17	11	6	7	0	297	229	1.7	1	16.1	36	26	9	11	11	5.6	
DENVER	1610	832.7	1015.8	5.0	-10.6	- 3.1	-2.8	15.6	23+	-24.4	31	0	31	-10.6	61	27	15	11	14	0	33	152	0.4	36	16.5	NW	6	6	9	16	6.7	53
GRAND JUNCTION	1480	852.4	1022.6	- 2.2	-12.8	- 7.6	-6.0	6.1	1	-20.0	24+	0	31	-10.6	78	29	14	9	13	0	424	178	0.6	5	10.7	[illegible]	20	5	12	16	6.9	41
PUEBLO	1428	853.4	1018.4	2.8	-12.2	- 4.7	-5.4	15.6	11	-22.2	22	0	31	-12.2	62	24	16	9	7	0	343	279	0.9	34	19.2	W	26	10	12	11	5.6	59

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C	C.	C.	C.	C		C.				C	%	Mm	Mm.	Mm			Mm	Mm	M.p.s		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1018.6	1019.4	6.1	- 1.7	2.2	1.5	13.9	19	- 9.4	1	0	22	- 1.7	76	142	53	37	13	1	257	102	2.0	32	14.3	30	14+	6	8	17	6.9	
HARTFORD	52	1012.2	1019.0	4.4	- 4.4	0.1	1.8	13.9	22+	-16.7	31+	0	24	- 5.0	70	172	84	47	12	0	551	381	2.2	34	13.0	NW	15+	4	11	16	7.1	56
NEW HAVEN	2	1019.0		5.6	- 2.8	1.6	1.4	13.3	19	-10.6	25	0	23			135	33	36	13		340	127			13.0	NW	29	7	5	19	6.8	54
DELAWARE																																
WILMINGTON	23	1016.9	1020.1	7.2	- 1.7	2.7	0.9	16.1	22	-11.7	2	0	19	- 1.7	73	133	56	41	12	0	[illegible]	152	1.6	31	12.5	6	11	9	6	16	6.4	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1018.3	1020.5	8.9	0.0	4.4	1.0	17.8	19	- 8.9	2	0	17	- 1.7	67	151	80	36	11	0	160	152	1.1	33	12.5	NW	23+	10	3	18	6.7	53
FLORIDA																																
APALACHICOLA U	4			18.3	11.1	14.6	1.4	23.3	22+	- 1.1	24	0	1			166	91	104	10	3	0	0			11.6	W	28	7	6	18	6.6	42
DAYTONA BEACH	9	1019.0	1020.3	22.8	11.7	17.3	1.6	27.8	19+	1.7	24	0	0	12.8	78	76	26	56	7	2	0	0	0.2	31	11.6	31	23	8	10	13	6.3	
FORT MYERS	5	1019.3	1019.5	26.7	14.4	20.6	2.3	30.6	14+	3.9	24	0	0	15.6	78	74	41	42	4	2	0	0	1.2	9	15.6	33	23	7	18	6	5.1	
JACKSONVILLE	6	1019.3	1020.4	21.7	10.0	15.9	2.6	28.3	19	- 0.6	24	0	1	11.1	78	119	63	62	10	3	0	0	0.4	32	13.4	NW	23	10	9	12	5.7	51
KEY WEST	1	1017.6	1018.4	25.1	21.1	23.6	2.1	28.3	14+	13.9	24	0	0	19.4	78	102	59	79	7	2	0	0	3.2	9	16.1	N	23	9	8	14	6.0	71
LAKELAND U	65			23.9	13.9	18.9	2.1	28.9	15	1.7	24	0	0			47	0	36	7		0	0						10	10	11	5.5	68
MIAMI	2	1018.6	1018.9	25.0	17.8	21.3	1.2	27.2	19+	8.3	24	0	0	16.7	76	35	- 8	23	4	0	0	0	1.7	10	17.0	32	23	6	15	10	5.9	
ORLANDO	33	1015.9	1020.3	24.4	12.8	18.8	2.8	28.9	19	2.2	24	0	0			61	13	48	7	1	0	0	0.2	7	12.1	23	11	11	10	10	5.6	
PENSACOLA	34	1015.2	1019.5	18.9	[illegible]	14.2	1.8	[illegible]	18	- 1.7	24+	0	3	10.6	80	166	59	68	12		0	0	1.1	10	17.0	SE	11	8	2	21	7.1	32
TALLAHASSEE	17	1018.0	1020.2	21.7	8.3	14.9	2.6	27.8	18	- 2.8	24	0	4	10.6	79	160	72	82	11	2	0	0	0.2	17	10.7	24	28	8	6	17	6.2	
TAMPA	6	1019.6	1019.7	23.9	12.8	18.2	1.4	27.8	20+	- 1.1	24	0	1	13.3	78	52	4	24	7	2	0	0	0.7	9	11.6	35	23	10	10	11	5.5	65
WEST PALM BEACH	5	1018.6	1019.3	25.6	15.6	20.5	0.4	28.9	11	7.2	24	0	0	15.0	72	31	- 34	14	6	2	0	0	1.2	10	13.0	32	23	7	9	15	6.4	
GEORGIA																																
ATHENS	244	990.5	1020.1	13.9	3.9	8.9	1.9	24.4	20	- 5.6	24	0	11	4.4	78	167	52	50	12	3	0	0	0.5	29	8.0	33	23+	8	7	16	6.3	
ATLANTA	308	982.4	1019.9	13.9	3.9	8.7	1.6	22.2	20	- 6.1	24+	0	10	3.9	76	170	59	53	12	2	0	0	0.0	26	13.4	NW	23	6	5	20	7.2	48
AUGUSTA	44	1014.6	1019.9	18.3	3.3	10.7	2.2	27.8	19	- 6.7	24	0	12	5.0	74	74	- 10	37	10	0	0	0	0.6	24	11.2	27	3	10	4	17	6.3	
COLUMBUS	117			17.2	5.6	11.2	2.4	24.4	19+	- 4.4	30	0	9	6.7	79	124	9	38	11		0	0	0.2	28	10.3	32	28+	7	5	19	7.0	
MACON	108	1006.8	1019.9	17.2	3.9	10.5	1.1	26.1	19+	- 6.7	24	0	11	5.0	74	98	- 5	31	13	0	0	0	0.4	24	22.4	NW	22	9	4	18	6.5	50
ROME	194			14.4	2.2	8.3	2.5	22.8	21	- 6.7	30	0	15			185	55	48	18		0	0										
SAVANNAH	14	1018.3	1020.2	20.0	6.1	12.9	2.2	28.3	20	- 3.9	24	0	7	7.8	75	75	4	23	9	1	0	0	0.5	22	13.4	NW	23	10	6	15	6.0	62
HAWAII																																
HILO	8	1011.9	1013.0	27.2	18.9	22.9	1.0	30.0	17+	16.1	12	0	0	18.3	78	434	49	142	17	0	0	0	0.9	20	13.0	SE	16	7	7	17	6.9	31
HONOLULU	2	1012.2	1012.5	26.7	20.0	23.3	0.2	29.4	6	15.0	28	0	0	17.8	73	252	176	110	17	4	0	0	1.5	9	13.9	SE	17+	5	12	14	6.8	52
KAHULUI	15	1010.2	1012.4	25.6	18.3	21.9	-0.7	30.0	17	12.8	28	0	0	18.3	83	129	61	37	14	1	0	0	1.2	5	15.2	N	13	4	12	15	6.6	69
LIHUE	31	1008.1	1013.1	24.4	17.8	21.1	-1.3	26.1	22+	13.3	29+	0	0	17.8	83	325	193	129	20	2	0	0	0.8	7	15.2	SW	23	3	10	18	7.3	40
IDAHO																																
BOISE	865	918.7	1021.9	1.7	- 6.7	- 2.3	-2.4	11.1	27	-16.7	16+	0	30	- 6.7	75	13	- 21	3	12	0	109	25	1.2	15	13.0	SE	5+	8	4	19	6.7	55
LEWISTON	431			4.4	- 2.8	0.8	-0.6	11.1	2	-14.4	15	0	17			37	2	20	13		224	76						4	1	26	8.4	
POCATELLO	1358	863.5	1022.2	- 1.7	-11.7	- 6.8	-4.3	6.7	4	-24.4	13	0	30	-10.0	75	23	- 2	9	13	0	353	203	2.5	21	17.4	SW	11	4	4	23	8.0	32
ILLINOIS																																
CAIRO U	96			8.9	0.6	4.7	0.6	20.0	21	-14.4	31	0	13			148	54	67	17		41	25			17.9	SW	2	6	8	17	6.8	40
CHICAGO O HARE	201	993.6	1018.7	2.8	- 5.0	- 0.9	1.6	16.1	21	-23.9	31	0	20	- 3.9	79	61	15	25	17	2	74	25	1.7	24	13.0	28	21+	6	5	20	7.5	
CHICAGO MIDWAY	185	995.3		3.3	- 3.9	- 0.2	1.4	16.7	21	-23.3	31	0	20	- 3.9	78	93	44	41	16	1	69	25	1.8	22	15.2	W	21	6	6	19	7.4	36
MOLINE	177	996.6	1018.8	2.2	- 6.1	- 1.9	0.9	15.0	21	-27.2	31	0	22	- 5.6	75	40	- 2	10	14	0	81	51	1.3	24	12.1	NW	25	4	9	18	7.6	30
PEORIA	199	994.2	1019.2	2.8	- 5.0	- 1.2	0.4	15.6	21	-25.6	31	0	22	- 3.9	83	67	18	15	19	3	56	51	0.8	23	11.2	N	2	4	4	23	8.1	28
ROCKFORD	221	990.2	1018.2	1.7	- 6.7	- 2.4	1.2	13.3	21	-26.1	31	0	24	- 5.0	82	39	- 4	8	13	3	51	51	1.3	25	10.3	28	21	6	7	18	7.4	
SPRINGFIELD	179	995.9	1019.0	3.3	- 3.9	- 0.3	-0.3	17.2	21	-22.8	31	0	24	- 2.8	84	152	104	60	16	3	163	76	0.6	24	14.8	NW	25+	4	6	21	7.9	30
INDIANA																																
EVANSVILLE	116	1004.7	1019.4	7.8	- 1.7	3.0	0.7	20.6	21	-17.8	31	0	19	- 1.1	74	140	62	41	14	3	23	25	0.6	23	14.3	SW	11	6	4	21	7.4	38
FORT WAYNE	241	988.5	1019.5	2.8	- 5.0	- 1.2	0.8	16.1	21	-22.8	31	0	21	- 3.9	81	138	85	41	16	2	94	76	1.7	24	14.3	W	22	3	8	20	7.8	37
INDIANAPOLIS	241	989.2	1019.2	5.0	- 2.8	0.9	1.4	19.4	21	-22.8	31	0	19	- 2.2	81	125	57	48	18	2	89	51	0.5	23	15.2	S	21	5	8	18	7.5	28
SOUTH BEND	236	989.5	1018.6	2.2	- 3.9	- 0.8	1.0	15.6	21	-23.3	31	0	22	- 3.3	83	104	48	31	20	2	318	102	1.6	23	13.9	29	21	2	7	22	8.4	
IOWA																																
BURLINGTON	211			2.8	- 5.0	- 1.1	0.9	16.7	21	-23.3	31	0	24	- 3.3	84	38	- 3		14	1	36		0.9	26	11.2	36	31+	5	4	22	7.7	
DES MOINES	286	983.1	1019.0	2.8	- 6.1	- 1.7	2.0	13.9	20	-22.8	31	0	24	- 5.6	79	19	- 10	6	13	0	66	51	0.7	29	14.8	SW	17	5	8	18	7.3	36
DUBUQUE	322	978.0		0.6	- 7.2	- 3.3	1.4	13.3	21	-27.8	31	0	27			58	10	24	14		71	51						4	8	19	7.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C	C.	C.		C.				C	%	Mm.	Mm.	Mm			Mm	Mm.	M.p.s.		M.p.s.							%
IOWA																																
SIOUX CITY	334	977.3	1018.7	0.6	- 8.3	- 3.9	-0.1	12.8	3	-24.4	31	0	29	- 7.8	76	19	0	9	7	0	33	T	0.8	29	18.8	NW	25	7	6	16	6.6	47
WATERLOO	265	985.4	1018.4	1.1	- 8.9	- 3.8	1.1	11.7	20+	-26.7	31	0	27	- 6.7	80	21	- 8	10	10	1	56	25	0.9	26	13.4	20	17	6	6	19	7.2	
KANSAS																																
CONCORDIA	448	963.4	1018.1	4.4	- 5.0	- 0.2	-0.2	16.1	20	-20.6	31	0	29	- 5.0	74	29	11	8	8	0	193	76	0.5	27	16.5	W	20	8	9	14	6.1	48
DODGE CITY	787	924.1	1017.3	6.7	- 5.0	0.7	-0.8	19.4	1	-18.3	31	0	29	- 6.7	65	13	1	4	10	0	74	25	1.2	29	17.0	N	2	14	3	14	5.3	64
GOODLAND	1113	886.2	1016.9	4.4	- 9.4	- 2.4	-1.5	15.6	23+	-21.7	31	0	31	- 8.3	69	11	0	4	6	0	213	76	2.4	28	20.1	30	6	13	7	11	5.3	
TOPEKA	267	986.1	1018.8	5.0	- 3.9	0.6	-0.2	16.7	20	-21.1	31	0	23	- 3.9	75	79	44	22	9	1	282	102	0.3	30	15.6	NW	25	7	4	20	7.1	37
WICHITA	403	968.8	1018.1	6.1	- 3.3	1.4	-0.7	16.7	20	-16.7	22	0	23	- 5.0	66	36	12	11	10	1	246	127	0.3	[illegible]	16.5	SW	17	10	6	15	6.2	46
KENTUCKY																																
COVINGTON	265	987.1	1019.4	7.2	- 1.7	2.7	1.9	20.6	21	-15.0	31	0	17	- 0.6	79	100	30	28	17	1	79	T	1.1	22	11.2	25	11	4	6	21	7.8	
LEXINGTON	294	983.4	1019.7	8.9	- 1.1	3.9	1.7	21.7	21	-12.8	31	0	16	0.0	75	101	14	24	15	2	272	203	1.4	17	12.5	21	12	5	7	19	7.3	
LOUISVILLE	145	1001.4	1019.3	8.9	- 0.6	4.1	1.7	20.6	21	-12.2	31	0	17	- 0.6	72	89	7	22	16	4	65	51	0.5	25	17.0	NW	24	6	6	19	7.6	38
LOUISIANA																																
ALEXANDRIA	28	1014.6	1016.8	15.0	4.4	9.9	-0.8	25.0	20	- 4.4	29	0	10	6.7	83	332	187	146	14	6	T	T	0.4	36	13.0	30	21	6	4	21	7.4	
BATON ROUGE	20	1016.3	1018.9	17.8	7.2	12.4	0.4	27.2	21+	- 5.0	29	0	7	8.9	82	151	22	44	12	2	0	0	0.5	9	10.7	22	2	6	4	21	7.1	
LAKE CHARLES	3	1017.3	1018.2	17.2	8.3	12.8	0.2	25.0	20	- 1.1	29	0	3	10.0	87	337	191	150	[illegible]	7	0	0	1.3	6	11.6	28	2	5	7	19	7.2	
NEW ORLEANS	1	1018.0	1018.7	19.4	10.0	14.6	1.6	27.8	19	- 1.1	24	0	4	10.6	77	274	169	88	12	3	0	0	0.8	8	13.4	17	18	6	7	18	7.0	
SHREVEPORT	77	1009.1	1018.4	15.0	3.9	9.4	-0.4	26.7	20	- 4.4	29+	0	10	5.0	78	100	- 26	30	14	3	18	25	0.1	13	12.1	32	21	9	6	16	6.3	46
MAINE																																
CARIBOU	190	993.2		- 3.3	-12.8	- 8.2	1.0	5.0	13	-26.1	25	0	30			116	55	37	10		792	457						5	5	21	7.6	
PORTLAND	14	1015.9	1018.4	2.8	- 7.2	- 2.3	1.1	11.7	19	-18.3	30	0	29	- 7.2	69	152	55	57	12	0	480	279	1.5	30	14.8	NW	14	12	5	14	5.6	54
MARYLAND																																
BALTIMORE	45	1014.6	1020.4	7.2	- 1.7	2.9	0.8	16.7	22	-12.8	2	0	20	- 2.2	70	135	59	38	12	0	117	203	1.6	31	13.0	NW	23	9	6	16	6.4	45
MASSACHUSETTS																																
BLUE HILL OBS R	192			3.9	- 3.9	0.0	1.1	12.2	22	-11.1	27+	0	25			206	105	75	12		579	305			18.8	NW	15					52
BOSTON	5	1017.6	1018.7	5.0	- 1.7	1.7	0.9	14.4	22	- 7.8	27	0	20	- 3.9	67	163	71	58	10	0	373	178	2.5	31	16.5	NE	28	7	10	14	6.2	57
NANTUCKET	13	1017.6	1018.1	7.2	- 0.6	3.2	0.9	12.8	12	- 8.3	31+	0	18	- 1.1	75	107	8	30	11	0	117	25	2.3	34	21.9	NW	4	7	7	17	7.1	40
PITTSFIELD	357			1.7	- 7.2	- 2.7	1.0	11.7	22	-19.4	31	0	27			105	23	33	13		323	178										
WORCESTER	301	980.7	1018.9	2.8	- 5.0	- 1.2	1.4	13.3	22	-12.2	27	0	29	- 6.1	71	145	54	39	11	0	564	381	2.7	30	16.5	29	15	7	11	13	6.4	
MICHIGAN																																
ALPENA	210	991.2	1017.4	0.6	- 7.8	- 3.5	0.9	14.4	21	-22.8	28	0	27	- 7.2	74	61	14	21	15	0	231	76	1.1	22	14.3	W	22	2	11	18	7.9	34
DETROIT	189			3.9	- 2.2	0.9	2.1	16.7	21	-16.1	31	0	21	- 2.8	76	113	60	54	13	2	86		2.1	26	12.5	28	22					
DETROIT M WAYNE CO	193	993.2	1018.2	2.8	- 3.9	- 0.6	0.6	16.1	21	-20.6	31	0	23	- 3.9	77	132	83	55	15	2	114	51	1.8	24	15.6	W	22	3	4	24	8.2	32
DETROIT WILLOW RUN	217	989.5	1018.5	2.8	- 4.4	- 0.7	0.7	15.6	21	-18.3	31	0	22	- 5.0	74	123	73	60	15	2	114	51	1.8	24	15.6	27	21	3	4	24	8.2	
FLINT	235	989.2	1017.8	2.8	- 4.4	- 0.7	1.7	15.6	21	-19.4	31	0	23	- 4.4	74	71	25	30	12	3	61	25	2.1	23	13.9	24	21	2	7	22	8.2	
GRAND RAPIDS	239	987.8	1017.9	2.2	- 4.4	- 1.2	1.6	15.6	21	-23.9	31	0	25	- 4.4	79	91	40	36	16	1	244	76	1.4	23	17.9	NW	21	2	5	24	8.5	31
HOUGHTON LAKE	350	974.3	1017.8	- 0.6	- 8.3	- 4.3		12.8	21	-24.4	31+	0	29	- 6.7	81	61		21	14	0	269	76	1.3	25	13.9	27	22	2	11	18	7.9	
LANSING	256	985.1	1017.7	2.2	- 5.6	- 1.6	0.9	16.1	21	-21.1	31	0	24	- 3.9	83	98	37	31	12	3	61	25	2.1	24	21.0	W	21	1	7	23	8.1	30
MARQUETTE U	206			- 0.6	- 7.2	- 4.1	0.3	11.7	21	-23.3	31	0	29			19	- 30	7	10		157	76			15.2	S	17	4	10	17	7.3	44
MUSKEGON	191	993.9	1017.6	2.8	- 2.8	- 0.3	0.9	15.6	21	-16.1	31	0	23	- 4.4	72	75	25	20	20	2	503	203	1.3	26	11.6	29	21	0	5	26	9.0	
SAULT STE MARIE	220	989.2	1016.7	- 1.7	- 9.4	- 5.4	0.8	6.7	21	-23.9	26	0	30	- 7.2	84	64	26	20	18	0	658	330	0.5	17	13.4	SW	25	4	8	19	7.8	26
MINNESOTA																																
DULUTH	435	962.8	1016.7	- 4.4	-12.8	- 8.7	1.3	5.0	21	-33.9	31	0	31	-12.8	71	23	- 6	7	12	0	109	51	1.6	26	20.1	SW	17	6	6	19	7.2	34
INTERNATIONAL FALLS	359	971.2	1016.7	- 7.8	-18.3	-12.9	-0.3	3.9	4+	-39.4	31	0	31	-15.0	79	35	14	22	11	0	328	305	1.5	22	12.5	18	17	7	7	17	6.7	
MINNEAPOLIS	254	986.5	1018.1	- 1.1	-10.0	- 5.7	2.1	10.6	21+	-30.0	31	0	29	-10.0	74	11	- 10	5	4	0	61	25	1.2	[illegible]	17.0	SW	17	6	6	19	[illegible]	42
ROCHESTER	395	968.5	1018.1	- 1.1	-10.6	- 5.7	1.8	10.6	21	-31.1	31	0	30	- 9.4	77	6	- 19	3	3	0	18	T	1.8	25	13.9	27	21	7	7	17	6.8	
ST CLOUD	315	977.7	1017.3	- 2.8	-11.7	- 7.3	1.2	5.6	20	-30.0	31	0	30		72	28	10	20	10		20	T						6	10	15	6.8	
MISSISSIPPI																																
JACKSON	94	1007.1	1019.3	16.1	4.4	10.1	0.4	26.1	21	- 6.1	30+	0	11	7.2	86	220	86	55	15	4	T	0	0.4	14	15.2	NW	21	5	7	19	7.2	35
MERIDIAN	88	1008.5	1019.7	16.7	4.4	10.7	1.7	25.6	21	- 5.6	29	0	11	6.7	80	284	150	72	14	5	T	0	0.2	23	11.2	22	11	5	7	19	7.2	
MISSOURI																																
COLUMBIA	237	989.5	1018.5	6.1	- 2.8	1.6	0.6	19.4	20	-19.4	31	0	22	- 2.8	76	62	12	14	16	2	157	51	0.0	29	15.2	NW	25+	6	5	20	7.5	40
KANSAS CITY	226	990.9	1018.6	6.1	- 2.2	1.9	-0.2	18.3	20	-17.2	31	0	21	- 2.2	77	44	5	18	13	1	175	102	0.1	23	11.6	N	30+	7	5	19	7.1	32

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C	C	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s.		M.p.s							%
MISSOURI																																
ST JOSEPH	247			5.0	- 3.3	1.0	1.3	15.6	20	-17.8	31	0	20	- 3.3	80	52	17	12	9	1	152	102	0.5	31	13.0	35	30	8	4	19	6.8	
ST LOUIS	163	998.3	1019.3	6.1	- 2.8	1.6	0.0	19.4	21	-20.6	31	0	18	- 1.7	81	157	107	48	13	[illegible]	107	25	0.5	26	13.0	NW	25	6	6	19	7.2	35
SPRINGFIELD	386	971.9	1018.4	8.3	- 1.7	3.5	0.9	19.4	6	-15.0	31	0	21	- 1.7	72	149	93	47	13	3	117	51	0.8	26	15.6	N	2	7	6	16	7.1	42
MONTANA																																
BILLINGS	1087	889.3	1017.3	1.1	- 8.9	- 4.1	-2.1	12.8	5	-24.4	30	0	29	-12.2	55	[illegible]	5	9	6	0	[illegible]	152	1.8	26	17.9	NW	11	5	3	23	7.6	23
GLASGOW	696	931.9		- 2.8	-15.0	- 8.9	-1.0	11.7	10+	-30.6	31	0	31			7	- 5	2	9		117	51						5	9	17	6.9	
GREAT FALLS	1116	886.2	1018.6	- 0.6	-10.6	- 5.5	-2.9	10.6	4	-32.8	21	0	27	-10.6	68	37	22	9	12	0	378	152	5.2	23	19.2	SW	10	3	5	23	7.8	30
HAVRE	787	921.8		- 1.1	-13.9	- 7.3	-1.2	11.7	10	-30.6	21	0	29			7	- 5	2	10		130	51			15.2	NW	31	7	5	19	7.0	48
HELENA	1167	880.5	1021.5	- 1.1	-13.3	- 7.2	-2.9	10.0	10+	-32.2	21	0	31	-11.7	70	35	22	8	10	0	579	279	2.1	27	17.9	W	11	4	5	22	7.7	33
KALISPELL	904	911.6	1019.7	- 1.1	- 7.8	- 4.6	-0.7	6.7	10	-18.9	20	0	30	- 7.2	82	37	3	8	14	0	541	152	0.0	15	13.0	1	18	2	5	24	8.5	
MILES CITY	801	921.1	1018.0	- 1.1	-13.9	- 7.7	-2.8	9.4	4	-33.3	31	0	31	-12.2	70	34	24		13		320		2.3	29								
MISSOULA	972	905.2	1021.3	- 1.1	- 8.9	- 5.1	-0.3	7.2	24	-19.4	21	0	29	- 8.3	78	43	16	13	17	0	320	102	0.6	13	12.5	NE	30	2	5	24	8.7	17
NEBRASKA																																
GRAND ISLAND	561	949.9	1018.4	3.3	- 8.3	- 2.7	-0.1	15.0	23	-27.2	31	0	30	- 7.2	75	12	- 3	4	8	0	109	76	1.1	29	17.0	33	25	11	4	16	5.8	
LINCOLN U	351			3.3	- 5.6	- 1.2	-0.4	15.6	20	-21.7	31	0	27			17	- 6	8	9		48	25			18.8	S	17	6	9	16	6.5	42
NORFOLK	471			1.1	-10.0	- 4.4	-0.6	12.8	24+	-30.0	31	0	30			19	0	10	7		124	76						8	8	15	6.3	
NORTH PLATTE	846	916.7	1018.3	2.2	-12.8	- 5.1	-2.6	14.4	4	-31.7	31	0	31	-10.6	69	4	- 6	3	2	0	86	76	1.5	34	16.5	NW	24	9	6	16	6.2	52
OMAHA	298	982.1	1018.6	3.3	- 7.2	- 2.0	0.1	15.6	20	-23.9	31	0	28	- 6.7	73	20	0	6	12	0	145	127	0.6	32	17.9	NW	25	6	8	17	6.9	45
SCOTTSBLUFF	1206	877.8	1018.9	0.0	-13.3	- 6.8	-4.9	8.9	4	-28.3	31	0	31	- 9.4	77	21	11	5	9	0	328	76	2.8	31	15.6	31	6	5	10	16	6.8	
VALENTINE	789			0.6	-13.9	- 6.7	-2.8	13.9	5	-32.8	31	0	31			10	1	5	7		150	76			19.2	S	16	8	7	16	6.5	58
NEVADA																																
ELKO	1539	845.2	1021.3	1.1	-10.6	- 4.9	-1.8	8.9	27	-23.9	13	0	29	- 9.4	70	17	- 9	7	6	1	216	152	0.5	25	13.0	2	14	5	12	14	6.9	
ELY	1906	807.3	1020.9	0.0	-15.6	- 8.0	-5.1	8.9	11	-24.4	21+	0	31	-12.8	72	18	0	23	7	0	300	279	1.3	20	20.1	SE	18	4	12	15	6.6	61
LAS VEGAS	659	940.7	1018.9	10.6	0.0	5.3	-1.9	19.4	26	- 5.0	21	0	17	- 3.9	57	21	11	18	3	0	51	51	1.3	29	16.5	NW	12	19	6	6	3.2	77
RENO	1342	867.6	1021.6	5.6	- 9.4	- 2.1	-2.0	14.4	3	-17.8	15	0	31	-12.8	47	14	- 13	11	6	0	48	25	0.2	18	24.1	NE	13	13	6	12	5.3	73
WINNEMUCCA	1310	870.0	1022.2	4.4	-10.0	- 2.8	-1.6	11.7	27+	-18.3	19	0	30	- 7.2	76	8	- 16	4	4	1	114	76	0.0	12	17.0	SW	4	7	12	12	6.1	36
NEW HAMPSHIRE																																
CONCORD	104	1006.1	1019.2	2.8	- 7.2	- 2.3	1.6	13.3	22	-23.3	31	0	28	- 7.8	65	97	14	36	11	0	381	254	2.0	31	13.9	NW	15	10	7	14	6.3	57
MT WASHINGTON OBS	1909			- 6.7	-16.1	-11.3	1.6	7.2	12	-28.3	27	0	31			184	24	54	19	0	1016	102			52.3Y	W	15	7	6	18	7.3	40
NEW JERSEY																																
ATLANTIC CITY	20	1018.0	1020.3	6.7	- 3.3	1.7	-0.8	15.6	13	-14.4	1	0	22	- 1.1	81	141	60	36	12	1	99	203	1.6	31	13.0	31	4	9	8	14	6.3	40
ATLANTIC CITY U	3			8.3	1.1	4.8	1.3	15.6	13	- 6.1	2	0	15			125	37	34	11						19.7	NNW	4					
NEWARK	2	1019.0	1020.0	7.2	0.0	3.5	2.0	17.2	22	- 6.7	30+	0	15	- 2.2	68	118	36	36	12	0	99	76	2.1	31	11.2	35	29+	7	8	16	6.8	
TRENTON U	17			6.7	0.6	3.6	1.8	16.7	22	- 7.2	30	0	12			148	75	46	12		127	152			12.5	NW	29+	8	9	14	6.3	47
NEW MEXICO																																
ALBUQUERQUE	1619	837.1	1018.3	5.6	- 5.0	0.2	-2.6	12.8	6	-11.7	18	0	29	- 8.9	55	14	3	7	5	0	71	25	1.0	6	25.5	E	13	13	6	12	5.1	64
CLAYTON	1515			5.6	- 7.2	- 0.9	-3.2	17.2	11+	-12.8	31+	0	31			8	- 1	4	5		178	127						9	11	11	5.5	
RATON	1944			3.3	-12.8	- 4.6	-4.1	15.0	5	-23.3	22	0	31			24	18	11	8		310	203						13	7	11	5.4	
ROSWELL	1102	891.3		9.4	- 6.1	1.8	-2.1	23.9	1	-13.3	10	0	30	- 5.6	67	27	13	12	8	0	163	127	0.7	33	14.8	N	27	13	5	13	5.3	49
SILVER CITY	1638			7.8	- 3.3	2.3	-3.0	13.9	12+	-12.2	22	0	25			44	28	18	10		330	203						14	4	13	4.8	
NEW YORK																																
ALBANY	84	1009.1	1020.1	2.8	- 6.1	- 1.7	1.3	11.1	13	-21.1	30	0	29	- 5.0	76	99	33	39	12	0	452	305	2.1	30	14.8	NW	14	3	6	22	8.1	39
BINGHAMTON	485	958.7	1019.4	1.7	- 5.0	- 1.7	1.2	10.6	22	-13.9	30	0	27	- 4.4	81	63	- 2	15	17	0	389	229	1.3	25	14.8	NW	3	1	6	24	8.6	31
BUFFALO	215	992.2	1018.5	3.9	- 2.8	0.6	2.9	18.3	22+	- 9.4	29+	0	22	- 3.3	76	55	- 21	14	20	2	264	127	2.7	24	25.0	SW	22	1	3	27	8.7	25
J.F. KENNEDY	4	1019.0	1019.7	6.1	- 0.6	2.6	1.0	13.3	19	- 7.8	2+	0	17	- 3.3	66	145	63	37	11	0	109	76	1.9	33	17.0	36	3	5	9	17	6.8	
NEW YORK U	40	1015.9	1019.3	6.7	0.6	3.4	1.3	16.7	22	- 6.7	30+	0	14	- 3.9	61	154	72	37	14	0	140	76	1.5	33	13.9	NE	28+					45
NEW YORK LA GUARDIA	3	1018.0	1019.8	6.7	0.6	3.7	1.2	15.6	22	- 6.1	30+	0	14	- 3.3	63	148	62	39	13	0	86	51	2.0	33	16.5	NW	4	5	8	18	6.9	
ROCHESTER	167	999.0	1019.8	3.9	- 3.3	0.2	2.0	13.3	22	-13.3	29	0	26	- 4.4	72	39	- 22	10	16	1	175	51	2.1	23	16.1	SW	12	1	4	26	8.8	25
SYRACUSE	125	1004.1	1019.5	3.9	- 3.3	0.4	2.7	12.8	22	-13.9	1	0	23	- 4.4	71	68	- 12	17	17	0	366	152	1.2	26	13.9	W	26	1	5	25	8.5	24
NORTH CAROLINA																																
ASHEVILLE	652	942.4	1019.8	11.7	- 0.6	5.4	2.2	18.9	20+	- 7.8	30+	0	22	1.7	82	156	64	33	11	1	48	51	0.8	35	17.0	33	3	7	6	18	6.7	49
CAPE HATTERAS R	2	1020.0	1020.2	15.6	6.1	10.9	1.9	23.9	22	- 4.4	25	0	4	6.7	77	120	3	38	7	3	T	T	1.7	32	18.8	SW	28	8	9	14	6.2	
CHARLOTTE	224	991.9	1020.0	13.3	2.8	7.9	2.0	21.7	19	- 6.1	24	0	14	2.8	72	140	49	42	11	0	T	0	0.4	30	12.1	SE	18	9	5	17	6.2	55
GREENSBORO	273	987.8	1020.2	12.8	1.7	7.3	2.9	22.2	19	- 6.1	24	0	15	2.8	76	161	82	42	8	1	T	T	0.5	33	12.1	NW	3	10	3	18	6.4	48
RALEIGH	132	1003.7	1020.1	13.9	2.2	7.9	2.4	23.9	22	- 8.9	24	0	15	2.2	71	125	49	28	12	0	36	25	0.4	30	10.3	25	12+	10	6	15	5.7	52

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity
	M.	Mb.	Mb.	C	C.	C.	C	C.		C.				C	%
NORTH CAROLINA															
WILMINGTON	9	1019.3	1020.5	17.8	5.0	11.2	2.2	27.2	19	- 3.9	24	0	8	5.6	72
NORTH DAKOTA															
BISMARCK	502	955.0	1017.8	- 3.9	-17.2	-10.7	-2.8	11.1	4	-41.7	31	0	31	-14.4	74
FARGO	273	982.7	1017.3	- 4.4	-14.4	- 9.4	0.4	11.1	3	-35.6	31	0	31	-13.3	74
WILLISTON	579	945.5	1017.4	- 3.9	-17.2	-10.5	-1.7	8.9	4	-36.1	30	0	31	-13.9	74
OHIO															
AKRON	368	973.6	1019.2	5.0	- 2.8	1.2	2.1	18.3	21	-13.9	27	0	20	- 2.8	77
CINCINNATI OBS	232			7.2	- 1.1	2.8	1.0	20.0	21	-13.9	31	0	17		
CLEVELAND	237	989.2	1019.2	5.0	- 2.2	1.5	2.3	18.3	21	-13.3	27	0	20	- 3.9	69
COLUMBUS	247	988.8	1019.9	5.6	- 2.8	1.3	1.6	17.8	21	-12.2	31+	0	21	- 2.2	77
DAYTON	305	982.4	1019.4	6.1	- 2.8	1.5	1.9	18.3	21	-15.0	31	0	19	- 2.2	78
MANSFIELD	395			4.4	- 3.3	0.6	2.2	17.2	21	-16.7	31	0	20	- 3.3	75
TOLEDO	204	993.2	1019.2	3.9	- 3.9	- 0.2	1.8	17.2	21	-17.8	31	0	22	- 3.3	79
YOUNGSTOWN	359	975.3	1019.4	3.3	- 3.3	- 0.1	1.3	17.8	21	-13.9	27	0	20	- 2.8	83
OKLAHOMA															
OKLAHOMA CITY	392	970.9	1018.2	10.0	- 1.1	4.3	-0.3	20.0	8	- 8.9	26	0	18	- 1.7	70
TULSA	198	993.6	1018.6	10.0	- 1.7	4.3	0.1	21.1	19	-11.1	31	0	19	- 2.8	65
OREGON															
ASTORIA	2	1018.3	1019.1	7.8	2.8	5.1	-1.1	11.7	24+	- 5.0	13	0	11	3.9	89
BURNS U	1265	874.0	1021.3	2.2	- 9.4	- 3.6	-2.0	13.9	27	-22.2	19	0	30	- 7.8	74
EUGENE	109	1007.1	1020.7	8.9	2.8	5.8	0.3	15.6	23	- 4.4	14+	0	9	2.8	83
MEACHAM	1234	876.4		- 0.6	- 5.6	- 3.1	-1.8	6.7	25	-16.7	15	0	27		
MEDFORD	396	973.9	1022.7	5.6	- 2.2	1.8	-0.9	11.7	3	-10.0	14	0	23	- 2.2	78
PENDLETON	452	965.1	1020.3	6.7	- 1.7	2.7	0.2	13.9	25+	-15.6	15	0	17	- 2.2	73
PORTLAND	6	1019.0	1020.4	7.8	1.7	4.7	-0.5	14.4	23	-10.6	20	0	10	1.7	82
SALEM	60	1012.9	1020.4	8.9	2.2	5.6	0.3	15.0	23	- 7.2	13	0	8	1.1	76
SEXTON SUMMIT R	1169	884.5	1020.3	3.3	- 2.2	0.4	-2.2	13.9	24	-10.0	14+	0	23		
PACIFIC AREA															
JOHNSTON	2	1011.5	1012.3	27.2	22.8	25.1	-0.6	29.4	8+	18.3	31	0	0	18.9	71
KOROR R	29	1006.1	1009.9	30.6	23.9	27.2	0.1	32.2	24+	22.2	25	2	0	23.3	84
KWAJALEIN	2	1008.8	1009.5	30.0	24.4	27.3	0.2	31.1	11+	22.2	19	0	0	23.3	77
MAJURO	3	1009.1	1009.5	29.4	25.6	27.5	0.7	30.6	26+	22.2	10	0	0	23.3	77
MARCUS ISLAND	6			26.7	21.1	23.8	-0.5	28.3	12+	18.3	27	0	0		
PAGO PAGO	4	1007.8	1007.8	29.4	23.9	26.7		31.7	9	20.0	19	0	0	22.8	81
PONAPE R	37	1003.7	1009.1	30.6	23.9	27.3	0.6	32.2	5	21.7	2	1	0	23.3	80
TAGUAC GUAM R	110			28.3	21.1	24.9	-1.1	29.4	16+	16.1	21	0	0		
TRUK MOEN ISLAND	2	1008.8	1009.1	30.0	25.0	27.6	0.4	31.1	17+	22.2	27	0	0	23.3	79
WAKE	3	1014.6	1014.9	29.4	23.3	26.5	0.4	30.6	14+	21.7	23+	0	0	20.0	71
YAP R	19	1007.5	1009.5	29.4	24.4	26.9	-0.3	31.1	22+	22.8	12+	0	0	23.3	83
PENNSYLVANIA															
ALLENTOWN	118	1005.8	1020.2	4.4	- 3.9	0.3	0.7	12.8	19+	-16.7	2	0	26	- 3.9	74
ERIE	223	991.5	1019.0	4.4	- 2.2	1.1	1.8	18.3	21	-10.6	27	0	22	- 3.3	72
HARRISBURG	103	1007.1	1020.4	5.6	- 2.8	1.6	1.0	15.6	13	-12.8	2	0	19	- 3.9	67
PHILADELPHIA	2	1019.3	1020.3	7.8	- 0.6	3.6	2.6	16.7	22	- 8.3	2	0	15	- 2.2	68
PITTSBURGH	347	974.3	1019.7	5.6	- 2.2	1.6	2.3	19.4	21	-12.8	30	0	21	- 3.3	73
READING U	81			6.7	- 0.6	2.9	1.4	15.6	13	-10.6	2	0	15		
SCRANTON	283	985.1	1020.4	3.9	- 3.9	- 0.2	1.3	12.2	13	-18.3	30	0	25	- 4.4	72
WILLIAMSPORT	160	1000.7	1020.4	[illegible]	- 3.3	0.8	1.7	[illegible]	13	-16.7	30	0	22	[illegible]	74
RHODE ISLAND															
BLOCK ISLAND	34			6.1	- 0.6	2.7	0.5	12.2	[illegible]	- 7.8	31+	0	15		
PROVIDENCE	16	1016.6	[illegible]	5.6	- 2.8	1.4	1.4	13.3	22+	-13.3	25	0	24	- 4.4	66
SOUTH CAROLINA															
CHARLESTON	12	1018.3	1020.1	18.9	5.0	11.9	1.9	27.8	19	- 3.9	24	0	8	7.2	75
CHARLESTON U	3			17.8	9.4	13.4	2.4	27.2	19	- 0.6	24	0	1		
COLUMBIA	65	1012.2	1020.4	16.7	2.8	9.8	1.8	26.1	19	- 6.1	24	0	17	5.0	79

State and Station	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Mm	Mm	Mm			Mm	Mm	M p.s		M.p.s							%
NORTH CAROLINA																	
WILMINGTON	119	32	40	10	3	T	0	0.5	29	14.8	[illegible]	11	9	10	12	5.4	[illegible]
NORTH DAKOTA																	
BISMARCK	24	15	12	5	0	333	229	2.3	30	17.0	N	24	7	7	17	6.6	57
FARGO	35	20	21	9	0	262	203	1.6	26	16.1	N	21	9	7	15	6.0	45
WILLISTON	14	2	7	10	0	142	127	2.1	29	16.1	NW	17	7	10	14	6.1	68
OHIO																	
AKRON	61	4	22	15	0	112	76	1.6	22	13.0	24	12	1	6	24	8.7	
CINCINNATI OBS	97	26	26	17		41	25			10.3	W	21					28
CLEVELAND	62	3	21	19	1	71	51	2.3	21	12.1	W	18	1	6	24	8.7	24
COLUMBUS	65	5	14	14	0	132	76	0.9	21	13.9	W	12	4	6	21	8.0	33
DAYTON	91	31	35	16	0	102	[illegible]	1.2	21	13.4	[illegible]	21+	5	5	21	7.8	34
MANSFIELD	72	3	24	15	0	203	76	2.6	21				2	9	20	8.1	
TOLEDO	173	123	90	17	2	130	25	1.8	24	14.3	SW	21	3	5	23	8.2	30
YOUNGSTOWN	49	- 19	16	17	0	203	76	1.5	22	12.5	25	12	2	5	24	8.7	
OKLAHOMA																	
OKLAHOMA CITY	26	- 9	7	10	0	30	25	0.5	33	20.1	NW	2	11	6	14	6.0	57
TULSA	28	- 13	8	11	1	41	25	0.5	23	18.8	SW	18	8	6	17	6.3	45
OREGON																	
ASTORIA	230	-117	56	27	4	20	T	1.5	17	14.3	18	22	3	3	25	8.5	
BURNS U	26	- 10	9	10		333	229	1.0	30				7	8	16	6.6	
EUGENE	127	- 41	35	16	0	28	25	1.8	16	13.0	16	1	2	2	27	8.0	
MEACHAM	148	43	43	19		587	406			9.8	30	11	3	6	22	9.1	
MEDFORD	66	1	41	11	0	193	76	0.5	13	13.0	14	17+	3	2	26	8.5	
PENDLETON	11	- 26	3	7	0	64	76	2.0	23	14.3	19	3	5	5	21	7.5	
PORTLAND	121	- 41	20	18	0	145	127	2.0	15	14.8	SW	3	2	5	24	8.6	22
SALEM	138	- 49	32	17	0	25	25	2.6	18	13.4	18	2	2	4	25	8.5	
SEXTON SUMMIT R	75	- 46	22	15		648	483			17.4	16	21	10	2	19	6.7	
PACIFIC AREA																	
JOHNSTON	76	0	38	11	1	0	0	3.6	5	18.3	W	17	16	11	4	4.2	74
KOROR R	311	13	77	22	3	0	0	1.5	7	9.4	SE	31+	0	5	26	9.1	74
KWAJALEIN	182	- 45	55	22	1	0	0	7.4	6	15.6	E	3	2	7	22	7.8	
MAJURO	165	-118	52	15	0	0	0	5.3	7	13.9	E	2	2	12	17	7.7	59
MARCUS ISLAND	81	2	42	14		0	0			14.8	NE	1					56
PAGO PAGO	416		[illegible]	23	3	0	0	1.8	11	13.9	E	15	5	7	19	7.7	[illegible]
PONAPE R	[illegible]	-146	68	23	1	0	0	3.7	8	9.8	NE	11	1	6	24	6.7	27
TAGUAC GUAM R	64	- 91	11	21		0	0			9.4	E	14+					
TRUK MOEN ISLAND	360	24	[illegible]	21	3	0	0	4.2	5	10.3	E	29	0	9	22	9.5	[illegible]
WAKE	47	1	28	10	1	0	0	6.6	7	13.9	NE	15+	15	12	4	4.1	61
YAP R	190	- 68	66	25	1	0	0	2.5	6	11.2	NE	1	1	7	23	8.6	[illegible]
PENNSYLVANIA																	
ALLENTOWN	130	47	33	10	0	213	178	1.8	31	16.5	34	3	5	6	20	7.2	
ERIE	56	- 10	16	21	2	333	127	3.0	21	14.3	15	10	2	4	25	8.7	
HARRISBURG	109	45	27	11	2	330	279	1.3	31	13.0	N	3	6	5	20	7.2	41
PHILADELPHIA	149	75	41	12	1	142	127	1.3	32	13.9	NE	28	8	7	16	6.5	[illegible]
PITTSBURGH	56	- 5	12	14	0	201	152	1.2	24	13.4	24	12	1	3	27	6.7	26
READING U	127	47	40	10		137	127			18.3	NW	3	7	6	18	6.7	41
SCRANTON	62	- 1	18	13	[illegible]	221	254	[illegible]	29	13.0	N	3	3	6	22	7.8	35
WILLIAMSPORT	69	- 8	19	12	2	264	152	1.2	29	10.3	29	15	3	7	21	7.8	
RHODE ISLAND																	
BLOCK ISLAND	206	115	112	12		94	76						6	11	14	5.6	
PROVIDENCE	167	95	61	13	0	483	152	2.0	31	15.6	35	4	7	9	15	6.3	55
SOUTH CAROLINA																	
CHARLESTON	71	- 2	45	8	0	0	0	0.5	27	21.0	[illegible]	3	6	14	11	5.5	69
CHARLESTON U	62	- 7	32	9		0	0			14.3	S	28+					
COLUMBIA	66	- 24	27	7	0	0	0	0.7	28	16.3	22	22	10	7	14	5.8	63

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow Sleet: Total	Snow Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb	Mb	C.	C.	C	C	C		C				C	%	Mm	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
SOUTH CAROLINA																																
GNVLE-SPARTANBURG	292	985.1	1020.2	13.9	3.3	8.4	2.0	21.7	19+	- 6.7	24	0	11	2.8	72	168	66	49	12	0	T	T	0.6	34	10.3	NE	28	10	3	18	6.4	49
SOUTH DAKOTA																																
ABERDEEN	395	968.8	1017.9	- 2.2	-15.0	- 8.6	-0.9	12.8	4	-39.4	31	0	31	-11.7	78	12	- 4	5	6	0	231	152	1.3	28	14.3	36	24	9	7	15	6.0	
HURON	391	969.2	1017.9	- 0.6	-12.2	- 6.2	1.2	12.8	11	-30.6	31	0	31	-11.7	66	12	- 2	6	6	0	109	76	1.2	27	16.5	NW	24	8	6	17	6.2	55
RAPID CITY	964	902.5	1017.5	1.1	-11.1	- 5.3	-2.6	15.6	5	-28.3	31	0	31	-13.3	55	23	15	7	11		231	76	2.5	32	15.5	NW	6	5	9	17	6.8	47
SIOUX FALLS	432	964.4	1017.9	0.0	-11.1	- 5.6	0.4	15.6	5	-28.9	31	0	31	- 9.4	75	23	4	18	8	0	64	25	1.5	27	14.3	24	17	10	4	17	6.2	
TENNESSEE																																
BRISTOL	459	964.8	1020.3	10.6	- 1.1	4.9	1.4	21.7	21	-10.0	24	0	20	1.1	80	143	61	44	13	1	104	25	0.4	33	11.2	27	12+	6	7	18	7.0	
CHATTANOOGA	203	994.6	1019.8	12.2	2.8	7.7	1.8	22.2	21	- 6.1	24	0	14	4.4	82	200	69	58	13	2	T	T	0.1	27	11.2	NW	22+	5	4	22	7.9	31
KNOXVILLE	299	983.7	1019.3	12.2	1.7	7.0	1.7	23.3	21	- 6.1	27+	0	18	3.3	80	177	69	51	14	2	T	T	0.4	35	13.4	SW	12	2	11	18	7.7	27
MEMPHIS	79	1009.1	1019.7	12.8	1.7	7.2	1.4	23.9	21	- 6.7	29	0	13	2.2	71	187	60	74	12	2	T	T	0.3	15	15.6	W	2	9	7	15	6.4	48
NASHVILLE	180	997.3	1019.5	11.7	0.0	5.9	0.7	22.8	21	- 8.9	31	0	17	1.7	76	149	43	37	14	3	213	102	0.9	21	15.2	S	21	5	8	18	7.4	45
OAK RIDGE R	276			11.7	2.2	6.8	2.3	21.7	21	- 6.1	27	0	13			222	52	51	14		5	T			15.2Y		11	3	7	21	7.9	
TEXAS																																
ABILENE	537	955.3	1016.1	12.2	1.1	6.5	-1.3	22.2	6	- 6.1	26	0	16	- 3.6	65	62	30	49	6	1	102	51	0.8	26	13.0	S	20	15	4	12	4.9	64
AMARILLO	1098	890.3	1016.1	7.8	- 3.9	1.9	-2.2	21.1	1	-11.1	31	0	27	- 6.1	63	13	- 7	9	5	0	155	51	2.1	29	17.9	NW	2	10	9	12	5.5	49
AUSTIN	182	996.3	1018.7	15.6	3.9	9.7	-1.8	25.6	1	- 2.2	26+	0	5	3.9	71	37	22	59	12	0	0	0	1.6	1	14.8	NW	10	11	3	17	6.3	42
BROWNSVILLE	6	1016.3	1016.9	21.7	11.1	16.3	-0.9	27.8	21	1.1	24	0	0	12.2	78	28	- 16	13	3	1	0	0	0.4	34	13.9	W	10	6	6	19	7.0	34
CORPUS CHRISTI	12	1016.3	1017.7	18.9	7.8	13.4	-1.7	26.7	1	- 2.2	23	0	3	9.4	78	21	- 31	6	6	0	0	0	1.6	4	13.9	N	21+	3	6	22	7.6	34
DALLAS	147	1001.0	1018.6	13.3	3.9	8.6	-0.3	24.4	6	- 3.3	29+	0	5	1.2	65	57	- 1	22	11	0	T	T	0.5	33	14.3	NW	21	13	3	15	5.5	55
DEL RIO	313	981.4	1018.1	15.6	3.9	9.7	-1.6	23.9	8+	- 3.9	28	0	4	2.2	64	19	- 2	11	11	1	T	0	0.5	2	13.4	32	27	9	5	17	6.4	
EL PASO	1194	882.2	1016.5	11.1	- 0.6	5.3	-1.4	20.6	1	- 7.8	10	0	16	- 3.3	60	20	7	10	8	0	142	102	0.2	28	22.4	W	17	15	4	12	4.6	67
FORT WORTH	164	998.0	1018.8	13.9	2.8	8.3	-0.4	24.4	6	- 3.9	29	0	8	1.7	68	58	- 1	20	12	0	T	0	0.7	32	13.0	32	2	12	4	15	5.8	
GALVESTON U	2			17.8	10.6	14.2	0.2	22.8	21+	2.2	28	0	0			64	- 35	21	13		0	0			13.4	N	21					31
HOUSTON	15	1015.9	1018.1	17.8	8.3	13.0	-0.2	27.2	1	- 1.1	23	0	3	7.5	76	125	17	64	17	2	0	0	1.0	2	15.6	29	2	8	3	20	7.3	35
LUBBOCK	992	903.5	1017.2	9.4	- 3.9	2.7	-2.3	21.1	1	-13.6	22	0	27	- 5.6	63	13	- 3	6	7	0	76	25	1.7	29	14.3	36	27	12	6	13	5.2	
MIDLAND	869	916.7	1016.8	12.2	- 1.1	5.5	-2.2	22.8	12	- 6.1	28+	0	20	- 3.3	62	20	3	10	6	0	30	25	0.8	29	14.8	24	12	14	6	11	4.7	
PORT ARTHUR	5	1017.6	1018.4	18.3	7.8	13.1	0.4	26.1	20	- 2.2	29+	0	2	9.4	83	116	- 14	36	10	3	0	0	1.2	5	21.5	NW	2	5	7	19	7.1	34
SAN ANGELO	580	949.9	1017.9	13.9	0.6	7.3	-1.4	23.9	12+	- 6.7	28	0	13	1.1	68	29	7	19	7	1	48	25	0.9	26	11.6	33	27	13	8	10	5.0	
SAN ANTONIO	240	989.8	1018.4	16.7	5.0	10.6	-1.5	25.6	9	- 3.3	23	0	7	4.4	70	35	- 9	15	9	0	0	0	1.5	36	12.5	N	9	8	6	17	6.7	42
VICTORIA	32	1013.9	1017.8	18.3	7.2	12.7	-1.3	28.3	1	- 1.7	23	0	2	7.8	76	14	- 52	3	11	1	0	0	1.4	3	17.4Y	N	2	5	6	20	7.3	
WACO	153	1000.3	1018.6	14.4	4.4	9.7	-0.5	23.9	12+	- 2.2	29	0	7	4.4	74	74	4	25	12		T	0	1.1	32	12.5	31	10	13	4	14	5.5	
WICHITA FALLS	303	981.0	1018.5	12.2	0.0	6.1	-0.9	23.9	8	- 5.6	22	0	19	- 1.1	67	37	0	26	7	0	T	T	0.8	31	16.5	33	2	11	4	16	6.1	
UTAH																																
MILFORD	1533	846.3		- 0.6	-13.3	- 6.9	-4.8	7.8	11	-26.7	21	0	31			21	3	7	8		373	152						9	12	10	5.5	
SALT LAKE CITY	1286	872.7	1021.0	1.1	- 8.3	- 3.8	-2.8	10.0	4	-15.6	21	0	29	- 8.3	69	42	10	13	10	1	688	254	1.3	17	17.9	S	18	1	8	22	8.3	40
WENDOVER	1291	872.3	1021.5	2.2	- 7.2	- 2.6	-1.4	12.8	27+	-12.2	24+	0	29			4	- 4	1	5		25	T										
VERMONT																																
BURLINGTON	101	1006.1	1019.2	0.6	- 7.8	- 3.6	2.2	9.4	22	-22.2	30	0	28	- 8.9	67	66	12	28	13	0	434	305	0.6	27	14.8	SW	18	3	6	22	8.0	44
VIRGINIA																																
LYNCHBURG	279			10.0	0.0	4.8	1.2	21.1	19	-10.0	24	0	19			151	71	42	10		102	76			10.7	SW	12+	12	2	17	6.0	50
NORFOLK	7	1019.6	1020.5	11.7	1.7	6.7	0.8	24.4	22	- 6.1	24	0	14	1.1	69	123	53	39	10	0	51	25	0.9	34	14.6	S	3	9	8	14	6.1	54
RICHMOND	50	1014.6	1020.6	11.7	- 0.6	5.5	1.2	21.7	14+	-10.0	24	0	19	0.6	75	165	89	41	10	0	142	102	0.5	36	12.1	SW	12	11	4	16	6.2	53
ROANOKE	350	977.3	1020.1	10.6	0.0	5.2	1.6	22.2	19	-10.6	30	0	17	- 2.2	61	123	47	36	10	0	376	203	1.2	30	13.0	30	3	10	7	14	6.1	
WALLOPS ISLAND	3			8.3	0.0	4.1		17.2	19	- 6.7	24	0	19			133		59	9		51	51			17.4Y	WSW	12	10	7	14	5.9	
WASHINGTON																																
OLYMPIA	59	1011.5	1018.9	7.2	1.1	4.1	-0.7	12.2	27	-11.1	13	0	12	2.2	88	151	- 79	24	20	0	201	178	2.5	20	13.9	20	4	5	0	26	8.3	
QUILLAYUTE	55	1009.8	1017.4	7.2	2.2	4.6	-0.5	11.7	9	- 6.1	15	0	9	3.3	91	489	62	132	23	2	46	25	1.5	15	16.1	SE	5	4	1	26	8.5	12
SEATTLE TACOMA	122	1002.4	1019.0	7.8	3.3	5.3	0.4	12.8	9	- 3.9	14+	0	10	1.7	79	120	- 40	23	20	0	91	51	2.1	18	13.4	20	10+	4	1	26	8.8	15
SPOKANE	718	932.6	1018.8	0.0	- 5.0	- 2.3	-1.3	6.1	10	-15.0	14	0	25	- 5.0	84	51	- 10	12	14	0	323	203	1.7	18	13.4	SW	2	4	2	25	8.3	21
STAMPEDE PASS R	1206	878.1		- 1.1	- 5.0	- 3.1	-0.3	6.1	25	-13.3	21+	0	26			408	- 3	64	26		1516	991						3	1	27	8.8	
WALLA WALLA U	289			6.7	0.0	3.4	0.2	13.9	4	-10.6	21	0	14			31	- 15	7	12		137	76			12.5	SE	7+	6	2	23	7.8	20
YAKIMA	321	980.4	1020.0	5.0	- 5.0	- 0.3	0.0	13.9	27	-12.8	16	0	29	- 5.0	74	14	- 14	6	8	0	119	51	1.5	27	13.0	20	2	7	9	15	6.7	
WEST INDIES																																
SAN JUAN P.R.	4	1014.9	1017.2	28.3	22.2	25.3	0.7	30.0	11	17.8	25	0	0	20.0	74	80	- 59	55	16	0	0	0	3.0	7	12.5	E	21	6	20	5	5.4	60

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C	C.	C	C	C		C.				C	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SWAN ISLAND	9			28.9	24.4	26.4	0.5	29.4	15+	21.7	25+	0	0			153	9	43	20		0	0						1	18	12	7.0	
WEST VIRGINIA																																
BECKLEY	763	929.2	1020.3	7.8	- 2.2	2.7		17.2	20	-13.3	30	0	19	- 1.7	76	126		40	15	0	490	305	1.7	20	13.9	26	12+	7	5	19	7.2	
CHARLESTON	286	984.8	1019.7	9.4	- 1.7	3.8	1.0	21.7	21	-11.7	30	0	20	- 0.6	75	120	37	27	16	0	422	279	0.8	22	11.2	17	18	5	6	20	7.3	
ELKINS	600	947.2	1020.0	6.3	- 4.4	2.1	1.6	19.4	16	-16.7	30	0	25	- 1.1	81	114	35	38	17	4	589	432	1.3	26	11.6	27	12	3	7	21	7.8	
HUNTINGTON	252	989.2	1020.0	8.9	- 1.1	3.8	0.8	22.2	21	-15.0	30	0	19	0.0	77	90	19	16	15	0	335	254	0.6	23	10.3	24	25	4	8	19	7.6	
PARKERSBURG U	187			8.3	- 1.1	3.6	1.4	21.1	21	-11.7	30	0	17			57	- 15	14	14		178	152			13.4	W	22					37
WISCONSIN																																
GREEN BAY	208	991.5	1018.0	- 1.1	- 9.4	- 5.3	0.3	11.1	21	-28.3	31	0	30	- 7.8	81	30	0	9	11	1	94	76	1.7	27	13.9	SW	21	7	5	19	6.9	30
LA CROSSE	198	993.2	1018.6	0.6	- 7.8	- 3.7	1.9	12.8	21	-27.2	31	0	26	- 7.8	75	13	- 16	9	5	0	38	25	0.9	23	10.7	31	25	5	8	18	7.3	
MADISON	262	985.8	1018.3	0.6	- 8.3	- 3.8	1.7	12.2	21	-26.7	31	0	29	- 6.1	82	48	15	30	12	2	61	25	1.3	26	12.1	W	25	5	8	18	7.4	42
MILWAUKEE	205	992.2	1018.3	2.2	- 5.6	- 1.7	2.4	13.9	21	-23.3	31	0	22	- 6.1	73	34	- 8	13	11	2	30	T	2.0	26	14.3	SW	21	5	7	19	7.4	43
WYOMING																																
CASPER	1627	834.1	1016.5	- 2.8	-13.9	- 8.1	-5.5	5.6	3	-28.3	30	0	31	-12.8	66	21	9	5	14	0	452	102	4.9	23	16.1	22	31	1	8	22	8.4	
CHEYENNE	1867	807.3	1017.0	1.1	-11.7	- 5.3	-3.9	10.6	4	-26.1	20	0	30	-12.2	57	12	0	2	12	.	122	51	4.2	30	22.4	W	6	4	10	17	6.9	50
LANDER	1696	825.9	1020.0	- 3.9	-15.0	- 9.4	-4.4	6.1	5	-26.1	21	0	31	-14.4	70	28	18	10	11	0	668	356	1.0	23	17.0	W	11+	2	5	24	8.0	34
SHERIDAN	1208	876.4	1018.9	0.0	-14.4	- 7.0	-3.8	12.2	3	-31.7	31+	0	31	-12.8	63	25	9	11	14	0	523	229	2.3	30	18.3	NW	11	3	7	21	7.6	39

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust
\+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

Z Sun continuously below horizon.

HEATING DEGREE DAYS

(Base 65°F.)

DECEMBER 1967

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	510	1205	1012
HUNTSVILLE	586	1360	1228
MOBILE	273	544	592
MONTGOMERY	379	855	925
ALASKA			
ANCHORAGE	1513	4329	4789
ANNETTE	884	2752	2981
BARROW	2287	8835	9511
BARTER ISLAND	2285	8661	8260
BETHEL	1707	5402	5667
COLD BAY	1064	4031	4236
FAIRBANKS	2064	5900	6435
JUNEAU	1162	3893	3003
KING SALMON	1640	4967	4952
KOTZEBUE	1941	6446	6654
MC GRATH	2035	6013	6386
NOME	1704	6025	6032
ST. PAUL ISLAND	1040	4225	4778
SHEMYA	999	4105	4255
YAKUTAT	1259	4253	3955
ARIZONA			
FLAGSTAFF	1292	2737	2813
PHOENIX	512	590	671
TUCSON	502	605	662
WINSLOW	1344	2135	1970
YUMA	385	422	467
ARKANSAS			
FORT SMITH	726	1380	1293
LITTLE ROCK	685	1358	1317
TEXARKANA	556	981	984
CALIFORNIA			
BAKERSFIELD	604	746	821
BISHOP	953	1598	1663
BLUE CANYON	925	1740	1896
EUREKA U	611	1875	2027
FRESNO	686	954	975
LONG BEACH	312	349	406
LOS ANGELES	331	384	550
LOS ANGELES U	287	319	298
MT SHASTA R	1073	2148	2196
OAKLAND	491	840	1065
RED BLUFF	567	830	926
SACRAMENTO	643	935	1033
SANDBERG R	927	1506	1403
SAN DIEGO	288	343	432
SAN FRANCISCO	521	972	1130
SAN FRANCISCO U	398	1027	1205
SANTA CATALINA	399	570	519
SANTA MARIA	474	858	1095
STOCKTON	687	979	1024
COLORADO			
ALAMOSA	1651	3755	3567
COLORADO SPRINGS	1223	2574	2470
DENVER	1186	2432	2414
GRAND JUNCTION	1442	2504	2242
PUEBLO	1282	2555	2116
CONNECTICUT			
BRIDGEPORT	895	1952	1974
HARTFORD	1013	2318	2307
NEW HAVEN	924	2026	2105
DELAWARE			
WILMINGTON	866	1995	1836
DIST.OF COLUMBIA			
WASH NATL AP	773	1639	1603
FLORIDA			
APALACHICOLA U	214	440	488
DAYTONA BEACH	108	186	286
FORT MYERS	34	36	133
JACKSONVILLE	179	341	466
KEY WEST	1	1	28
LAKELAND U	81	131	221
MIAMI	25	25	65
ORLANDO	80	109	270
PENSACOLA	262	544	567
TALLAHASSEE	222	505	586
TAMPA	95	164	231
WEST PALM BEACH	37	38	71
GEORGIA			
ATHENS	524	1204	1164
ATLANTA	530	1265	1185
AUGUSTA	428	981	963
COLUMBUS	403	916	963
MACON	440	1035	870
ROME	557	1375	1360
SAVANNAH	306	669	730
IDAHO			
BOISE	1146	2352	2356
LEWISTON	969	2071	2215
POCATELLO	1398	2957	2731
ILLINOIS			
CAIRO U	754	1532	1504
CHICAGO O HARE	1068	2542	2483
CHICAGO MIDWAY	1027	2357	2273
MOLINE	1127	2601	2398
PEORIA	1083	2471	2291
ROCKFORD	1149	2725	2587
SPRINGFIELD	1032	2305	2082
INDIANA			
EVANSVILLE	844	1876	1788
FORT WAYNE	1083	2651	2410
INDIANAPOLIS	964	2147	2180
SOUTH BEND	1064	2552	2391
IOWA			
BURLINGTON	1076	2446	2318
DES MOINES	1112	2543	2530
DUBUQUE	1204	2903	2842
SIOUX CITY	1235	2718	2592
WATERLOO	1231	3111	2802
KANSAS			
CONCORDIA	1028	2180	2061
DODGE CITY	974	1759	1889
GOODLAND	1148	2395	2351
TOPEKA	985	2126	1976
WICHITA	936	1927	1785
KENTUCKY			
COVINGTON	867	2000	2018
LEXINGTON	800	1892	1804
LOUISVILLE	788	1775	1801
LOUISIANA			
ALEXANDRIA	472	918	760
BATON ROUGE	347	649	616
LAKE CHARLES	322	522	570
NEW ORLEANS	265	528	533
SHREVEPORT	500	831	821
MAINE			
CARIBOU	1471	3452	3790
PORTLAND	1147	2711	2790
MARYLAND			
BALTIMORE	861	1928	1802
MASSACHUSETTS			
BLUE HILL OBS R	1017	2391	2286
BOSTON	923	2123	1971
NANTUCKET	837	2002	1928
PITTSFIELD	1169	2924	2882
WORCESTER	1087	2604	2583
MICHIGAN			
ALPENA	1213	3309	3206
DETROIT	970	2284	2273
DETROIT W WAYNE CO	1050	2607	2417
DETROIT WILLOW RUN	1058	2677	2301
FLINT	1059	2780	2550
GRAND RAPIDS	1080	2730	2614
HOUGHTON LAKE	1260	3334	3154
LANSING	1109	2864	2573
MARQUETTE U	1243	3257	3111
MUSKEGON	1030	2510	2410
SAULT STE MARIE	1320	3648	3378
MINNESOTA			
DULUTH	1504	3838	3854
INTERNATIONAL FALLS	1739	4200	4207
MINNEAPOLIS	1335	3293	3215
ROCHESTER	1334	3303	3162
ST CLOUD	1427	3404	3414
MISSISSIPPI			
JACKSON	461	1005	851
MERIDIAN	434	1013	938
MISSOURI			
COLUMBIA	929	1966	1923
KANSAS CITY	909	1824	1776
ST JOSEPH	963	2103	2008
ST LOUIS	928	1955	1874
SPRINGFIELD	819	1766	1745
MONTANA			
BILLINGS	1240	2697	2726
GLASGOW	1519	3281	3526
GREAT FALLS	1327	2784	2972
HAVRE	1428	3070	3414
HELENA	1422	3046	3252
KALISPELL	1272	3101	3384
MILES CITY	1447	3031	2956
MISSOULA	1299	3038	3384
NEBRASKA			
GRAND ISLAND	1168	2482	2501
LINCOLN U	1092	2309	2174
NORFOLK	1260	2782	2624
NORTH PLATTE	1305	2990	2620
OMAHA	1129	2469	2346
SCOTTSBLUFF	1396	2880	2601
VALENTINE	1389	2982	2859
NEVADA			
ELKO	1291	2501	2950
ELY	1462	3029	3020
LAS VEGAS	716	978	1082
RENO	1132	2315	2651
WINNEMUCCA	1174	2483	2747
NEW HAMPSHIRE			
CONCORD	1144	2841	2800
MT WASHINGTON OBS	1650	5853	5889
NEW JERSEY			
ATLANTIC CITY	922	2228	1719
ATLANTIC CITY U	751	1617	1597
NEWARK	823	1844	1842
TRENTON U	815	1864	1821
NEW MEXICO			
ALBUQUERQUE	1003	1793	1751
CLAYTON	1066	2118	1980
RATON	1272	2664	2467
ROSWELL	915	1648	1592
SILVER CITY	890	1545	1443
NEW YORK			
ALBANY	1112	2612	2568
BINGHAMTON	1113	2815	2753
BUFFALO	985	2441	2570
NEW YORK C	925	1819	1705
J.F. KENNEDY	871	1962	1781
NEW YORK LA G ARDIA	817	1793	1665
ROCHESTER	1005	2479	2453
SYRACUSE	995	2427	2478
NORTH CAROLINA			
ASHEVILLE	713	1891	1821
CAPE HATTERAS R	418	905	872
CHARLOTTE	572	1298	1259
GREENSBORO	610	1416	1516
RALEIGH	574	1347	1351
WILMINGTON	402	856	886
NORTH DAKOTA			
BISMARCK	1613	3584	3407
FARGO	1544	3534	3534
WILLISTON	1607	3490	3571
OHIO			
AKRON	949	2343	2292
CINCINNATI OBS	858	2015	1835
CLEVELAND	934	2246	2262
COLUMBUS	942	2395	2190
DAYTON	934	2317	2135
MANSFIELD	982	2458	2420
TOLEDO	1021	2658	2469
YOUNGSTOWN	1023	2672	2432
OKLAHOMA			
OKLAHOMA CITY	773	1419	1443
TULSA	781	1500	1485
OREGON			
ASTORIA	731	1921	2101
BURNS U	1221	2695	2754
EUGENE	693	1587	1867
MEACHAM	1187	2848	3085
MEDFORD	913	1845	1999
PENDLETON	866	1907	2056
PORTLAND	758	1654	1824
SALEM	706	1638	1849
SEXTON SUMMIT R	992	2301	2316
PENNSYLVANIA			
ALLENTOWN	1000	2422	2181
ERIE	955	2385	2295
HARRISBURG	931	2140	2001
PHILADELPHIA	814	1900	1936
PITTSBURGH	931	2331	2278
PITTSBURGH U	862	2131	2056
READING U	856	1953	1847
SCRANTON	1023	2455	2451
WILLIAMSPORT	973	2312	2285
RHODE ISLAND			
BLOCK ISLAND	865	1980	1807
PROVIDENCE	937	2164	2167
SOUTH CAROLINA			
CHARLESTON	367	828	812
CHARLESTON U	278	559	669
COLUMBIA	480	1145	1006
GNVLE-SPARTANBURG	547	1267	1213
SOUTH DAKOTA			
ABERDEEN	1500	3291	3261
HURON	1361	2995	3140
RAPID CITY	1311	2856	2749
SIOUX FALLS	1328	3049	3007
TENNESSEE			
BRISTOL	745	1799	1688
CHATTANOOGA	587	1371	1327
KNOXVILLE	626	1536	1415
MEMPHIS	613	1260	1293
NASHVILLE	688	1580	1415
OAK RIDGE R	638	1569	1534
TEXAS			
ABILENE	654	1110	1051
AMARILLO	911	1664	1590
AUSTIN	477	717	644
BROWNSVILLE	174	187	215
CORPUS CHRISTI	299	379	340
DALLAS	543	885	907
DEL RIO	475	671	643
EL PASO	720	1180	1146
FORT WORTH	548	923	925
GALVESTON U	243	336	408
HOUSTON	312	432	406
LUBBOCK	866	1540	1449
MIDLAND	708	1136	1060
PORT ARTHUR	313	489	558
SAN ANGELO	603	938	922
SAN ANTONIO	429	649	598
VICTORIA	332	434	426
WACO	480	728	769
WICHITA FALLS	674	1147	1112
UTAH			
MILFORD	1403	2569	2550
SALT LAKE CITY	1228	2325	2431
WENDOVER	1159	2301	2333
VERMONT			
BURLINGTON	1216	2937	3070
VIRGINIA			
LYNCHBURG	744	1859	1636
NORFOLK	644	1457	1242
RICHMOND	708	1651	1529
ROANOKE	728	1797	1654
WALLOPS ISLAND	786	1777	
WASHINGTON			
OLYMPIA	786	1954	2149
QUILLAYUTE	760	2125	2240
SEATTLE TACOMA	718	1612	2054
SPOKANE	1146	2617	2656
STAMPEDE PASS R	1191	3422	3844
WALLA WALLA U	827	1745	1921
YAKIMA	1031	2217	2473
WEST VIRGINIA			
BECKLEY	865	2381	2158
CHARLESTON	802	1937	1773
ELKINS	900	2465	2290
HUNTINGTON	805	1977	1761
PARKERSBURG U	816	1966	1835
WISCONSIN			
GREEN BAY	1313	3268	2993
LA CROSSE	1223	2887	2884
MADISON	1229	3139	2973
MILWAUKEE	1112	2723	2863
WYOMING			
CASPER	1470	3179	2949
CHEYENNE	1308	2939	2828
LANDER	1541	3319	3103
SHERIDAN	1404	3218	2962

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

DECEMBER 1967

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				Ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROP-ERTY	†DAMAGE CROPS
Alabama	6	5	2	29	7					0	0	4	0													1	0	5	4
Alaska												3																	
Arizona	1	1	0	0	4													8	?	6	5								
Arkansas	2	1	0	6	0					0	1	0	0																
California										1	0	6	4					1	0	5	4					2	0	4	6
Colorado										0	0	4	0					0	2	4	0								
Connecticut										0	0	4	0									0	0	5	0	0	11	5	0
Delaware *																													
Florida	8	3	2	84	7																								
Georgia	1	1	0	2	4																								
Hawaii	1	1	0	0	5																					2	0	°6	C
Idaho																		1										?	
Illinois	3	1	0	2	6																					0	0	?	?
Indiana	11	2	0	4	5					0	1	4	0																
Iowa																						0	0	6	0				
Kansas										0	0	5	0					0	0	4	0	0	0	4	0				
Kentucky	4	1	0	0	5					0	0	4	0	0	0	4	0												
Louisiana										0	3	4	0	1	0	0	0									0	0	4	0
Maine																		1	0	5	0	0	0	4	0				
Maryland																						0	0	4	0				
Massachusetts										0	0	4	0					9	0	7	0	0	0	5	0	0	0	5	0
Michigan										0	0	3	0	0	0	4	0					0	2	4	0	1	0	0	0
Minnesota																		0	0	4	0	0	0	6	0				
Mississippi	11	5	3	15	5					1	0	5	0	0	1	5	0	0	0	?	0					0	0	5	0
Missouri	8	2	3	67	7																								
Montana																		0	0	2	0								
Nebraska *																													
Nevada *																													
New Hampshire																		1	0	6	0	0	0	5	0				
New Jersey *																													
New Mexico										0	0	4	0					0	0	?	0	0	0	?	0				
New York											1	3																	
North Carolina	1	1	0	0	5					0	0	5	0																
North Dakota																		3	?	?	?								
Ohio										0	0	4	0																
Oklahoma										0	0	5	0									0	0	5	0				
Oregon										0	5-6	5	2																
Pacific Area																										0	1	°4	C
Pennsylvania										0	0	2	0																
Puerto Rico																										0	50	5	0
Rhode Island																						0	0	4	0				
South Carolina	1	1	0	1	4					0	0	4	1	0	0	3	0												
South Dakota																						1	?	5	0				
Tennessee	2	1	0	1	5					0	0	3	0	0	0	3	0	0	0	4	0	0	0	4	0	0	0	4	0
Texas N																													
Utah																		3	2	?	?								
Vermont														0	0	3	0	0	0	5	0	0	0	4	0	0	0	4	0
U. S. Virgin Is.*																													
Virginia										0	4	5	0																
Washington												5																	
West Virginia																		0	0	4	0								
Wisconsin						0	0	5	0																				
Wyoming *																													

C Crop damage
° Includes crop damage
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
\# Freezing drizzle and freezing rain, commonly known as glaze.
Ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

DECEMBER 1967

Elmer R. Nelson, Office of Hydrology

The most significant flooding during December occurred in southern Arizona. Considerable overflow occurred along the Santa Cruz and Gila Rivers. Preliminary estimates of property damage were placed at over $2.5 million. One death from drowning was reported. Elsewhere, damages exceeding $1.6 million occurred along the Tombigbee River where crests ranged from 4 feet above flood stage at Aberdeen, Miss., to more than 12 feet above flood stage at Gainesville, Ala. An estimated $1 million in damages occurred from the flooding in the Snoqualmie and Snohomish Basins in Washington during the latter part of the month.

Flash flooding in Hawaii was reported Dec. 18 on the island of Oahu, southeast of Honolulu from Waikiki Beach to Koko Head. Excessive rains of 10 inches between 10 p.m. local time on the 17th and 7 a.m. on the 18th caused streams to rise rapidly to above bankfull stage. About 200 people mostly in the Niu Valley, were evacuated. Some roads and homes were flooded up to depths of several feet. No estimates of damages are available.

ST. LAWRENCE DRAINAGE

Lake Erie.--There were two periods of flooding in the Maumee Basin in Indiana and Ohio during December. The first overflow was comparatively minor and occurred on the 11-16th. The second overflow was due to heavy rains on the 21st totalling 3 to 4 inches over much of Ft. Wayne, Ind., and in the area to the north. These rains caused local flash flooding in Ft. Wayne and over the northern half of Allen County, Ind. This was perhaps the fastest rise ever observed on the Maumee River at Ft. Wayne which crested 5.4 feet above flood stage on the 22d. It was in flood at this point from the 21st to the 26th. The crest reached Defiance and Grand Rapids, Ohio, on the 23d, 2.3 feet to 0.1 foot above flood stage. The crest on St. Marys River at Decatur, Ind., was 1.5 feet above floodstage on the 22d, 0.2 foot below the first crest on the 12th. The St. Joseph River at Montpelier, Ohio, crested 4.2 feet above flood stage on the 23d. This was nearly 2 feet higher than the first crest on the 13th. Most of the damage from the flash flooding was to flooded basements, to a few homes where the water entered the living quarters, and to construction projects not completed or essentially unprotected. Overflow of the Maumee River at Ft. Wayne created a critical situation for several hours with flooding in the River Haven area immediately east of the city. Several evacuations were reported.

ATLANTIC SLOPE DRAINAGE

There were two significant rises in portions of New Jersey and eastern Pennsylvania during December. General snow fell over this area on Nov. 30 - Dec. 1. Depths of from 1 to 7 inches occurred with the heavier amounts reported over the Schuylkill, Brandywine, and Lehigh Basins and through central New Jersey. Heavy rains on Dec. 3 together with rapid melting snow caused a general overflow of many of the small brooks in central and northern New Jersey and some small streams in southeastern Pennsylvania. Neshaminy Creek at Langhorne, Pa., crested 0.3 foot below flood stage on the 3d. The Millstone and Raritan Rivers in New Jersey crested near bankfull stage. Rainfall was lighter over the Lehigh and upper Delaware Basins where the snow cover was also the lightest, so only slight rises occurred in that area. Additional heavy precipitation on the 10-12th, ranging from 2 to 3 inches produced minor flooding on many streams in central New Jersey on the 12th and 13th. The Raritan and Millstone Rivers and Assunpink Creek crested 1.2 to 2.2 feet above flood stage on the 12th.

Light flooding occurred on the Neuse River at Smithfield, N. C., and on the lower Cape Fear River near Tarheel, N. C., and Elizabethtown, N. C., on the 29th-31st. This overflow was due to 1 to 1 1/2 inches of mixed snow and rain that fell on the 28th. Up to 5 inches of snow occurred over portions of the upper Roanoke and Dan Basins. The water equivalent of the snow which fell on the 22d averaged between 1 and 1 1/2 inches. The upper Cape Fear rose 8 to 17 feet which in turn caused the lower portion to rise 5 feet over its banks. The Neuse River was swollen to around bankfull stage to 1 foot above flood stage along most of its course.

The Tar, Dan, and upper Roanoke Rivers rose 5 to 8 feet above their base stages but did not reach flood stage. No damage was reported from the flooding on the Cape Fear and Neuse Rivers.

The Lumber River at Lumberton, N. C., rose out of its banks on Nov. 30 and continued in flood until Dec. 4, after cresting nearly 1 foot above flood stage. This flooding was due to intermittent heavy rainfall which began on Nov. 22. The rainfall averaged about 2.25 inches on Nov. 22-24. Additional rainfall averaging about 0.75 inch occurred during the first few days of December. Damage from this overflow was minor.

The Rocky River at Norwood, N. C., rose 2 feet out of its banks on the 28th. No damage resulted from this brief overflow. The Pee Dee River at Peedee, S. C., continued in light flood from Dec. 31 to Jan. 4. It crested on Jan. 2, 0.4 foot above flood stage.

There were two periods of flooding on the Broad River in South Carolina. The first occurred from the 11th to the 14th and the second from the 29th to the 31st. The first flooding was due to heavy rain on the 10th to the 12th and the second to heavy rainfall on the 28th and 29th. Rainfall amounts ranged from 8 to 9 inches upstate to less than 3 inches elsewhere. As a result of these rains, soil moisture was excessive by the end of the month. Crests ranged from 0.4 foot above flood stage at Gaffney, S. C., to nearly 5 feet above flood stage at Blair, S. C. No damage resulted from this flooding.

One or two periods of heavy rainfall combined with release of excessive water from Clark Hill Reservoir caused some overflow on the Savannah River in Georgia. Flooding was slight at Millhaven and damage, if any, was light.

Downstream at Clyo, Ga., the river went above flood stage on the 12th and was 2.3 feet above flood stage on the 31st. Damage, if any, was light as the rise was very gradual.

EAST GULF OF MEXICO DRAINAGE

Frequent rains during the month over the Chattahoochee, Flint, and Apalachicola Rivers with heavy rains on the 10-11th, caused minor flooding on the Apalachicola at Blountstown, Fla., on the 15-18th. Crest stages were well below flood stage throughout the Chattahoochee and Flint Rivers. The crest on the Apalachicola at Blountstown, Fla., was 0.8 foot above flood stage on the 16th. Only wooded and unpopulated areas of small extent were affected by this light overflow.

Minor flooding occurred on the Oostanaula River at Resaca, Ga., on the 22d-26th. This overflow was due to general rains beginning on the 18th with heavy rains

of 2 to 3 inches on the 21st. Storm totals averaged about 4 inches. Damage to farmlands and roads was estimated at $79,000.

The heavy rains (1.75 inches) on the 9th caused the East Fork to rise above flood stage on the 12th. The Tombigbee River at Amory, Miss., went out of its banks on the 11th and receded back within its banks on the 12th. Additional heavy rain (1.75 inches) on the 15th resulted in light flooding on the Warrior River at Warrior, Ala., on the 17th. The Tibbee River at Tibbee, Miss., rose above flood stage on the 17th. Heavy rain (near 4 inches) on the 19th and 20th caused additional flooding in the Tombigbee Basin. Flooding was not too extensive on the Warrior but crests along the Tombigbee ranged from 4 feet above flood stage at Aberdeen, Miss., to more than 12 feet above flood stage at Gainesville, Ala. Preliminary estimates indicate that damages from flooding exceeded $1.6 million.

The flooding on the Leaf and Pearl Rivers in Mississippi during December was due to continuous heavy rain which occurred on 10 to 15 days during the month. The precipitation averaged from 10 to 15 inches with the heaviest precipitation occurring during the middle of the month. Some stations reported over 5 inches of rainfall during a 24-hour period. Light flooding occurred on the Leaf River at Beaumont, Miss., on the 20th-23d. The Pearl River rose above flood stage around the middle of the month and crests ranged from 3.8 feet above flood stage at Edinburg, Miss., to 1.4 feet above flood stage at Pearl River, La. Timely forecasts and the recently constructed levee system in the Jackson area kept flood damage to a minimum. The total damages in the Pearl Basin were estimated at $417,000.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Navigation on the Mississippi River was closed at St. Paul, Minn., on the 9th and at Guttenberg, Iowa, on the 12th.

Heavy rain on the 2d and 3d in central and southern Illinois caused rapid rise on streams with the Kaskaskia River at Vandalia, Ill., cresting 1.3 feet above flood stage on the 6th. The Sangamon River at Riverton, Ill., went above flood stage on the 4th and continued in flood through December, cresting 7.3 feet above flood stage on the 14th. Another period of general rain on the 8-11th and 13-14th caused additional flooding on the Kaskaskia at Vandalia, Ill., and the Big Muddy at Murphysboro, Ill. The Kaskaskia at Carlyle Dam, Ill., rose above flood stage on the 14th remaining above bankfull throughout the month, cresting 2.8 feet above flood stage on the 23d. The Illinois River at Meredosia, Ill., rose above flood stage on the 10th, cresting 4.9 feet above flood stage on the 29th, and remained out of its banks through December. At Beardstown, Ill., the Illinois rose above flood stage on the 15th, cresting 2.6 feet above flood stage on the 29th, and remained above bankfull stage throughout the month. The Sangamon River at Petersburg, Ill., crested 1.4 feet above flood stage on the 15th. Additional heavy rains of 1 to 5 inches on the 20th and 21st in southeastern Missouri and southern Illinois resulted in extensive flooding. Runoff was heavy due to the wet condition of the soil from rains earlier in the month. The Big Muddy River at Plumfield, Ill., was out of its banks on the 25-27th, cresting 0.9 foot above flood stage on the 26th. The Kaskaskia River at Vandalia, Ill., crested 8 feet above bankfull stage on the 23d. This was the third time during the month that the Kaskaskia River had risen to above flood stage at Vandalia. General overflow occurred along the entire river from Shelbyville, Mo., to New Athens, Ill., beginning on the 22d and 23d. Crests ranged from 3 to 6 feet above flood stage on the 23d-26th. The Illinois River at Havana, Ill., rose above flood stage on the 22d, cresting 1.2 feet above flood stage on the 28th. The Sangamon River at Petersburg, Ill., rose out of its banks for the second time during the month cresting 1.4 feet above flood stage on the 26th. At Monticello, Ill., the Sangamon crested 1.7 feet above flood stage on the 24th. The Meramec River in Missouri rose above bankfull stage on the 22d and 23d from Steelville to Valley Park. The crests ranged from 0.4 foot above flood stage at Steelville to 6.5 feet above flood stage at Pacific, Mo. The Big River at Byrnsville, Mo., crested 5.1 feet above flood stage on the 23d. Flood warnings and bulletins were given adequate dissemination over the ESSA, Weather Wire Service; and through the Press, radio, and TV facilities in the flood areas.

Missouri Basin.--Light to heavy rains on the 10th and 11th caused flooding along the Blackwater River at Valley City, Mo. The Blackwater River was out of its banks on the 10th and 11th and crested 3.6 feet above flood stage on the 10th. General snow and light rain occurred during the first 3 days of the month leaving a light snow cover over the Blackwater Basin and other portions of the northwest quadrant of Missouri.

The main stem of the Missouri River froze over at Bismarck, N. Dak., on the 21st. Ice began to form after the middle of the month in northwestern Missouri. Considerable ice was reported along the Missouri as far as Glasgow, Mo., by the end of the month.

Ohio Basin.--Minor flooding occurred on the Scioto River at La Rue, Ohio, on the 4th. Only lowlands in the immediate area were flooded. A rise of three-quarters bankfull occurred farther downstream. This flooding was due to heavy rain and snowmelt on the 2d and 3d. Rainfall over the upper reach of the Scioto Basin averaged 1.97 inches, most of which fell between noon of the 2d and the morning of the 3d. A second rise to flood stage occurred at La Rue on the 22d and 23d.

Heavy rains along the Wabash Valley on the last day of November set the scene for flooding in the Wabash Valley during December. General rains of 1 inch or more fell over the basin on Nov. 30. Rain was almost a daily occurrence during December but amounts were generally light to moderate. Extremely heavy rainfall on the 21st caused flash flooding of some tributaries in the Wabash Basin and major flooding on the Wabash River in Indiana. Twenty-four hour rainfall amounts averaged about 3 inches at Wabash and Peru, Ind., and in the adjacent Eel River Basin. Twenty-four hour rainfall amounts averaged considerably more and ranged upward to 5 inches at Waveland, Ind. Heavy rains occurred in southeastern Illinois, north of the upper Little Wabash River, on the 21st and 22d. Unofficial rainfall reports of 10 inches or more were reported in the area. These rains caused severe overflow along the Little Wabash River. A near record crest of 22.3 feet occurred at Wayne City, Ill., on the Skillet Fork, a tributary of the Little Wabash River. Flash flooding occurred on the Eel River which flows into the Wabash River below Peru, Ind. The USGS gage near the mouth of the Eel River recorded the highest crest of record. Crests on the Wabash River ranged from 6 feet above flood stage at Wabash, Ind., to 9 to 11 feet above flood stage in the reach from Lafayette through Montezuma, Ind., and 4 to 6 feet above flood stage at most points. An unknown

amount of damage, mostly industrial, resulted from the flash flooding along the Eel River. A considerable amount of unpicked corn remaining in the fields was damaged.

There were three periods of flooding on South Chichamauga Creek near Chichamauga, Tenn., during December. The first overflow occurred on the 11-12th, the second on the 18th-21st and the third overflow on the 22d-24th. The crests ranged from 1.4 feet above flood stage on the 11th to 3.9 feet above flood stage on the 23d. The Elk River at Fayetteville, Tenn., was out of its banks on the 18-20th. It crested on the 19th, 3.1 feet above flood stage. This flooding was due to 3.5 inches of rain on the night of the 17th which continued through the evening of the 18th. There were no reports of damages along the Elk River except for overflow of some lowland. There was some flooding along the main stem of the Tennessee at Florence, Ala., Whitesburg, Ala., and Gilbertsville, Ky., during the second half of the month. Crests ranged from 2 to 6 feet above flood stage between the 22d and 27th.

Minor flooding occurred on the Ohio River at Cairo, Ill., on the 27th. Some damage occurred to crops in the vicinity of Brookport, Ill., where the Ohio approached within 0.2 feet of flood stage.

White Basin.--Flash flooding occurred near Lesterville, Mo., on the upper Black River on the 21st. There were three periods of bankfull stage or more on the lower Black River at Black Rock, Ark., between the 12th and the end of the month. Crests ranged from bankfull stage on the 12th to 5.6 feet above flood stage on the 23d. The Cache River at Patterson, Ark., rose above flood stage on the 9th and continued in flood into January. It crested 2.3 feet above flood stage on the 19th. The lower White River at Clarendon, Ark., went out of its banks on the 25th and continued in flood into January. Rainfall on the 2d and 3d averaged 1 to 2 inches with amounts of 3.5 to 4 inches over the flatlands of the lower Cache and lower White Basin. Intermittent rains occurred from the 6th to the 21st with the heaviest rains occurring from the 10th to the 16th. Severe rainstorms of 2 to 3 inches over the hilly portions of northern Arkansas and southern Missouri caused flash flooding above the Clearwater Reservoir near Lesterville, Mo. These rains kept the White River in flood into January.

Arkansas Basin.--The Illinois River at Tahlequah, Okla., was in minor flood on the 23d. This overflow was due to 1.6 inches of rain on the 21st. This same storm caused lowland flooding along the Poteau River at Panama, Okla., on the 22d and 23d. The crest at Panama on the 22d was 3.1 feet above flood stage.

Red Basin.--Minor flooding occurred on the upper Sulphur River in Texas between the 14th and 28th. This overflow was due to 2 to 4 inches of rain from the 13th to the 17th. No damage was reported.

Lower Mississippi Basin.--The St. Francis River rose out of its banks at Fisk, Mo., on Dec. 16 and continued in flood to Jan. 4. It crested on the 27th, 4.5 feet above flood stage. In the reach below, at St. Francis, Ark., flooding began on Dec. 20 and continued to Jan. 8. It crested on the 30th and 31st, 2.8 feet above flood stage. There were no reports of any flood damage.

Heavy rains (3 to 8 inches) on the 15-18th caused the Big Black River to rise above flood stage at Bovina and Pickins, Miss., on the 18th. The Big Black continued in flood at Pickins to the 30th, and at Bovina to the 31st. The crests ranged from 3.3 feet above flood stage at Pickins, Miss., on the 19th to 10.7 feet above flood stage at Bovina, Miss., on the 23d-24th. Moderate to heavy damage resulted to farm, pasture, and timber lands and to farm roads.

WEST GULF OF MEXICO DRAINAGE

Minor flooding occurred on the Calcasieu River in Louisiana during the second half of the month. Even though rainfall was near twice normal during December, runoff was not heavy as rainfall during November was much below normal. Lake Charles, La., experienced the driest November of record and the wettest December of record. Most of the rainfall during December was spread out throught the middle third of the month.

Minor flooding occurred along the upper Sabine River in Texas beginning on the 15th and continuing into January at Mineola, Tex. This overflow was due to 2 to 4 inches of rain from the 13th to the 17th. Additional rain of 2 inches occurred near the end of the month. No damage resulted from the light flooding.

Minor flooding occurred on the Trinity River at Moss Bluff, Tex., on the 22d-29th. This overflow was due to heavy rains up to 2 inches in the upper Trinity on the 14th, followed by heavy rains in the lower Trinity on the 15th. As this area is largely marshland, no damage resulted from the overflow.

COLORADO BASIN

Floods of December 14-22, 1967 in southern Arizona.--Heavy rains (1 to 3 inches) on the 13-14th over the mountains, south of the Mogollon Rim, in Arizona, caused flooding on tributaries of the New River, the Indian Bend Wash, and in the vicinity of Phoenix, Ariz., on the 14th. A canal levy in western sections of Phoenix was breached during the evening of the 14th. Some Salt River bottom road crossings were closed due to local runoff. Flooding occurred on Papago Reservation in the vicinity of Santa Rosa Wash south of Casa Grande, Ariz. Moderate rains continued during the night and highway dips and desert washes were reported to be flooding on the 15th.

Rain on the 18th caused flooding in highway dips in south-central and southeastern Arizona. Snow depths of 30 to 50 inches were observed in the Little Colorado, Verde, Tonto, Salt, and Gila River Basins prior to this storm. The freezing level was at 3,000 to 4,000 feet and some snowmelt was occurring. Mild temperatures over south-central and western Arizona during the 24-hour period ending 7 a.m. on the 19th caused considerable snowmelt below 5,500 feet. One to 2 inches of rain below this level along and under the Mogollon Rim caused considerable runoff on many streams draining the Rim. Heavy rains during the morning and afternoon of the 19th in the Phoenix metropolitan area caused considerable flooding of streets and washes. Moderate to heavy rains occurred over the Little Colorado, the Hassayampa, and the Agna Fria near Black Canyon City, Ariz. Heavy rains during the night of the 19-20th over southeastern Arizona caused flooding on the Santa Cruz River near Amado, Ariz., on the morning of the 20th and at Tucson, Ariz., by midevening. The flood crest passed Eloy, Ariz., around noon on the 21st. Extensive flooding occurred along the Santa Cruz and on the Gila River between the mouth of the Santa Cruz and Painted Rock Dam as the flood crest passed downstream. Flooding along the Gila River continued through the 22d. Preliminary estimates of flood damages were placed at over $2.5 million. Approximately 13,500 acres of farmland were inundated. There was one death from drowning in the Tucson area.

Two storms were responsible for the excessive precipitation that caused extensive flooding over southern

Arizona during the period from the 13th to the 22d. The first storm began as a long wave trough aloft, during the night of the 13th, over the Plateau Region. This trough became a cut-off low aloft over Southern California by 0000Z on the 14th with a copious moisture supply. By 0000Z of the 18th this intense system had filled and moved east of Arizona. By 0000Z of the 19th, another major cold trough aloft began affecting Arizona. This was a slow moving system which passed east of the flood area by 12000Z of the 21st. Precipitation received from these two systems is shown in the following table:

*Location	13	14	15	16	17	18	19	20	21	Total inches
Alpine	M	M	M	M	.47	T	.45	1.95	M	----
Bisbee	T	.11	.21	1.17	.32	.61	.08	.88	0	3.38
Childs	.01	1.07	M	.33	.75	.09	1.98	2.32	.03	6.58
Cottonwood	M	M	1.61	1.31	M	0	M	1.68	M	----
Douglas	0	.15	.48	1.46	.02	.17	.11	.54	.28	3.21
Flagstaff	.28	2.09	.85	.44	.69	T	1.26	1.65	.10	7.36
Ft. Huachuca	T	.13	.64	1.04	.11	.68	.02	1.85	.32	4.79
Globe	.62	1.66	1.63	.84	.64	.14	.79	2.14	.08	8.54
Kingman	0	T	.30	.27	0	0	1.10	.29	0	1.96
McNary	1.32	.51	T	M	1.03	T	2.15	1.43	.19	6.63
Nogales	.04	.83	2.57	2.63	.31	.04	.27	1.63	.15	8.47
Payson	T	1.35	2.42	1.14	.80	T	M	2.31	.24	8.26
Phoenix	T	.56	1.75	.37	.03	.04	.26	.97	T	3.98
Prescott	.31	.49	1.05	.71	.32	T	.56	1.58	.04	5.06
Safford	.11	.12	.15	.57	.33	.02	.07	.80	.02	2.19
Showlow	.72	1.80	.10	.07	.60	T	.80	1.90	.10	6.09
Tucson	T	.40	1.17	.74	T	.22	.23	.62	T	3.38
Winslow	.04	1.12	.88	.16	.10	T	T	1.35	0	3.65
								Average		5.22

* Selected stations
M Missing

PACIFIC SLOPE DRAINAGE

Considerable flooding occurred in the Snoqualmie and Snohomish Rivers at Carnation and Snohimish, Wash., on the 24-28th. Flooding on the Nooksack at Deming, Wash., on the 24th and 25th was minor. The high water resulted from a combination of heavy rain and snowmelt. Rainfall during the 4-day period, Dec. 22-25 averaged 7 to 8 inches in the Nooksack Basin and 3 to 6 inches in the Snaqualmie - Snohomish Basins. Temperatures at low-level stations of near freezing on the 20th rose to around 50° by the 22d with an inflow of warm, moist Pacific air. At Stampede Pass, Wash., the maximum temperature rose from about 12° on the 20th to 40° on the 21st. Snow depth at Stampede Pass decreased from 33 inches on the 22d to 20 inches on the 25th. Several inches of snow which had fallen in the lowlands on the 21st melted rapidly in the warm rain during the night of the 21st-22d. Preliminary estimates of flood damage in the Snohomish - Snoqualmie Basins by the Corps of Engineers place flood losses at about $1 million. Losses include water damage to some residences on low ground, damage to dikes, costs of evacuation of some 50 to 60 families and numerous livestock, costs of emergency maintenance of dikes, damage to dikes, and damage to flooded farmland.

FLOOD STAGE DATA

(All dates in December unless otherwise specified)

DECEMBER 1967

River and station	Flood stage	Above flood stages -dates From—	To—	Crest * Stage	Crest * Date
	Ft.			Ft.	
ST. LAWRENCE DRAINAGE					
Lake Erie					
St. Marys: Decatur, Ind.	15	11 22	13 23	16.7 16.5	12 22
St. Joseph: Montpelier, Ohio	10	11 22	16 27	12.4 11.2	13 23
Maumee: Ft. Wayne, Ind.	15	12 21	12 26	15.1 20.4	12 22
Defiance, Ohio	10	22	24	12.3	23
Grand Rapids, Ohio	15	23	23	15.1	23
ATLANTIC SLOPE DRAINAGE					
Millstone: Blackwells Mills, N.J.	8	12	13	9.7	12
Raritan: Manville, N. J.	12	12	13	13.2	12
Bound Brook, N. J.	8	12	13	9.4	12
Assunpink Creek: Trenton, N. J.	5	12	13	7.2	12
Neuse: Smithfield, N. C.	13	29	Jan. 2	14.5	Jan. 1
Cape Fear: William O. Huske L&D near Tarheel, N. C.	12	29	31	17.3	[illegible]
Lock No. 2, Elizabethtown, N. C.	20	30	Jan. 2	24.7	31
Rocky: Norwood, N. C.	15	28	28	E17.0	28
Lumber Lumberton, N. C.	8	Nov. (30 (12	4 1	8.95 10.0	4 Jan. 8
Pee Dee: Peedee, S. C.	19	31	Jan. 4	19.4	Jan. 2
Broad: Gaffney, S. C.	10	12	12	10.4	12
Blair, S. C.	11	(11 (29	14 31	18.8 18.5	13 30
Savannah: Millhaven, Ga.	15	(26 (30	28 Jan. 9	15.1 15.7	27 Jan. 8
Clyo, Ga.	11	12	1/	14.9	Jan. 21
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	15	18	15.8	16
Oostanaula: Resaca, Ga.	22	22	26	26.1	25
Warrior: Oliver L&D, Tuscaloosa, Ala.	47	20 23	20 23	47.5 48.0	20 23
Warrior L&D,	30	17 21	17 28	30.6 36.0	17 25
East Fork Tombigbee: Fulton, Miss.	16	12 19	12 23	16.2 17.2	12 18
Tibbee: Tibbee, Miss.	23	17	22	28.2	19
Tombigbee: Amory, Miss.	20	(11 (18	12 23	21.2 24.4	11 19
Aberdeen, Miss.	34	19	24	38.1	20
Columbus, Miss.	29	19	25	34.3	22
Gainesville, Ala.	36	20	Jan. 2	48.1	26
Demopolis, Ala.	48	17	Jan. 6	59.3	29
Jackson, L&D, Ala.	43	15	Jan. 30	53.5	Jan. 3
Leaf: Beaumont, Miss.	20	20	23	20.8	21
Pearl: Edinburg, Miss.	20	19	26	23.8	22
Jackson, Miss.	18	16	Jan. 24	31.25	21
Monticello, Miss.	19	24	Jan. 3	21.55	31
Bogalusa, La.	15	17	1	19.1	Jan. 4
Pearl River, La.	12	20	1/	(13.1 (13.9	22 Jan. 6
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Sangamon: Monticello, Ill.	13			14.7	24
Riverton, Ill.	13	4	Jan. 2	20.3	11
Petersburg, Ill.	497			(498.4 (498.4	15 26
Illinois: Havana, Ill.	14	22	Jan. 5	15.2	28
Beardstown, Ill.	14	15	Jan. 4	16.6	29
Meredosia, Ill.	10	10	1/	14.9	29
Big: Byrnsville, Mo.	16	22	24	21.1	23
Meramec: Steelville, Mo.	12	22	22	12.4	22
Sullivan, Mo.	15	22	23	18.5	22
MISSISSIPPI SYSTEM	Ft			Ft.	
Meramec: Pacific, Mo.	11	23	25	17.5	24
Eureka, Mo.	16	23	25	20.6	24
Valley Park, Mo.	16	23	25	20.1	24
Kaskaskia Shelbyville, Mo.	13	22	26	16.0	23
Vandalia, Ill.	18	(4 (13 (22	7 16 30	19.3 19.2 26.0	6 14 23
Carlye Dam, Ill.	21	14	Jan. 31	23.8	23
New Athens, Ill.	25	23	29	27.8	26
Big Muddy: Plumfield, Ill.	20	25	27	20.9	26
Murphysboro, Ill.	16	16	Jan. 5	27.6	27
Missouri Basin					
Blackwater: Valley City, Mo.	20	10	11	23.6	10
Ohio Basin					
Scioto: La Rue, Ohio	11	4 22	4 23	12.0 11.0	4 22
Sugar Creek Crawfordsville, Ind.	8T	22	22	10.3	21
Embarrass: Ste. Marie, Ill.	18	4 13 22	6 15 27	19.3 18.55 25.8	6 14 23
Lawrenceville, Ill.	11T	5 11	10 1/	13.9 20.35	9 25
Muscatatuck: Austin, Ind.	16T	22	Jan. 17	17.5	23
White: Spencer, Ind.	14	24	26	15.8	25
Elliston, Ind.	18	24	27	20.75	25
Edwardsport, Ind.	15	25	28	17.6	27
Skillet Fork: Wayne City, Ill.	15	4 11 21	4 16 26	15.8 18.0 22.3	4 15 23
Little Wabash Wilcox, Ill	16	2	29		
Carmi, Ill.	27	18	Jan. 7		
Wabash Wabash, Ind.	12	12 21	12 25	#12.15 18.1	12 21
Lafayette, Ind.	11	7 12 21	8 16 29	#11.75 #14.9 22.1	8 14 23
Covington, Ind	16	13 22	16 30	#18.6 #25.3	15 25
Montezuma, Ind.	14	12 22	18 Jan. 1	#17.4 24.8	15 22
Clinton, Ind.	18	21	30	(#23.4 (23.6	23 26
Terre Haute, Ind.	14	13 22	18 Jan. 1	15.4 20.3	16-17 26
Hutsonville, Ind.	20T	23	Jan. 2	#23.3	28
Riverton, Ind.	18			#20.3	28
Vincennes, Ind.	16	24	Jan. 4	#21.2	29
Mt. Carmel, Ill.	17	25	Jan. 3	#21.9	30
New Harmony, Ind.	15	26	Jan. 2		
Saline Harrisburg, Ill.	13	Nov. 30 2 12	1 6 24	16.5	30
South Chickamauga Creek Chickamauga (nr), Tenn.	10	(11 (18 (22	12 21 24	11.4 13.8 13.9	11 19 23
Elk: Fayetteville, Tenn.	18	18	20	21.1	19
Tennessee: Florence, Ala.	18	16	26	20.0	22
Whitesburg, Ala.	11	18 31	29 1/	18.0	23
Gilbertsville, Ky.	320	20	31	326.2	27
Ohio: Cairo, Ill.	40	27	27	40.1	27
White Basin					
Black: Black Rock, Ark.	14	12 15 22	12 21 1/	14.0 18.2 19.6	12 16 23
Cache: Patterson, Ark.	7	9	1/	9.3	19
White: Clarendon, Ark.	26	25	1/	26.9	Jan. 7, 8, 9

FLOOD STAGE DATA

(All dates in December unless otherwise specified)

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest * Stage	Crest * Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Arkansas Basin					
Illinois: Tahlequah, Okla.	11	23	23	11.3	23
Poteau: Panama, Okla.	24	22	23	27.1	22
Red Basin					
Sulphur: Hagansport, Tex.	38	14	21	44.9	17
Naples, Tex.	22	19	28	26.9	21
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	16	Jan. 4	24.5	27
St. Francis, Ark.	18	20	Jan. 8	20.8	30-31
Big Black: Pickens, Miss.	16	18	30	19.3	19
Bovina, Miss.	28	18	31	38.7	23-24
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Hineston, La.	12	16	23	13.7	19
Kinder, La.	16	22	24	17.0	22
Old Town Bay, La.	4	21	23	4.9	22

River and station	Flood stage	Above flood stages -dates From—	Above flood stages -dates To—	Crest * Stage	Crest * Date
WEST GULF OF MEXICO DRAINAGE	Ft.			Ft.	
Sabine: Quitman, Tex.	14	16	22	16.6	18
Edgewood, Tex.	12	15	29	13.0	18
Mineola, Tex.	14	15	1/	17.0	19
Gladewater, Tex.	26	25	30	27.1	28
Trinity: Moss Bluff, Tex.	4	22	29	5.2	26
PACIFIC SLOPE DRAINAGE					
Puget Sound Drainage					
Snoqualmie: Carnation, Wash.	54	24	28	57.7	26
Snohomish Snohomish, Wash.	25	24	28	30.7	26
Nooksack: Deming, Wash.	12	24 25	24 25	12.3 12.5	24 25

* Provisional
\# Highest stage observed
E Estimated
T Tentative
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

DECEMBER 1967

ALBANY, N. Y. — 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	86	-2.6	-5.9	30	2.2
1000	30	157			31	2.3
950	30	566	-3.0	-6.3	28	3.6
900	30	993	-3.8	-8.4	29	5.6
850	30	1,444	-4.2	-9.9	28	8.6
800	30	1,922	-4.8	-12.8	28	11.[illegible]
750	30	2,428	-5.7	-13.8	28	13.4
700	30	2,970	-7.9	-16.1	28	15.7
650	30	3,541	-10.2	-19.4	28	17.6
600	30	4,158	-13.3	-22.0	28	19.8
550	30	4,815	-17.1	-26.8	27	20.8
500	30	5,526	-21.5	-31.4	27	23.7
450	30	6,291	-26.9	-35.6	28	24.9
400	30	7,136	-32.9	-40.9	28	27.1
350	30	8,063	-39.7	-42.1	27	31.6
300	30	9,101	-46.7		27	36.7
250	30	10,292	-53.0		28	40.4
200	30	11,716	-56.4		28	36.9
175	30	12,563	-56.4		28	31.8
150	30	13,540	-57.3		28	28.9
125	30	14,688	-59.0		27	23.4
100	30	16,082	-60.8		27	18.5
80	29	17,462	-60.7		28	15.7
70	28	18,296	-60.4		28	13.8
60	28	19,257	-60.7		27	11.5
50	28	20,390	-61.2		27	8.4
40	28	21,777	-60.4		26	9.2
30	28	23,576	-59.0		27	10.0
25	27	24,731	-56.9		27	10.4
20	26	26,151	-55.3		27	10.1
15	25	27,992	-53.2		27	17.5
10	20	30,588	-49.7		27	27.3
7	13	32,900	-45.7			
5	7	35,091	-42.0			
4						

ALBUQUERQUE, N. MEX. — 837 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,619	-2.9	-8.8	07	1.[illegible]
1000	31	188				
950	31	603				
900	31	1,036				
850	31	1,496				
800	31	1,978	-2.1	-10.0	30	1.8
750	31	2,489	-3.8	-12.2	28	5.8
700	31	3,033	-5.3	-15.0	28	8.[illegible]
650	31	3,607	-7.8	-17.7	28	10.1
600	31	4,231	-10.7	-22.3	28	14.5
550	31	4,889	-15.1	-26.0	27	15.7
500	31	5,609	-20.2	-31.4	27	18.7
450	31	6,376	-25.[illegible]	-37.5	27	20.[illegible]
400	31	7,225	-31.[illegible]	-42.4	27	21.6
350	31	8,157	-38.1	-47.1	27	23.5
300	31	9,202	-45.2		27	25.9
250	31	10,399	-52.4		27	28.6
200	31	11,826	-56.0		27	27.5
175	31	12,672	-57.4		26	26.0
150	30	13,642	-58.9		26	25.7
125	30	14,780	-61.0		27	22.1
100	30	16,160	-62.9		27	16.1
80	30	17,529	-63.[illegible]		28	12.4
70	30	18,347	-63.4		28	8.7
60	30	19,295	-63.1		29	6.9
50	29	20,416	-61.8		31	5.9
40	29	21,802	-60.3		32	4.7
30	28	23,599	-58.4		30	6.1
25	26	24,750	-55.9		29	9.0
20	21	26,169	-54.5		28	12.8
15	18	28,032	-53.1		28	16.4
10	10	30,625	-50.[illegible]			

AMARILLO, TEXAS — 891 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,095	-2.[illegible]	-6.9	31	2.7
1000	31	163				
950	31	577				
900	31	1,017				
850	31	1,466	.3	-7.5	29	5.2
800	31	1,953	.5	-8.6	27	6.1
750	31	2,472	-1.1	-10.6	26	8.0
700	31	3,019	-3.5	-14.0	26	12.4
650	31	3,597	-6.5	-17.1	26	13.7
600	31	4,224	-9.9	-21.2	26	16.0
550	31	4,887	-14.1	-26.0	26	19.3
500	31	5,607	-18.7	-30.5	26	20.8
450	31	6,378	-24.2	-35.3	26	24.3
400	31	7,233	-30.2	-40.6	26	26.3
350	31	8,170	-37.1	-44.7	26	29.1
300	31	9,220	-44.6		26	32.1
250	31	10,421	-51.9		25	37.5
200	31	11,849	-57.0		26	35.6
175	31	12,694	-57.4		26	33.0
150	31	13,664	-59.0		26	29.7
125	31	14,803	-61.4		26	25.4
100	30	16,181	-64.1		26	21.2
80	29	17,542	-64.5		27	14.4
70	29	18,359	-63.5		27	10.3
60	29	19,305	-63.3		27	8.5
50	26	20,426	-62.0		26	7.0
40	23	21,808	-60.6		28	6.3
30	22	23,599	-58.4		28	7.1
25	21	24,744	-57.1		27	8.7
20	20	26,161	-55.3		27	11.8
15	17	28,018	-51.7		27	19.9
10	11	30,670	-49.3			

ANCHORAGE, ALASKA — 1004 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	45	-9.1	-14.3	03	.2
1000	31	77			07	.7
950	31	482	-6.9	-12.3	02	1.8
900	31	899	-7.8	-13.5	01	1.6
850	31	1,342	-8.9	-14.[illegible]	10	.5
800	31	1,810	-10.9	-16.9	16	1.3
750	31	2,304	-13.2	-20.0	17	2.0
700	31	2,827	-15.9	-22.8	19	3.9
650	31	3,375	-19.5	-26.7	20	5.2
600	31	3,972	-23.1	-30.7	21	5.1
550	31	4,602	-27.1	-35.2	22	6.[illegible]
500	31	5,286	-31.2	-39.2	23	7.2
450	31	6,023	-35.8	-41.5	23	7.1
400	31	6,837	-40.6	-44.5	24	7.[illegible]
350	31	7,734	-46.4		25	8.9
300	31	8,746	-51.2		25	12.1
250	31	9,924	-53.3		25	15.9
200	31	11,361	-52.9		26	17.5
175	31	12,224	-52.1		26	17.9
150	31	13,221	-52.5		26	18.2
125	31	14,398	-53.2		27	18.8
100	30	15,825	-55.0		27	20.8
80	30	17,250	-55.3		28	21.5
70	30	18,100	-55.7		28	23.1
60	29	19,073	-55.9		28	25.5
50	29	20,231	-56.8		28	27.3
40	27	21,633	-57.5		28	31.7
30	25	23,460	-59.4		29	34.9
25	22	24,615	-60.3		29	35.6
20	17	26,069	-59.8		30	38.8
15	15	27,833	-62.5		30	43.9
10	7	30,557	-61.9			

* ANNETTE, ALASKA — 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	37	2.1	-1.3	12	2.3
1000	31	96			11	1.4
950	31	511	-.1	-3.4	15	4.5
900	31	941	-2.5	-5.2	17	4.1
850	31	1,393	-4.2	-8.3	20	4.8
800	31	1,870	-6.4	-11.7	22	5.7
750	31	2,369	-8.8	-15.6	25	6.4
700	31	2,904	-12.0	-19.7	25	7.9
650	31	3,461	-15.5	-23.8	26	8.2
600	31	4,067	-19.3	-28.1	26	9.6
550	31	4,703	-23.5	-30.9	26	11.7
500	31	5,400	-27.7	-34.8	27	14.1
450	31	6,144	-32.7	-37.8	27	16.4
400	31	6,971	-38.1	-40.9	27	17.6
350	31	7,879	-43.3	-46.9	28	19.3
300	31	8,903	-49.0		29	23.7
250	31	10,090	-52.7		30	22.9
200	31	11,523	-54.0		30	21.6
175	31	12,380	-54.0		30	21.4
150	31	13,369	-54.1		29	20.9
125	31	14,536	-55.0		30	19.8
100	31	15,955	-56.7		29	19.2
80	31	17,371	-56.8		29	18.8
70	30	18,214	-56.7		29	19.1
60	30	19,193	-56.8		29	19.4
50	30	20,345	-57.9		29	20.7
40	28	21,752	-58.6		30	22.5
30	28	23,555	-59.8		30	25.3
25	27	24,671	-61.5		31	28.7
20	25	26,096	-62.3		31	29.7
15	23	27,916	-62.7		31	32.1
10	20	30,460	-64.4		32	38.0
7	13	32,573	-65.8			
5	11	34,551	-62.9			
4	6	36,020	-60.4			

ATHENS, GEORGIA — 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	5.4	3.5	34	.2
1000	31	166				
950	31	592	8.2	3.6	23	2.3
900	31	1,036	7.8	.2	24	5.6
850	31	1,507	6.8	-2.4	25	7.7
800	31	2,004	5.1	-4.7	25	8.8
750	31	2,527	3.1	-7.8	26	10.6
700	31	3,087	.4	-11.3	26	13.0
650	31	3,672	-2.6	-14.7	26	15.4
600	31	4,310	-6.4	-17.3	26	18.3
550	31	4,979	-10.4	-22.9	26	20.7
500	31	5,713	-15.1	-27.1	26	23.1
450	31	6,495	-20.4	-32.6	26	25.4
400	31	7,365	-26.2	-37.8	26	27.9
350	31	8,317	-33.3	-43.1	26	31.0
300	31	9,383	-41.2	-48.4	26	35.0
250	31	10,597	-50.0		26	39.2
200	31	12,027	-58.2		26	42.2
175	31	12,862	-60.8		26	41.9
150	30	13,818	-63.1		26	36.6
125	30	14,930	-66.2		26	33.1
100	29	16,279	-68.3		26	26.1
80	28	17,611	-68.9		26	20.3
70	27	18,415	-68.0		27	15.[illegible]
60	27	19,344	-66.3		27	9.8
50	27	20,454	-64.1		27	7.7
40	26	21,829	-61.3		27	8.0
30	26	23,627	-58.1		28	7.9
25	26	24,781	-55.6		28	9.1
20	25	26,213	-51.4		27	12.9
15	24	28,096	-47.2		27	17.9
10	22	30,799	-43.0		26	30.2
7	6	33,323	-39.4			

* BARROW, ALASKA — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	8	-22.5	-26.4	07	1.2
1000	31	121	-20.9	-23.8	08	1.3
950	31	505	-18.6	-20.4	04	[illegible].3
900	31	906	-17.1	-19.5	35	1.0
850	31	1,335	-17.3	-20.[illegible]	32	1.4
800	31	1,789	-18.0	-22.0	30	2.0
750	31	2,272	-19.8	-24.2	29	2.7
700	31	2,779	-22.1	-26.8	27	3.8
650	31	3,321	-25.1	-30.1	27	4.3
600	31	3,899	-28.4	-33.7	26	5.6
550	31	4,518	-32.3	-37.0	26	6.5
500	31	5,185	-36.7	-40.3	26	7.5
450	31	5,908	-41.5	-41.5	26	7.8
400	31	6,700	-46.7		26	8.7
350	31	7,576	-52.0		26	9.8
300	31	8,563	-56.6		26	11.5
250	31	9,714	-58.5		27	13.5
200	31	11,115	-58.3		27	14.3
175	31	11,956	-57.9		27	14.9
150	31	12,928	-57.9		27	16.3
125	30	14,072	-58.[illegible]		27	18.6
100	30	15,468	-60.3		27	20.4
80	29	16,851	-61.9		27	24.3
70	29	17,675	-63.0		27	26.5
60	29	18,619	-64.2		28	26.0
50	28	19,731	-65.3		28	28.4
40	25	21,109	-66.2		28	31.6
30	23	22,860	-66.9		28	35.0
25	18	23,962	-67.0		29	34.6
20	18	25,309	-67.4		29	37.3
15	8	27,114	-67.0			

HARTER IS., ALASKA — 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-22.5	-26.8	26	2.0
1000	31	124	-20.2	-23.9	27	2.2
950	31	507	-18.8	-21.7	28	4.0
900	31	910	-17.2	-20.[illegible]	28	4.8
850	31	1,340	-16.0	-19.1	27	5.3
800	31	1,797	-16.3	-18.7	27	5.7
750	31	2,277	-18.3	-21.6	28	5.4
700	31	2,795	-20.1	-24.1	28	6.1
650	31	3,338	-23.0	-28.0	27	6.8
600	31	3,925	-26.4	-31.0	27	7.8
550	31	4,542	-30.4	-35.3	27	9.6
500	31	5,221	-34.9	-39.5	27	10.[illegible]
450	31	5,943	-39.7	-41.0	27	12.0
400	31	6,746	-45.3	-43.2	27	13.8
350	31	7,626	-51.1		27	14.6
300	31	8,616	-56.3		26	16.4
250	31	9,767	-58.4		27	15.8
200	31	11,171	-57.7		27	15.4
175	31	12,014	-57.6		27	17.0
150	31	12,987	-57.5		27	17.9
125	29	14,130	-58.2		27	18.3
100	29	15,529	-60.0		27	20.6
80	27	16,943	-61.4		27	25.4
70	26	17,775	-62.3		27	26.1
60	24	18,738	-63.3		27	29.7
50	23	19,864	-64.3		28	33.0
40	15	21,380	-63.0		28	36.9
30	12	23,231	-63.9		28	44.4
25	8	24,388	-63.9			

BETHEL, ALASKA — 1006 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	39	-11.9	-13.6	13	.9
1000	29	85			16	1.9
950	29	483	-8.1	-12.2	16	3.6
900	29	902	-9.5	-14.1	16	4.0
850	29	1,342	-10.9	-16.4	19	4.1
800	29	1,807	-12.4	-20.0	21	2.8
750	29	2,295	-14.6	-22.9	23	2.5
700	29	2,819	-17.2	-26.1	24	3.3
650	29	3,367	-20.4	-29.0	23	5.0
600	29	3,960	-23.8	-32.3	24	5.[illegible]
550	29	4,587	-27.3	-35.3	23	6.7
500	29	5,272	-31.6	-37.5	23	7.7
450	29	6,003	-36.6	-40.0	22	9.4
400	29	6,818	-41.9	-45.0	22	11.2
350	29	7,712	-46.9		22	14.2
300	29	8,722	-51.2		23	17.9
250	29	9,899	-53.4		24	17.5
200	29	11,337	-52.1		24	18.0
175	29	12,203	-51.4		24	19.2
150	29	13,204	-50.9		25	19.5
125	29	14,389	-51.4		25	20.1
100	29	15,833	-52.3		25	20.6
80	29	17,275	-52.6		26	23.8
70	29	18,135	-52.9		26	24.5
60	28	19,128	-53.0		26	25.1
50	28	20,303	-53.2		27	28.7
40	27	21,739	-53.6		27	31.6
30	27	23,584	-54.6		27	35.3
25	25	24,780	-55.3		28	37.8
20	21	26,239	-55.7		28	42.7
15	17	28,133	-55.5			
10	8	30,728	-56.9			

BISMARCK, N. DAK. — 955 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	505	-11.8	-14.0	29	2.1
1000	31	145				
950	31	535			29	3.9
900	31	959	-7.4	-12.9	31	7.8
850	31	1,404	-7.3	-15.3	31	9.6
800	31	1,875	-8.8	-16.5	30	10.3
750	31	2,372	-10.6	-18.1	29	11.3
700	31	2,903	-12.7	-21.0	29	11.6
650	31	3,460	-15.9	-24.3	29	13.2
600	31	4,065	-19.5	-27.6	29	13.3
550	31	4,704	-23.4	-32.1	28	14.0
500	31	5,399	-27.5	-36.0	28	16.0
450	31	6,146	-32.6	-40.7	28	17.6
400	31	6,971	-38.1	-44.8	28	19.1
350	31	7,878	-44.2	-47.3	29	20.0
300	31	8,898	-49.9		29	21.1
250	31	10,078	-53.7		28	22.0
200	31	11,510	-53.5		28	21.4
175	31	12,371	-52.9		28	19.2
150	31	13,364	-53.7		28	16.9
125	31	14,532	-55.3		28	17.6
100	31	15,950	-56.5		28	16.9
80	31	17,360	-58.0		28	15.4
70	31	18,200	-58.6		29	15.4
60	31	19,166	-60.0		29	14.7
50	31	20,301	-61.1		29	15.2
40	31	21,685	-61.6		30	14.1
30	26	23,505	-61.9		31	14.6
25	22	24,656	-61.0		31	14.1
20	22	26,040	-61.8		31	14.6
15	11	27,891	-61.3		30	13.5

BOISE, IDAHO — 919 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	868	-4.0	-7.0	15	1.9
1000	31	195				
950	31	604				
900	31	1,033	-2.1	-6.9	12	1.0
850	31	1,487	-2.6	-8.5	29	1.7
800	31	1,967	-4.9	-10.3	29	5.0
750	31	2,470	-7.3	-13.0	29	7.4
700	31	3,008	-9.9	-16.2	30	9.1
650	31	3,573	-12.8	-19.6	31	9.9
600	31	4,183	-16.6	-23.5	31	11.2
550	31	4,827	-20.8	-27.4	31	12.3
500	31	5,531	-25.3	-32.3	31	14.[illegible]
450	31	6,285	-29.8	-34.8	32	16.5
400	31	7,121	-35.4	-41.1	32	18.6
350	31	8,039	-41.5	-45.9	33	19.3
300	31	9,072	-47.5		33	22.4
250	31	10,262	-52.7		32	24.2
200	31	11,692	-55.6		32	21.7
175	31	12,541	-56.3		31	20.9
150	31	13,520	-56.3		31	19.0
125	30	14,671	-57.2		31	16.4
100	30	16,079	-58.1		31	15.2
80	29	17,481	-58.1		31	11.1
70	28	18,323	-58.0		32	9.7
60	28	19,291	-58.7		33	8.6
50	27	20,439	-59.1		34	8.5
40	25	21,840	-59.4		34	9.9
30	22	23,642	-60.5		35	12.3
25	19	24,808	-59.3		36	11.9
20	13	26,201	-59.7		36	12.4
15	7	28,011	-61.6			
10						
7						
5						

* BOOTHVILLE, LA. — 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1	14.4	12.9	01	1.2
1000	31	152	14.7	12.8	05	1.1
950	31	585	12.6	10.3	19	2.9
900	31	1,039	11.7	6.9	22	5.6
850	31	1,517	10.5	1.1	24	6.1
800	31	2,020	8.6	-2.3	24	[illegible]
750	31	2,556	7.2	-5.5	25	9.6
700	31	3,118	4.3	-9.8	25	10.8
650	31	3,717	1.0	-14.5	26	12.4
600	31	4,356	-3.1	-17.7	26	13.9
550	31	5,034	-7.5	-21.2	26	14.7
500	31	5,775	-12.4	-25.6	25	16.9
450	31	6,566	-18.0	-30.3	25	19.6
400	31	7,443	-24.1	-35.4	25	23.0
350	31	8,404	-31.0	-42.8	26	25.1
300	31	9,479	-39.0	-49.3	26	27.9
250	31	10,704	-48.5		26	32.2
200	30	12,139	-57.9		26	36.7
175	30	12,973	-61.7		26	36.6
150	28	13,922	-65.2		26	34.8
125	28	15,023	-66.5		26	30.4
100	26	16,346	-70.7		26	25.7
80	24	17,665	-71.3		26	17.4
70	23	18,452	-70.2		26	11.8
60	23	19,373	-67.8		26	7.3
50	23	20,478	-64.0		26	6.4
40	22	21,852	-60.9		27	6.3
30	22	23,657	-56.6		27	8.3
25	22	24,818	-54.2		28	9.8
20	22	26,259	-50.7		27	11.6
15	21	28,157	-45.9		27	11.7
10	20	30,878	-44.2		25	14.7
7	15	33,299	-41.0		23	19.4
5	8	35,631	-35.3			

* BROWNSVILLE, TEXAS — 1016 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	7	14.2	11.6	33	1.2
1000	31	139	15.1	11.4	02	1.0
950	31	573	14.1	10.9	17	4.1
900	31	1,031	13.0	7.6	19	5.2
850	31	1,512	12.5	2.3	22	6.1
800	31	2,020	10.[illegible]	-1.3	22	6.2
750	31	2,555	9.1	-6.3	24	7.[illegible]
700	31	3,125	5.9	-10.2	24	8.8
650	31	3,725	1.9	-12.9	24	9.8
600	31	4,369	-2.3	-17.6	25	11.1
550	31	5,049	-6.7	-22.3	25	11.8
500	31	5,793	-11.8	-27.2	24	14.4
450	31	6,586	-17.3	-30.0	25	17.7
400	31	7,467	-23.3	-35.7	25	21.1
350	31	8,432	-30.2	-42.7	25	23.9
300	31	9,511	-38.2	-48.8	25	26.5
250	31	10,741	-47.6		25	30.9
200	30	12,180	-57.7		25	34.5
175	30	13,014	-61.9		25	33.6
150	30	13,959	-65.5		25	30.4
125	28	15,062	-69.1		25	28.9
100	26	16,386	-73.2		25	22.8
80	21	17,687	-73.6		24	13.4
70	18	18,468	-71.8		25	9.1
60	16	19,379	-69.0		25	5.8
50	15	20,478	-64.9		25	5.2
40	15	21,855	-60.3		25	5.4
30	15	23,666	-56.1		26	6.6
25	14	24,828	-53.4		26	8.8
20	14	26,274	-50.2		26	9.7
15	14	28,172	-45.4		26	7.2
10	14	30,875	-45.1		23	6.6
7	14	33,265	-42.7		22	12.2
5	6	35,593	-36.0			

BUFFALO, N. Y. — 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	218	-.9	-4.3	24	2.5
1000	31	154				
950	31	564	-2.0	-6.5	25	6.3
900	31	992	-3.6	-8.9	26	8.6
850	31	1,443	-4.9	-11.1	26	9.6
800	31	1,919	-5.8	-12.6	26	12.0
750	31	2,428	-7.3	-14.4	27	13.9
700	31	2,961	-9.1	-16.5	27	16.6
650	31	3,536	-11.4	-20.9	27	19.0
600	31	4,145	-14.7	-25.2	27	20.2
550	31	4,796	-18.6	-29.4	27	22.3
500	31	5,504	-23.2	-33.1	27	24.7
450	31	6,264	-28.4	-37.7	27	24.6
400	31	7,105	-34.4	-40.3	27	28.9
350	31	8,027	-40.4	-44.4	27	33.0
300	31	9,063	-47.0		27	35.7
250	31	10,255	-53.1		27	37.0
200	31	11,679	-56.3		27	33.8
175	31	12,527	-56.3		27	30.8
150	31	13,503	-57.4		27	26.1
125	31	14,650	-59.2		27	23.7
100	31	16,041	-61.1		27	19.1
80	29	17,414	-62.3		26	15.0
70	28	18,233	-62.1		26	13.8
60	25	19,182	-61.7		26	12.9
50	25	20,312	-61.2		26	10.1
40	25	21,699	-60.6		25	9.6
30	24	23,493	-58.8		26	7.8
25	23	24,641	-55.8		26	7.9
20	23	26,068	-53.6			
15	22	27,926	-50.0			
10	19	30,606	-45.7			
7	8	33,063	-42.6			

* CAPE HATTERAS, N. C. — 1019 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point †	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	8.8	6.2	34	2.3
1000	31	162	10.6	5.0	33	2.8
950	31	586	8.7	2.3	29	3.5
900	31	1,036	7.4	-1.4	26	5.5
850	31	1,505	5.9	-4.8	26	8.2
800	31	2,001	4.5	-8.3	26	10.4
750	31	2,523	2.8	-10.5	26	13.0
700	31	3,082	.3	-12.8	27	14.5
650	31	3,669	-2.6	-16.8	27	16.6
600	31	4,304	-6.3	-20.1	27	18.6
550	31	4,975	-10.4	-22.7	27	21.6
500	31	5,708	-15.2	-25.5	27	25.0
450	31	6,492	-20.5	-29.8	27	28.4
400	31	7,358	-26.9	-35.9	27	30.5
350	31	8,309	-33.7	-42.5	28	34.9
300	31	9,373	-41.4	-47.5	27	38.4
250	31	10,587	-50.4		28	42.5
200	31	12,015	-58.4		28	48.0
175	31	12,850	-60.6		28	45.9
150	31	13,806	-62.4		28	38.4
125	31	14,921	-65.7		27	33.3
100	31	16,272	-67.4		27	27.4
80	26	17,617	-67.0		27	20.5
70	26	18,423	-66.4		27	15.5
60	24	19,363	-64.6		27	12.3
50	23	20,479	-63.0		28	9.0
40	22	21,864	-60.9		28	7.2
30	22	23,664	-57.9		28	6.4
25	22	24,818	-55.9		28	6.3
20	19	26,256	-52.7		27	10.8
15	16	28,124	-49.8		27	14.6
10	10	30,824	-43.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	* CARIBOU, MAINE 994 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	30	191	-9.0	-11.6	30	2.6
1000	30	140				
950	30	535	-8.6	-10.4	30	3.8
900	30	956	-8.7	-12.0	30	4.9
850	30	1,399	-9.3	-14.2	29	6.2
800	30	1,868	-9.2	-15.2	29	7.9
750	30	2,367	-10.1	-16.2	28	9.8
700	30	2,897	-12.0	-18.8	29	11.8
650	30	3,457	-14.6	-21.4	29	13.1
600	30	4,065	-17.8	-24.7	28	15.0
550	30	4,704	-21.9	-29.4	28	16.0
500	30	5,406	-26.2	-34.4	28	16.6
450	30	6,151	-31.0	-38.7	28	19.3
400	30	6,988	-36.6	-42.7	28	22.0
350	30	7,900	-42.8	-43.1	27	23.9
300	30	8,926	-48.9		27	27.3
250	29	10,107	-53.0		27	31.8
200	28	11,538	-53.4		27	31.8
175	28	12,396	-53.9		27	23.8
150	28	13,385	-54.7		27	20.6
125	28	14,546	-56.3		27	18.3
100	28	15,960	-57.4		27	14.9
80	27	17,369	-59.4		27	13.2
70	27	18,203	-59.7		27	12.7
60	27	19,166	-60.1		26	13.2
50	27	20,301	-60.8		27	11.9
40	26	21,686	-60.5		27	12.1
30	25	23,482	-60.6		27	9.5
25	25	24,617	-60.4		27	10.4
20	25	26,009	-59.6		27	11.9
15	22	27,826	-55.9		26	15.3
10	22	30,433	-50.5		26	23.8
7	17	32,785	-45.9		25	37.9
5	5	35,244	-39.7			

Standard pressure surface (mb)	CHARLESTON, S. C. 1019 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	13	7.5	5.5	32	.9
1000	31	165	11.6	6.3	30	1.4
950	31	592	10.9	4.2	25	4.0
900	31	1,045	9.5	1.4	24	5.9
850	31	1,519	8.1	-2.3	25	6.9
800	31	2,019	6.8	-6.5	25	8.5
750	31	2,545	4.6	-10.6	26	9.9
700	31	3,107	1.7	-12.8	26	12.4
650	31	3,697	-1.4	-16.1	26	15.0
600	31	4,336	-4.9	-18.7	26	17.7
550	31	5,011	-8.9	-22.6	26	19.4
500	31	5,749	-13.6	-27.9	26	21.6
450	31	6,535	-18.8	-31.7	26	23.4
400	31	7,413	-24.8	-36.7	26	25.9
350	31	8,371	-31.7	-41.3	27	28.9
300	31	9,443	-39.8	-48.7	27	32.4
250	30	10,667	-49.2		27	35.9
200	30	12,101	-57.9		27	38.8
175	29	12,946	-60.6		27	38.9
150	29	13,898	-63.4		27	34.7
125	29	15,009	-66.8		27	30.9
100	29	16,348	-69.4		27	25.4
80	29	17,679	-69.1		27	19.5
70	29	18,477	-68.4		27	14.3
60	28	19,404	-66.7		27	11.2
50	28	20,514	-63.8		28	9.1
40	28	21,891	-60.7		27	7.7
30	28	23,699	-56.4		28	7.5
25	28	24,863	-53.6		27	10.1
20	27	26,313	-50.0		27	13.9
15	25	28,211	-45.4		27	19.8
10	12	30,974	-39.8			

Standard pressure surface (mb)	* COLD BAY, ALASKA 1003 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	30	-1.3	[illegible]	14	2.1
1000	31	54			18	[illegible]
950	31	461	-2.2	-6.9	13	[illegible]
900	31	892	-4.5	-9.1	14	2.4
850	31	1,340	-7.0	-11.7	18	[illegible]
800	31	1,812	-9.3	-14.7	20	[illegible]
750	31	2,306	-11.5	-18.8	22	4.2
700	31	2,836	-14.3	-22.5	23	5.4
650	31	3,390	-17.6	-25.9	24	6.6
600	31	3,990	-20.9	-28.9	24	8.1
550	31	4,623	-24.8	-33.4	24	[illegible]
500	31	5,315	-28.9	-37.2	24	12.0
450	31	6,055	-33.2	-40.6	22	[illegible]
400	31	6,883	-38.1	-42.4	23	16.4
350	31	7,792	-43.4	-45.1	23	19.8
300	31	8,819	-48.1		23	21.8
250	31	10,012	-52.0		23	20.2
200	31	11,459	-50.8		23	[illegible]
175	31	12,333	-49.4		24	18.2
150	31	13,342	-49.9		24	19.5
125	31	14,533	-50.4		24	17.0
100	31	15,990	-50.2		24	17.2
80	29	17,449	-50.4		25	17.3
70	29	18,319	-50.5		25	16.3
60	29	19,324	-50.1		26	14.5
50	29	20,516	-50.0		26	14.8
40	28	21,984	-50.4		27	16.9
30	28	23,858	-51.4		29	18.4
25	26	25,048	-52.3		30	20.9
20	24	26,496	-53.0		30	23.4
15	22	28,344	-55.3		31	26.8
10	20	30,955	-57.8		32	32.1
7	12	33,326	-56.0		31	36.8
5	9	35,483	-56.1			

Standard pressure surface (mb)	COLUMBIA, MO. 989 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	238	.2	-2.2	15	.3
1000	31	147				
950	31	[illegible]	.1	-4.0	26	2.1
900	31	991	-.1	-6.4	26	4.3
850	31	1,449	-.3	-6.0	26	6.7
800	31	1,934	-1.3	-7.9	26	8.9
750	31	2,446	-2.4	-11.5	26	[illegible]
700	31	2,993	-4.9	-13.9	25	13.5
650	31	3,570	-7.8	-17.3	25	15.2
600	31	4,192	-11.4	-22.3	25	17.4
550	31	4,850	-15.9	-26.5	25	20.3
500	31	5,566	-20.3	-30.5	25	[illegible]
450	31	6,329	-25.8	-35.8	25	27.7
400	31	7,181	-31.8	-40.5	25	31.0
350	31	8,113	-38.0	-44.3	25	35.4
300	31	[illegible]	-45.5		25	38.1
250	31	10,354	-52.7		25	40.2
200	31	11,781	-56.3		26	[illegible]
175	31	12,629	-57.0		26	[illegible]
150	31	13,602	-58.5		26	32.2
125	31	14,742	-60.6		26	28.4
100	29	16,126	-62.3		26	21.5
80	29	17,500	-63.0		27	18.3
70	27	18,324	-63.4		27	15.2
60	26	19,276	-63.0		27	11.7
50	25	20,397	-62.5		27	9.9
40	23	21,781	-61.2		28	8.4
30	20	23,584	-59.9		28	8.0
25	19	24,727	-58.5		28	9.6
20	19	26,133	-57.2		27	12.9
15	16	27,987	-52.9		26	12.9
10	7	30,640	-49.0			

Standard pressure surface (mb)	DAYTON, OHIO 983 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	297	-.5	[illegible]	[illegible]	1.1
1000	31	160				
950	31	571	-.7	-3.6	24	4.4
900	31	1,003	-.7	-6.4	[illegible]	[illegible]
850	31	1,460	-.7	-7.9	[illegible]	[illegible]
800	31	1,944	-1.7	[illegible]	[illegible]	[illegible]
750	31	2,458	-3.1	-11.4	[illegible]	[illegible]
700	31	3,002	-5.5	-13.5	[illegible]	[illegible]
650	31	3,578	-8.1	-17.8	26	[illegible]
600	31	4,199	-11.6	-22.1	26	20.1
550	31	4,857	-15.5	-26.1	26	22.7
500	31	5,575	-20.1	-29.5	27	[illegible]
450	31	6,344	-25.5	-33.8	27	28.8
400	31	7,192	-31.5	-39.4	27	32.0
350	31	8,123	-38.5	-42.1	26	34.3
300	31	9,165	-46.0		26	39.1
250	31	10,358	-53.3		26	44.1
200	31	11,775	-57.7		26	46.8
175	31	12,617	-57.7		26	43.4
150	31	13,585	-59.8		26	38.9
125	31	14,720	-61.6		26	31.1
100	30	16,088	-63.5		26	27.2
80	28	17,454	-63.9		27	20.8
70	26	18,273	-63.8		27	16.6
60	25	19,213	-63.2		27	15.8
50	25	20,334	-63.2		27	13.9
40	23	21,709	-61.6		27	12.8
30	23	23,498	-59.8		27	11.1
25	21	24,655	-57.1		27	[illegible]
20	20	26,085	-53.5		27	15.4
15	16	27,957	-49.8		26	17.1
10	13	30,626	-46.7		26	25.9

Standard pressure surface (mb)	DEL RIO, TEXAS 981 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	314	6.8	2.7	02	.9
1000	31	155				
950	31	581	8.1	1.3	30	.2
900	31	1,025	7.4	-1.0	23	1.8
850	31	1,496	7.9	-3.0	23	4.4
800	31	1,997	8.0	-5.9	24	6.8
750	31	2,525	5.7	-10.0	25	9.1
700	31	3,090	2.8	-12.8	26	9.9
650	31	3,682	-.9	-16.0	25	11.1
600	31	4,321	-4.8	-20.1	25	13.7
550	31	4,994	-9.2	-25.6	25	15.4
500	31	5,731	-14.3	-29.4	25	17.7
450	31	6,516	-19.9	-32.3	25	19.6
400	31	7,387	-26.0	-37.5	25	23.3
350	31	8,341	-32.8	-42.9	25	24.9
300	31	9,409	-40.6	-48.1	25	29.3
250	31	10,627	-49.5		25	32.8
200	31	12,060	-57.9		25	36.7
175	31	12,895	-60.6		25	35.4
150	31	13,849	-63.0		25	32.6
125	31	14,961	-66.5		25	27.7
100	28	16,302	-69.1		25	21.3
80	26	17,627	-69.3		25	16.3
70	26	18,426	-67.8		26	11.3
60	25	19,355	-66.5		26	6.8
50	24	20,464	-63.8		27	4.1
40	24	21,845	-60.1		28	3.5
30	21	23,654	-57.0		28	5.4
25	21	24,812	-54.8		28	7.1
20	21	26,252	-50.8		28	11.8
15	19	28,133	-48.5		28	15.4
10	15	30,829	-46.3		25	15.1
7	9	33,247	-43.1			

Standard pressure surface (mb)	DENVER, COLO. 834 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	1,611	-6.5	-11.9	24	2.0
1000	31	172				
950	31	579				
900	31	1,009				
850	31	1,462				
800	31	1,939	-3.1	-12.0	27	3.9
750	31	2,449	-4.3	-13.8	28	4.9
700	31	2,991	-7.8	-16.7	29	6.3
650	31	3,561	-11.0	-19.4	29	8.2
600	31	4,175	-14.4	-23.3	29	11.0
550	31	4,825	-18.1	-26.9	29	12.3
500	31	5,536	-22.8	-31.8	29	14.5
450	31	6,291	-28.5	-37.2	28	16.3
400	31	7,134	-34.6	-41.9	28	17.1
350	31	8,054	-41.3	-44.7	28	20.3
300	31	9,086	-47.7		28	22.9
250	31	10,274	-52.8		27	24.5
200	31	11,707	-55.2		26	24.0
175	31	12,559	-55.0		26	23.9
150	31	13,541	-56.3		26	22.0
125	31	14,695	-57.7		27	20.8
100	31	16,102	-59.2		28	15.6
80	30	17,494	-60.1		28	11.9
70	30	18,325	-60.5		29	10.5
60	30	19,286	-60.5		29	9.6
50	30	20,420	-61.0		30	8.6
40	30	21,809	-60.3		31	7.8
30	27	23,616	-59.8		32	8.9
25	25	24,756	-59.3		31	10.4
20	23	26,167	-57.4		30	12.2
15	19	28,002	-55.1		27	17.0
10	8	30,599	-50.3			

Standard pressure surface (mb)	DODGE CITY, KANS. 924 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	791	-3.0	-7.2	31	1.9
1000	31	157				
950	31	564				
900	31	998	-1.1	-8.6	32	3.3
850	31	1,455	-.5	-9.8	32	4.8
800	31	1,940	-1.3	-11.3	30	6.0
750	31	2,450	-3.4	-13.5	29	6.9
700	31	2,996	-5.9	-16.0	28	9.7
650	31	3,569	-9.2	-18.7	26	12.1
600	31	4,189	-12.6	-22.3	26	14.1
550	31	4,843	-16.9	-26.7	26	16.4
500	31	5,557	-21.6	-32.3	26	18.9
450	31	6,319	-27.0	-37.4	26	21.9
400	31	7,164	-32.9	-42.4	26	25.8
350	31	8,092	-39.0	-44.9	26	28.3
300	31	9,135	-45.3		26	33.7
250	31	10,333	-51.9		26	38.2
200	31	11,764	-55.8		26	36.1
175	31	12,613	-56.2		26	32.0
150	31	13,590	-57.4		26	27.2
125	31	14,735	-59.8		26	24.9
100	30	16,115	-62.0		26	18.2
80	29	17,498	-62.8		27	13.8
70	28	18,318	-62.5		27	11.7
60	27	19,266	-61.9		28	8.3
50	27	20,395	-61.3		28	8.4
40	26	21,780	-60.6		30	7.9
30	26	23,577	-59.2		29	9.6
25	24	24,720	-58.4		29	11.1
20	23	26,137	-55.6		28	13.3
15	19	27,997	-51.9		27	15.0
10	13	30,624	-52.0			

Standard pressure surface (mb)	EL PASO, TEXAS 882 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	1,193	1.6	-4.1	36	.3
1000	31	166				
950	31	586				
900	31	1,027				
850	31	1,491	3.9	-5.6	32	1.4
800	31	1,982	2.5	-7.1	27	4.2
750	31	2,502	1.3	-8.8	26	9.0
700	31	3,057	-.9	-12.8	25	12.0
650	31	3,641	-4.3	-17.0	26	14.0
600	31	4,274	-7.8	-20.7	26	15.3
550	31	4,939	-11.8	-24.8	26	17.4
500	31	5,670	-16.5	-29.4	26	19.9
450	31	6,448	-21.8	-33.9	26	21.6
400	31	7,313	-28.2	-39.5	26	23.8
350	31	8,257	-35.5	-45.6	25	26.1
300	31	9,313	-43.4		25	27.1
250	31	10,519	-51.8		26	28.9
200	31	11,945	-57.4		26	28.2
175	31	12,784	-59.5		26	31.1
150	31	13,745	-60.9		26	25.1
125	30	14,875	-63.0		27	21.4
100	30	16,236	-66.3		27	17.9
80	30	17,586	-66.5		27	14.1
70	29	18,397	-65.4		28	9.5
60	29	19,336	-64.3		27	7.5
50	27	20,460	-63.2		28	3.2
40	27	21,837	-61.0		33	2.5
30	27	23,634	-58.5		31	4.8
25	26	24,785	-57.2		29	6.5
20	25	26,206	-53.5		29	9.2
15	23	28,077	-51.1		27	15.7
10	21	30,724	-48.8		27	24.6
7	11	33,115	-45.3			

Standard pressure surface (mb)	ELY, NEV. 808 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	1,908	-11.5	-15.1	21	2.2
1000	31	238				
950	31	636				
900	31	1,062				
850	31	1,511				
800	31	1,980			25	1.2
750	31	2,481	-6.6	-12.1	35	2.4
700	31	3,023	-9.1	-14.8	34	4.2
650	31	3,586	-11.4	-18.0	32	6.3
600	31	4,205	-14.3	-23.3	31	10.2
550	31	4,855	-17.9	-27.4	31	12.4
500	31	5,568	-22.6	-31.6	31	14.7
450	31	6,327	-27.7	-36.1	31	15.6
400	31	7,173	-33.7	-40.7	30	17.2
350	31	8,097	-40.1	-45.0	31	18.3
300	31	9,136	-46.3		31	18.4
250	31	10,334	-52.0		31	19.7
200	31	11,765	-56.2		30	20.4
175	31	12,612	-56.8		31	20.0
150	31	13,589	-56.8		30	18.2
125	31	14,742	-58.2		30	[illegible]
100	31	16,141	-60.2		30	13.1
80	30	17,531	-61.0		30	11.1
70	30	18,361	-60.6		31	9.3
60	30	19,319	-60.9		32	7.6
50	29	20,453	-61.1		34	7.1
40	29	21,842	-60.1		35	7.1
30	27	23,632	-60.1		34	8.8
25	23	24,773	-59.0		33	9.9
20	21	26,164	-58.6		31	12.4
15	16	28,001	-56.5		30	17.3
10	5	30,701	-53.7			

Standard pressure surface (mb)	* FAIRBANKS, ALASKA 997 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	135	-18.2	-20.7	05	.5
1000	31	111			09	1.0
950	31	503	-14.4	-18.1	13	2.0
900	31	910	-12.7	-16.2	20	2.3
850	31	1,346	-12.5	-16.6	23	3.2
800	31	1,809	-13.4	-17.6	23	3.3
750	31	2,300	-15.1	-19.5	23	4.0
700	31	2,819	-17.5	-21.6	24	4.5
650	31	3,372	-20.5	-25.3	24	5.2
600	31	3,960	-24.5	-29.9	23	5.9
550	31	4,589	-28.8	-34.0	23	6.3
500	31	5,264	-33.4	-36.8	24	7.6
450	31	5,995	-38.3	-39.2	25	8.1
400	31	6,799	-43.5	-42.7	25	9.4
350	31	7,687	-49.1		25	11.3
300	31	8,686	-53.9		25	13.4
250	31	9,851	-55.8		26	14.4
200	30	11,271	-55.1		27	15.8
175	30	12,126	-54.4		26	17.4
150	30	13,113	-54.6		27	18.7
125	30	14,281	-54.7		27	19.9
100	30	15,705	-56.0		27	22.0
80	30	17,117	-57.8		28	24.9
70	30	17,958	-58.3		28	27.2
60	30	18,926	-59.1		28	29.5
50	30	20,067	-59.9		28	30.9
40	29	21,462	-60.7		28	35.7
30	26	23,311	-62.1		29	40.3
25	26	24,433	-63.8		29	41.3
20	24	25,828	-65.4		29	43.0
15	12	27,747	-63.9		29	45.7
10	7	30,405	-64.6			
7						

Standard pressure surface (mb)	FLINT, MICH. 989 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	234	-1.4	-4.7	23	2.1
1000	31	146				
950	31	553	-3.1	-6.1	25	5.5
900	31	981	-4.6	-8.5	26	7.3
850	31	1,431	-5.0	-11.6	27	9.2
800	31	1,908	-5.5	-13.6	27	11.2
750	31	2,412	-6.9	-14.9	27	13.5
700	31	2,951	-8.5	-18.7	27	15.5
650	31	3,520	-11.0	-22.3	27	16.9
600	31	4,134	-14.4	-26.0	27	18.9
550	31	4,784	-18.6	-30.1	27	21.3
500	31	5,493	-23.0	-33.1	27	25.0
450	31	6,254	-28.0	-38.8	27	29.3
400	31	7,094	-33.8	-43.1	27	33.6
350	31	8,018	-40.2	-44.5	27	35.4
300	31	9,054	-47.0		27	39.9
250	31	10,245	-52.9		27	42.1
200	31	11,671	-55.7		27	39.9
175	31	12,521	-56.1		27	37.6
150	31	13,500	-56.5		27	32.9
125	31	14,653	-58.0		27	26.8
100	31	16,051	-60.5		27	24.6
80	31	17,436	-61.1		27	19.2
70	31	18,264	-61.5		27	15.7
60	31	19,218	-61.7		27	13.8
50	29	20,348	-61.5		27	13.9
40	27	21,729	-61.1		27	13.2
30	25	23,529	-59.0		27	11.3
25	25	24,676	-57.1		27	14.2
20	23	26,107	-54.7		27	15.4
15	14	28,012	-48.5		26	16.0
10	9	30,683	-45.1			
7	5	33,191	-40.5			

Standard pressure surface (mb)	FORT WORTH, TEXAS 998 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	180	5.0	.6	32	1.7
1000	31	158			33	1.9
950	31	581	5.7	-1.8	29	3.5
900	31	1,021	6.6	-2.4	26	5.0
850	31	1,490	6.0	-4.8	25	7.1
800	31	1,986	5.1	-6.8	25	9.1
750	31	2,511	2.9	-8.9	25	11.4
700	31	3,067	.0	-12.2	25	13.2
650	31	3,653	-3.0	-15.6	25	15.1
600	31	4,288	-6.7	-19.8	25	17.2
550	31	4,955	-11.0	-24.0	25	19.3
500	31	5,688	-15.8	-28.4	25	21.0
450	31	6,469	-21.4	-33.3	25	24.6
400	31	7,333	-27.5	-38.4	25	26.8
350	31	8,281	-34.6	-43.8	25	30.2
300	31	9,341	-41.4	-46.8	25	32.2
250	31	10,550	-51.1		25	36.8
200	31	11,977	-58.2		25	38.8
175	31	12,814	-60.1		25	37.2
150	30	13,775	-62.0		26	32.6
125	29	14,891	-64.4		25	27.1
100	28	16,251	-66.9		25	22.9
80	28	17,599	-66.7		26	16.9
70	27	18,402	-66.2		26	12.6
60	24	19,339	-65.0		27	9.2
50	24	20,455	-63.3		28	7.4
40	23	21,832	-61.1		28	5.8
30	19	23,628	-58.0		27	7.1
25	19	24,784	-55.6		27	10.3
20	16	26,216	-51.9		28	12.0
15	15	28,098	-48.8		28	12.2
10	6	30,847	-46.0			

Standard pressure surface (mb)	GLASGOW, MONT. 933 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	696	-10.6	-14.7	34	1.4
1000	31	155				
950	31	556				
900	31	972	-7.1	-12.9	30	5.8
850	31	1,418	-7.4	-13.8	30	9.0
800	31	1,889	-9.0	-15.5	31	10.6
750	31	2,388	-11.2	-17.6	31	11.3
700	31	2,914	-13.4	-21.2	31	11.6
650	31	3,474	-15.9	-23.6	31	12.3
600	31	4,075	-19.3	-27.1	31	13.2
550	31	4,711	-23.3	-31.1	30	14.8
500	31	5,408	-28.0	-35.2	30	16.4
450	31	6,149	-33.4	-39.3	31	16.7
400	31	6,974	-39.1	-44.4	31	17.5
350	31	7,877	-45.0		31	18.1
300	31	8,894	-50.2		31	19.4
250	31	10,075	-53.5		30	21.3
200	31	11,506	-53.9		31	18.5
175	31	12,364	-53.3		31	17.8
150	31	13,356	-53.4		30	15.4
125	31	14,525	-54.8		30	15.7
100	31	15,946	-56.4		30	14.5
80	31	17,357	-57.4		30	16.6
70	31	18,193	-57.9		31	16.2
60	31	19,167	-58.8		31	15.9
50	31	20,308	-59.9		31	15.9
40	31	21,696	-61.4		31	18.0
30	27	23,487	-61.9		31	18.4
25	27	24,612	-62.8		30	19.6
20	25	26,016	-62.1		30	21.3
15	17	27,794	-61.8		31	20.1
10	8	30,296	-56.1			

Standard pressure surface (mb)	* GRAND JUNCTION, COLO. 852 MB: No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind: Direction	Speed
SURFACE	31	1,474	-8.7	-11.4	12	1.3
1000	31	219				
950	31	623				
900	31	1,049				
850	31	1,494			12	1.8
800	31	1,969	-5.2	-10.6	16	1.6
750	31	2,477	-6.4	-12.0	24	2.1
700	31	3,013	-9.0	-13.9	27	4.9
650	31	3,585	-11.5	-17.3	27	6.9
600	31	4,194	-14.6	-20.9	27	9.6
550	31	4,847	-18.3	-25.4	27	11.7
500	31	5,554	-22.8	-31.3	27	13.2
450	31	6,314	-28.4	-35.9	28	14.2
400	31	7,152	-34.6	-41.8	28	17.2
350	31	8,072	-41.0	-46.2	29	18.3
300	31	9,106	-46.9		29	19.9
250	31	10,299	-52.4		29	20.5
200	31	11,732	-54.7		29	22.5
175	31	12,585	-55.2		29	21.3
150	31	13,569	-55.6		28	20.3
125	31	14,726	-57.5		28	18.6
100	31	16,127	-59.7		28	15.2
80	31	17,517	-60.4		29	12.1
70	31	18,348	-60.5		30	10.0
60	31	19,307	-60.7		31	8.9
50	31	20,441	-60.7		31	8.1
40	29	21,830	-60.7		32	8.0
30	23	23,619	-59.9		31	9.5
25	22	24,758	-58.5		30	10.3
20	20	26,152	-57.8		29	12.9
15	17	27,990	-53.9		27	20.8
10	11	30,619	-51.7			
7	6	33,007	-45.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

DECEMBER 1967

* GREAT FALLS, MONT. 885 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,123	-6.0	-11.4	23	5.9
1000	31	152				
950	31	560				
900	31	991				
850	31	1,437	-4.4	-13.3	25	9.2
800	31	1,912	-6.9	-14.3	28	10.0
750	31	2,417	-9.5	-15.8	29	10.7
700	31	2,945	-11.8	-18.1	30	11.8
650	31	3,511	-14.7	-21.2	30	11.8
600	31	4,112	-18.4	-25.1	30	13.0
550	31	4,755	-22.6	-29.5	30	13.7
500	31	5,449	-27.1	-33.5	30	14.7
450	31	6,200	-32.1	-37.7	31	15.8
400	31	7,024	-37.8	-41.8	31	16.2
350	31	7,932	-44.5	-45.8	31	18.6
300	31	8,952	-49.6		31	21.3
250	31	10,136	-53.0		31	22.5
200	30	11,566	-54.8		31	16.9
175	30	12,420	-54.4		30	15.5
150	29	13,406	-54.4		29	14.0
125	28	14,566	-54.2		29	12.7
100	26	15,992	-54.9		30	10.1
80	26	17,412	-56.8		30	9.4
70	25	18,253	-57.1		30	10.4
60	24	19,231	-57.4		31	9.4
50	24	20,381	-58.4		32	9.9
40	23	21,770	-59.5		32	11.1
30	21	23,556	-62.0		32	14.6
25	18	24,689	-62.7		32	15.5
20	16	26,070	-62.0		32	16.8
15	11	27,903	-60.9		32	15.0
10	6	30,376	-57.5			
7						
5						

GREEN BAY, WIS. 992 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	210	-6.7	-8.8	27	1.5
1000	31	142				
950	31	546	-6.2	-10.3	28	3.7
900	31	965	-7.2	-12.1	28	4.7
850	31	1,412	-6.6	-13.4	27	7.0
800	31	1,886	-6.8	-15.7	27	8.7
750	31	2,385	-8.5	-18.1	27	11.1
700	31	2,922	-10.6	-21.3	27	13.0
650	31	3,483	-13.1	-24.6	27	14.7
600	31	4,097	-16.3	-26.4	27	17.8
550	31	4,740	-20.5	-30.7	27	19.4
500	31	5,446	-25.1	-35.5	27	22.0
450	31	6,197	-30.4	-38.8	26	25.3
400	31	7,033	-36.2	-44.0	26	27.5
350	31	7,948	-42.4	-49.7	26	32.9
300	31	8,977	-48.5		26	36.8
250	31	10,162	-53.6		26	39.8
200	30	11,586	-54.8		26	36.5
175	30	12,439	-55.2		26	34.2
150	30	13,422	-55.8		27	30.7
125	30	14,578	-57.2		27	26.7
100	30	15,984	-59.3		27	21.2
80	30	17,378	-60.4		27	19.0
70	30	18,207	-61.0		27	16.3
60	29	19,161	-61.1		27	15.6
50	28	20,300	-61.3		27	13.3
40	28	21,683	-61.6		27	13.7
30	28	23,468	-60.8		28	13.9
25	27	24,618	-59.5		28	15.4
20	23	26,051	-56.8		26	15.6
15	19	27,880	-55.1		26	15.4
10	13	30,490	-51.5			
7						
5						

GREENSBORO, N. C. 988 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	273	4.4	2.3	31	.4
1000	31	170				
950	31	589	5.7	.0	27	2.5
900	31	1,033	6.0	-1.5	27	5.4
850	31	1,501	5.2	-4.5	26	7.7
800	31	1,995	3.7	-6.1	26	9.2
750	31	2,517	1.4	-9.4	26	11.3
700	31	3,071	-1.0	-13.4	26	14.0
650	31	3,658	-4.1	-17.0	26	16.2
600	31	4,287	-7.9	-20.7	27	18.1
550	31	4,953	-12.0	-24.3	27	20.1
500	31	5,682	-16.6	-28.1	26	23.8
450	31	6,462	-21.7	-32.9	26	26.9
400	31	7,324	-27.7	-38.3	27	30.0
350	31	8,272	-34.4	-43.6	27	34.0
300	31	9,333	-42.1	-47.4	27	37.5
250	31	10,545	-50.7		27	40.6
200	31	11,971	-58.7		27	44.7
175	31	12,806	-60.4		27	41.9
150	31	13,763	-62.3		27	36.1
125	31	14,882	-64.7		27	28.5
100	31	16,237	-66.7		27	22.4
80	31	17,585	-66.6		27	17.6
70	31	18,393	-66.1		27	14.5
60	31	19,330	-64.7		27	9.3
50	31	20,446	-63.0		27	7.4
40	31	21,825	-61.0		27	7.5
30	30	23,620	-58.0		28	9.5
25	30	24,774	-55.8		28	9.2
20	29	26,200	-52.6		27	11.4
15	26	28,082	-48.7		27	14.4
10	12	30,763	-44.8			
7	6	33,207	-40.5			
5						

GUAM, MARIANA IS. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	111	23.9	22.0	09	3.5
1000	31	106			08	4.1
950	31	552	22.1	19.3	09	9.6
900	31	1,024	19.5	14.8	09	9.7
850	31	1,515	17.3	9.0	09	8.6
800	31	2,032	15.2	3.7	09	7.2
750	31	2,574	13.0	-3.2	09	6.7
700	31	3,153	10.4	-9.1	10	6.5
650	31	3,765	6.8	-12.9	10	6.2
600	31	4,418	3.0	-16.6	10	7.2
550	31	5,116	-.6	-20.1	10	7.2
500	31	5,874	-5.3	-22.4	10	7.2
450	31	6,690	-10.1	-28.0	10	7.8
400	31	7,593	-15.9	-34.0	09	6.4
350	31	8,586	-22.8	-40.4	09	5.5
300	31	9,697	-31.4	-47.2	09	4.6
250	31	10,960	-41.6		10	2.7
200	31	12,434	-53.8		14	2.3
175	31	13,278	-60.8		16	2.4
150	31	14,219	-66.5		15	3.7
125	31	15,289	-76.6		14	4.3
100	28	16,551	-82.8		12	6.7
80	22	17,799	-81.2		11	7.7
70	21	18,561	-76.5		11	5.3
60	21	19,467	-70.1		11	4.4
50	21	20,564	-65.6		11	3.8
40	21	21,936	-60.9		09	6.1
30	21	23,749	-55.8		09	12.4
25	19	24,911	-53.4		09	15.9
20	19	26,367	-48.6		09	18.7
15	19	28,273	-45.5		09	19.0
10	14	30,978	-44.6		10	12.2
7	7	33,362	-44.3			
5						

HILO, HAWAII 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	20.3	17.3	21	1.7
1000	31	114	21.1	17.0	20	2.2
950	31	556	18.8	14.6	16	3.1
900	31	1,021	15.7	12.0	16	3.2
850	31	1,506	13.1	8.7	18	3.1
800	31	2,014	10.8	5.1	20	3.3
750	31	2,551	8.7	.0	21	2.8
700	31	3,120	5.6	-6.2	24	2.9
650	31	3,720	2.9	-10.7	25	3.1
600	31	4,368	-.8	-14.5	26	3.7
550	31	5,053	-5.1	-18.2	27	7.0
500	31	5,802	-9.5	-23.6	27	8.4
450	31	6,603	-15.1	-28.2	27	10.7
400	31	7,489	-21.6	-33.1	27	12.0
350	31	8,460	-28.6	-39.1	26	14.5
300	31	9,548	-35.8	-46.2	26	20.0
250	31	10,793	-44.2		26	26.0
200	31	12,257	-54.2		26	27.5
175	31	13,103	-59.6		26	28.1
150	31	14,055	-65.2		26	24.7
125	31	15,150	-71.0		26	19.2
100	31	16,453	-76.0		27	10.6
80	29	17,736	-75.8		25	1.1
70	29	18,511	-73.2		10	3.5
60	28	19,424	-68.9		09	5.4
50	25	20,526	-65.1		09	7.2
40	25	21,901	-60.6		09	6.1
30	25	23,710	-56.1		07	4.8
25	25	24,875	-53.7		07	6.3
20	21	26,317	-51.4		09	8.2
15	18	28,201	-49.2		11	9.4
10	15	30,877	-47.8		12	6.5
7	10	33,242	-46.1			
5	5	35,522	-42.6			

HUNTINGTON W. VA. 991 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	246	1.2	-2.6	22	.7
1000	31	168				
950	31	585	2.8	-1.8	23	3.3
900	31	1,021	2.3	-4.2	25	7.5
850	31	1,482	1.2	-6.7	26	10.5
800	31	1,970	.2	-8.3	26	12.2
750	31	2,485	-1.6	-11.5	26	13.8
700	31	3,034	-3.7	-14.5	27	15.4
650	31	3,614	-6.7	-18.3	26	17.3
600	31	4,238	-10.3	-22.1	27	19.2
550	31	4,901	-14.4	-24.8	27	20.9
500	31	5,621	-19.1	-28.8	27	22.3
450	31	6,396	-24.3	-33.3	27	24.8
400	31	7,249	-30.4	-38.8	27	28.7
350	31	8,186	-36.8	-42.1	26	32.5
300	31	9,238	-44.0	-45.0	26	35.8
250	31	10,442	-51.9		26	40.0
200	31	11,866	-57.7		26	42.6
175	31	12,706	-58.6		27	41.0
150	31	13,672	-60.5		27	36.0
125	30	14,808	-62.7		27	30.2
100	29	16,171	-64.8		27	25.6
80	28	17,531	-64.6		27	18.8
70	28	18,345	-64.6		27	15.9
60	28	19,290	-63.6		27	13.1
50	28	20,412	-62.3		27	10.1
40	28	21,795	-60.9		27	9.1
30	28	23,590	-58.7		27	11.0
25	28	24,742	-56.1		27	11.5
20	28	26,169	-53.3		27	14.0
15	26	28,019	-50.7		26	20.6
10	17	30,680	-47.7		26	18.7
7	7	33,027	-43.9			
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* INTERNATIONAL FALLS, MINN. 971 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	360	-13.8	-16.4	21	1.6
1000	31	135				
950	31	524	-12.1	-14.9	21	3.1
900	31	941	-11.0	-14.5	25	5.4
850	31	1,380	-10.3	-15.7	27	7.0
800	31	1,847	-11.2	-17.4	27	8.6
750	31	2,336	-12.9	-19.5	27	9.2
700	31	2,865	-14.6	-21.8	27	10.7
650	31	3,417	-17.4	-24.7	27	12.3
600	31	4,020	-20.7	-27.8	28	13.9
550	31	4,650	-24.7	-31.4	28	15.8
500	31	5,345	-29.3	-36.4	27	15.9
450	31	6,079	-34.7	-39.8	28	17.7
400	31	6,904	-39.9	-44.6	27	20.2
350	31	7,806	-45.4		27	22.6
300	31	8,823	-50.5		27	24.1
250	31	10,004	-53.1		27	24.0
200	31	11,439	-53.6		27	22.4
175	31	12,298	-53.6		27	21.2
150	31	13,289	-54.0		27	20.0
125	31	14,456	-55.6		27	19.1
100	31	15,869	-57.9		28	18.7
80	31	17,271	-59.4		28	18.1
70	31	18,104	-60.2		28	17.8
60	31	19,065	-60.7		28	18.2
50	31	20,196	-61.5		28	16.8
40	30	21,577	-62.3		28	16.1
30	29	23,363	-62.6		28	17.4
25	27	24,483	-62.2		28	18.4
20	25	25,886	-61.3		29	15.2
15	22	27,748	-58.4		28	15.6
10	14	30,431	-55.6		26	16.8
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JACKSON, MISS. 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	94	8.0	6.6	07	.4
1000	31	155			08	.7
950	31	582	9.2	4.9	21	4.3
900	31	1,030	8.7	3.0	23	6.1
850	31	1,502	7.8	.2	24	7.4
800	31	2,002	6.4	-3.1	24	9.1
750	31	2,527	4.0	-6.4	25	11.1
700	31	3,088	1.4	-11.3	25	12.2
650	31	3,677	-1.9	-14.8	26	14.3
600	31	4,315	-5.4	-18.8	26	17.1
550	31	4,986	-9.9	-22.4	25	19.6
500	31	5,722	-14.4	-28.0	25	21.7
450	31	6,507	-19.7	-32.1	25	23.6
400	31	7,378	-26.2	-37.3	26	26.0
350	31	8,331	-33.0	-43.8	25	29.5
300	31	9,397	-41.1	-47.3	25	31.9
250	31	10,611	-50.3		26	37.4
200	31	12,037	-58.8		26	41.7
175	31	12,869	-61.2		25	41.7
150	31	13,819	-63.8		26	39.1
125	31	14,927	-67.1		26	32.8
100	31	16,267	-68.9		26	25.0
80	29	17,598	-69.3		26	18.6
70	28	18,393	-68.5		26	14.0
60	27	19,321	-66.3		26	10.5
50	27	20,431	-63.9		27	7.9
40	24	21,805	-61.3		27	7.4
30	23	23,601	-57.7		27	8.7
25	22	24,757	-55.1		27	10.3
20	20	26,202	-51.0		28	9.5
15	18	28,097	-48.0		27	10.4
10	6	30,832	-44.0			
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* JACKSONVILLE, FLA. 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	12.0	10.5	31	1.6
1000	31	171	14.8	11.5	28	.6
950	31	602	13.1	8.5	21	4.1
900	31	1,058	11.2	4.7	23	5.7
850	31	1,535	9.6	.0	24	6.8
800	31	2,037	8.1	-6.1	25	8.2
750	31	2,566	6.3	-9.1	26	9.7
700	31	3,131	3.6	-11.5	26	11.4
650	31	3,725	.4	-14.9	26	12.8
600	31	4,367	-3.4	-18.6	26	14.9
550	31	5,039	-7.7	-23.1	26	16.4
500	31	5,786	-12.5	-26.7	26	18.2
450	31	6,573	-17.6	-30.6	26	22.1
400	31	7,455	-24.0	-35.0	26	23.9
350	31	8,416	-31.2	-41.2	26	25.9
300	31	9,490	-39.3	-47.8	26	29.9
250	31	10,716	-48.3		26	33.4
200	31	12,152	-58.1		26	38.0
175	31	12,986	-62.0		26	39.9
150	29	13,937	-64.6		27	36.7
125	26	15,042	-68.0		27	32.5
100	24	16,367	-71.1		27	26.2
80	24	17,680	-71.9		27	18.5
70	24	18,468	-70.4		27	14.6
60	23	19,393	-68.3		27	10.3
50	23	20,494	-64.9		27	5.9
40	23	21,868	-60.4		28	6.3
30	23	23,677	-56.0		27	7.7
25	23	24,844	-52.8		27	11.0
20	23	26,295	-49.0		27	13.4
15	20	28,202	-44.3		27	16.2
10	19	30,930	-42.8		25	19.5
7	15	33,324	-40.7		25	19.6
5	6	35,573	-38.1			

JOHN F. KENNEDY INT. AP NY 1020 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	1.6	-3.5	33	1.7
1000	31	163	1.5	-3.6	33	2.3
950	31	577	.2	-5.0	31	4.5
900	31	1,009	-.4	-7.8	30	5.9
850	31	1,466	-1.0	-9.2	29	8.7
800	31	1,950	-1.3	-10.7	28	12.1
750	31	2,464	-3.1	-11.8	28	15.1
700	31	3,007	-5.4	-14.9	28	16.7
650	31	3,585	-8.2	-17.4	28	20.2
600	31	4,205	-11.3	-20.5	28	22.0
550	31	4,865	-15.3	-24.0	28	24.4
500	31	5,582	-19.9	-28.4	28	26.7
450	31	6,352	-25.2	-33.1	28	28.6
400	31	7,202	-31.3	-38.7	28	32.4
350	31	8,136	-38.0	-42.3	27	35.2
300	31	9,182	-45.5		27	40.1
250	31	10,379	-52.8		27	43.7
200	31	11,803	-57.4		28	44.7
175	31	12,647	-57.2		28	40.5
150	31	13,620	-58.9		28	35.1
125	31	14,757	-61.3		28	29.8
100	30	16,138	-62.0		28	22.1
80	29	17,520	-62.4		28	17.6
70	28	18,337	-62.2		28	15.3
60	26	19,292	-61.8		27	11.4
50	26	20,422	-61.1		26	10.1
40	26	21,812	-60.0		26	8.6
30	25	23,610	-57.7		27	9.0
25	25	24,766	-55.7		27	11.1
20	24	26,191	-52.9		27	10.2
15	17	28,085	-47.8		27	14.1
10	13	30,734	-44.4			
7	5	33,216	-38.1			
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JOHNSTON IS., PACIFIC AREA 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	3	24.3	19.1	06	3.8
1000	30	108	23.4	18.6	06	4.6
950	30	552	19.7	16.2	06	5.0
900	30	1,018	16.5	13.2	05	4.2
850	30	1,504	14.0	8.3	05	3.2
800	30	2,014	12.5	-.1	03	2.9
750	30	2,553	10.9	-5.3	35	2.3
700	30	3,126	8.0	-8.7	32	2.3
650	30	3,730	4.5	-13.2	31	3.5
600	30	4,381	.7	-16.0	30	6.0
550	30	5,068	-3.6	-20.2	30	7.6
500	30	5,820	-8.3	-24.9	30	8.2
450	30	6,630	-13.5	-29.3	30	10.7
400	30	7,515	-20.2	-34.6	30	11.0
350	30	8,490	-27.4	-41.0	30	13.1
300	30	9,581	-35.1	-48.4	30	15.7
250	30	10,829	-43.4		29	17.9
200	30	12,297	-53.7		28	18.0
175	30	13,143	-59.8		28	19.4
150	29	14,088	-66.1		28	18.6
125	29	15,175	-72.6		29	15.8
100	28	16,470	-78.1		30	9.9
80	26	17,738	-78.8		32	2.9
70	26	18,504	-75.4		04	1.5
60	26	19,410	-69.5		07	3.5
50	26	20,511	-64.4		10	4.5
40	24	21,890	-60.1		09	5.7
30	24	23,711	-55.1		08	9.2
25	24	24,879	-53.0		08	12.1
20	23	26,327	-49.9		08	14.2
15	19	28,224	-47.4		09	15.7
10	11	30,913	-45.9			
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KING SALMON, ALASKA 1008 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	15	-11.9	-16.3	09	1.2
1000	31	77			08	1.7
950	31	476	-8.5	-14.2	07	2.7
900	31	895	-9.2	-14.7	01	1.3
850	31	1,336	-10.3	-17.3	27	1.7
800	31	1,803	-11.7	-20.1	26	2.4
750	31	2,293	-13.6	-23.1	26	3.3
700	31	2,819	-16.0	-26.4	26	3.8
650	31	3,370	-18.8	-29.1	26	5.1
600	31	3,967	-22.2	-31.3	25	6.5
550	31	4,597	-26.0	-34.8	26	7.8
500	31	5,286	-30.5	-37.5	26	9.5
450	31	6,025	-35.2	-37.8	25	12.3
400	31	6,842	-39.9	-42.5	25	14.1
350	31	7,744	-44.8		25	15.5
300	31	8,765	-49.3		25	18.6
250	31	9,950	-52.9		25	18.5
200	31	11,390	-52.0		25	17.0
175	31	12,257	-50.7		25	18.1
150	31	13,261	-51.0		25	17.9
125	31	14,445	-51.9		26	17.7
100	31	15,888	-52.4		26	18.6
80	31	17,331	-52.5		27	20.5
70	31	18,192	-52.7		27	22.6
60	31	19,189	-52.5		28	24.5
50	31	20,366	-52.9		28	23.1
40	30	21,794	-54.0		28	27.7
30	30	23,637	-55.0		29	32.2
25	29	24,796	-55.9		29	33.9
20	25	26,222	-56.3		29	38.2
15	21	28,063	-56.4		30	42.5
10	17	30,629	-59.8			
7	8	33,186	-57.5			
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* KOROR, CAROLINE IS. 1007 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	30	27.4	24.1	07	1.9
1000	31	96	26.8	23.4	07	2.4
950	31	544	23.2	19.3	07	4.8
900	31	1,020	20.2	15.3	07	5.6
850	31	1,512	17.6	11.2	07	4.9
800	31	2,030	15.2	7.4	07	4.5
750	31	2,569	12.8	2.3	07	4.6
700	31	3,152	9.6	-2.2	07	4.5
650	31	3,758	6.1	-6.2	07	4.3
600	31	4,417	2.7	-10.9	07	4.9
550	31	5,112	-1.2	-16.8	08	4.9
500	31	5,871	-5.2	-20.8	08	5.6
450	31	6,685	-9.9	-25.4	08	6.3
400	31	7,593	-15.5	-31.3	08	6.5
350	31	8,588	-22.3	-37.9	09	6.7
300	31	9,702	-30.9	-45.4	10	5.2
250	31	10,968	-41.2		11	4.4
200	31	12,443	-53.7		12	6.6
175	31	13,288	-60.8		12	7.6
150	31	14,229	-68.2		12	9.0
125	31	15,301	-76.5		11	10.7
100	31	16,565	-82.6		11	9.0
80	30	17,815	-78.8		08	3.1
70	30	18,584	-73.5		33	1.5
60	30	19,495	-69.2		28	3.2
50	30	20,595	-64.8		27	1.8
40	29	21,968	-60.8		10	6.5
30	27	23,775	-56.8		09	19.2
25	24	24,937	-53.1		09	24.5
20	23	26,385	-49.5		09	27.5
15	16	28,295	-45.9		09	31.3
10	7	31,006	-42.6			
7	5	33,424	-37.6			
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KOTZEBUE, ALASKA 1012 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	5	-17.3	-20.0	09	2.7
1000	30	93			10	3.3
950	30	486	-12.4	-16.0	11	3.5
900	30	897	-12.7	-16.7	12	2.0
850	30	1,333	-13.8	-17.1	09	.8
800	30	1,792	-15.3	-19.0	06	.4
750	30	2,279	-17.6	-22.1	21	.6
700	30	2,792	-20.2	-25.8	23	2.6
650	30	3,337	-23.5	-30.0	22	4.2
600	30	3,919	-27.2	-34.4	23	5.0
550	30	4,538	-31.2	-38.5	24	5.9
500	30	5,210	-35.5	-40.2	24	6.9
450	30	5,934	-40.2	-42.0	24	7.5
400	30	6,733	-45.1	-44.5	24	7.7
350	30	7,614	-50.1		23	10.9
300	30	8,610	-54.5		23	12.7
250	30	9,771	-56.9		23	15.1
200	30	11,185	-56.1		24	15.2
175	30	12,035	-55.1		25	16.3
150	30	13,021	-55.0		25	18.2
125	29	14,173	-55.5		26	20.4
100	29	15,593	-56.7		26	23.3
80	29	17,004	-57.8		26	26.6
70	29	17,844	-58.6		26	28.0
60	29	18,812	-59.2		27	31.8
50	27	19,985	-59.6		27	34.9
40	26	21,405	-59.8		27	39.8
30	23	23,283	-60.6		28	48.6
25	22	24,420	-60.8		29	48.0
20	13	25,908	-61.9			
15	11	27,713	-62.0		29	56.9
10						
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KWAJALEIN, MARSHALL IS. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	4	26.8	23.0	06	7.5
1000	31	91	26.3	22.2	06	8.5
950	31	543	22.9	19.9	07	10.0
900	31	1,013	19.6	16.1	07	10.0
850	31	1,504	17.2	11.8	08	8.7
800	31	2,021	15.1	7.3	08	8.1
750	31	2,567	13.4	-.4	09	7.6
700	31	3,145	10.7	-4.3	08	7.9
650	31	3,760	7.3	-10.4	08	8.0
600	31	4,414	3.7	-14.8	08	9.4
550	31	5,116	-.3	-18.2	08	9.8
500	31	5,871	-5.1	-21.9	08	9.8
450	31	6,691	-10.2	-29.2	08	10.7
400	31	7,589	-15.6	-33.1	07	10.0
350	31	8,583	-22.6	-39.5	07	7.8
300	31	9,695	-31.2	-46.0	07	4.1
250	31	10,959	-41.5	-54.0	04	.7
200	31	12,433	-53.6	-64.0	15	1.2
175	31	13,277	-60.8	-71.6	13	1.0
150	31	14,218	-68.6		01	.3
125	31	15,288	-76.6		05	1.3
100	31	16,549	-83.3		09	6.1
80	28	17,789	-81.3		08	6.5
70	28	18,548	-76.1		08	1.7
60	28	19,451	-70.8		28	3.1
50	28	20,543	-66.3		04	1.3
40	28	21,912	-61.5		09	7.3
30	27	23,704	-58.1		09	18.0
25	27	24,859	-55.1		09	23.3
20	27	26,298	-50.8		09	25.0
15	25	28,188	-46.7		09	30.4
10	24	30,891	-42.9		10	11.4
7	20	33,304	-40.1		23	7.9
5	11	35,611	-37.2		25	12.5

See reference note at end of table

RAWINSONDE DATA

Average monthly values

DECEMBER 1967

LAKE CHARLES, LA. 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	11.4	10.3	08	1.1
1000	31	149	12.1	9.3	12	1.9
950	31	580	11.2	7.4	20	4.3
900	31	1,030	10.3	2.5	23	5.5
850	31	1,506	9.0	-.2	24	7.2
800	31	2,007	7.4	-2.3	24	8.8
750	31	2,535	5.5	-6.4	24	9.6
700	31	3,099	3.2	-12.5	25	11.7
650	31	3,698	-.2	-16.6	25	13.8
600	31	4,332	-4.2	-19.1	25	16.0
550	31	5,011	-8.5	-24.3	25	16.9
500	31	5,745	-13.3	-27.7	25	19.4
450	31	6,537	-18.8	-33.0	25	21.1
400	31	7,408	-24.8	-37.4	25	23.2
350	31	8,366	-31.6	-43.3	25	27.2
300	31	9,438	-39.7	-48.1	25	30.8
250	31	10,661	-48.9		25	33.8
200	31	12,095	-58.1		25	37.3
175	31	12,929	-61.0		25	36.2
150	31	13,882	-63.2		25	35.2
125	30	14,999	-66.6		25	30.3
100	30	16,338	-69.5		25	24.1
80	30	17,665	-70.1		25	17.7
70	29	18,458	-69.7		25	13.4
60	29	19,382	-67.1		25	8.1
50	28	20,487	-64.0		27	6.7
40	28	21,862	-61.3		27	6.1
30	28	23,657	-58.3		27	9.1
25	28	24,810	-55.8		27	11.0
20	26	26,242	-52.5		27	15.0
15	19	28,100	-49.6		27	17.0
10	18	30,787	-45.8		27	23.5
7	7	33,174	-46.4			
5						
4						
3						

LANDER, WYO. 826 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,696	-10.5	-15.2	26	.7
1000	31	202				
950	31	601				
900	31	1,027				
850	31	1,474				
800	31	1,944	-7.3	-14.4	32	.4
750	31	2,446	-7.8	-15.3	32	1.9
700	31	2,982	-10.0	-17.5	31	6.0
650	31	3,546	-13.3	-20.6	31	9.3
600	31	4,157	-16.8	-23.7	30	11.7
550	31	4,802	-20.6	-28.4	30	12.0
500	31	5,505	-25.4	-32.9	30	13.3
450	31	6,258	-30.9	-37.8	29	14.5
400	31	7,089	-37.0	-41.9	29	17.0
350	31	8,001	-42.9	-45.5	29	18.9
300	31	9,028	-48.5		29	20.3
250	31	10,216	-52.8		28	20.7
200	30	11,638	-55.4		28	18.7
175	30	12,490	-55.5		28	18.0
150	30	13,473	-55.7		27	16.7
125	30	14,635	-55.7		28	16.4
100	30	16,052	-57.4		28	13.5
80	30	17,457	-58.8		28	10.7
70	30	18,294	-59.5		29	9.0
60	29	19,258	-59.9		30	8.7
50	28	20,396	-60.7		31	8.6
40	27	21,786	-61.1		32	11.1
30	24	23,587	-60.9		33	10.7
25	22	24,718	-61.0		32	12.2
20	18	26,103	-61.1		32	14.6
15	11	27,904	-59.8			

* LIHUE KAUAI, HAWAII 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	36	19.9	17.5	08	.8
1000	31	114	20.5	17.2	07	1.2
950	31	555	18.1	15.1	08	1.9
900	31	1,019	15.1	12.6	12	.9
850	31	1,502	12.1	9.5	19	.8
800	31	2,009	9.8	3.5	21	1.8
750	31	2,543	8.2	-4.8	23	2.6
700	31	3,112	5.6	-9.5	24	4.7
650	31	3,708	2.2	-12.8	25	6.7
600	31	4,357	-1.7	-16.1	25	8.4
550	31	5,035	-5.9	-22.9	26	8.9
500	31	5,785	-10.4	-26.2	26	10.7
450	31	6,583	-16.1	-29.9	25	12.5
400	31	7,465	-22.6	-35.5	26	13.5
350	31	8,432	-29.5	-42.0	26	15.8
300	31	9,514	-37.4	-49.6	26	16.3
250	31	10,752	-45.4		26	21.6
200	31	12,213	-53.8		26	25.6
175	31	13,062	-56.5		26	24.3
150	31	14,019	-63.7		26	19.6
125	31	15,124	-68.8		26	16.8
100	31	16,441	-74.0		26	13.4
80	31	17,739	-74.5		26	4.8
70	29	18,516	-71.8		11	1.3
60	28	19,436	-67.6		09	6.0
50	28	20,540	-64.7		10	7.1
40	28	21,914	-61.0		09	7.5
30	28	23,722	-55.9		08	6.1
25	28	24,887	-53.6		07	6.9
20	28	26,329	-50.8		09	8.6
15	28	28,212	-48.7		09	6.5
10	28	30,876	-49.0		13	3.8
7	27	33,228	-45.3		16	2.5
5	23	35,485	-41.6		22	8.2
4	17	37,009	-39.2		24	12.0
3	8	39,013	-34.3			

LITTLE ROCK, ARK. 1009 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	79	3.8	1.0	34	1.0
1000	31	15[illegible]			34	1.8
950	31	570	4.9	-.8	25	3.1
900	31	1,01[illegible]	6.2	-2.4	25	6.1
850	31	1,480	5.6	-2.9	25	8.9
800	31	1,975	3.9	-5.2	25	10.2
750	31	2,495	1.8	-8.6	25	11.3
700	31	3,053	-.6	-11.4	25	13.2
650	31	3,637	-3.6	-15.0	25	15.6
600	31	4,272	-7.2	-19.6	25	17.8
550	31	4,937	-11.5	-23.8	26	19.9
500	31	5,670	-16.1	-28.8	25	23.3
450	31	6,449	-21.6	-32.4	25	24.5
400	31	7,315	-27.8	-37.5	25	27.4
350	31	8,260	-35.0	-43.2	25	30.9
300	31	9,317	-42.9	-44.7	25	35.4
250	31	10,523	-51.6		26	40.1
200	31	11,945	-58.5		26	41.7
175	31	12,782	-60.0		26	40.1
150	31	13,739	-61.9		26	35.7
125	31	14,860	-64.4		26	31.2
100	29	16,210	-66.2		26	23.6
80	29	17,559	-66.6		26	17.2
70	28	18,372	-66.0		26	13.9
60	27	19,311	-64.7		26	10.0
50	25	20,433	-63.3		27	6.2
40	25	21,809	-61.3		27	5.5
30	25	23,604	-58.4		28	7.4
25	23	24,747	-56.7		28	8.7
20	20	26,163	-53.9		27	10.7
15	15	28,049	-48.7		26	18.3
10	7	30,798	-45.0			

MCGRATH, ALASKA 1000 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	103	-19.9	-22.3	16	.3
1000	29	101			17	.4
950	29	491	-13.6	-15.8	16	.8
900	29	900	-13.1	-15.8	14	.7
850	29	1,336	-12.7	-15.8	20	.9
800	29	1,798	-13.8	-17.7	17	1.[illegible]
750	29	2,281	-15.5	-20.1	21	1.5
700	29	2,805	-18.1	-23.6	22	1.6
650	29	3,350	-21.8	-27.9	23	2.1
600	29	3,941	-24.9	-31.2	23	2.[illegible]
550	29	4,565	-29.7	-36.3	25	4.[illegible]
500	29	5,245	-32.9	-37.5	24	5.4
450	29	5,976	-37.5	-40.0	27	7.5
400	29	6,783	-42.4	-41.3	28	8.6
350	29	7,675	-47.8		25	10.9
300	29	8,680	-52.3		25	14.4
250	29	9,852	-54.4		25	16.7
200	29	11,284	-53.0		26	16.5
175	29	12,146	-52.5		26	17.3
150	29	13,142	-52.5		26	18.7
125	29	14,318	-53.1		26	20.8
100	29	15,752	-54.1		27	21.8
80	29	17,181	-54.9		27	22.5
70	28	18,022	-55.1		27	25.4
60	28	19,005	-55.8		28	27.9
50	28	20,165	-56.0		28	31.4
40	28	21,582	-56.8		28	35.2
30	24	23,451	-57.1		28	40.4
25	21	24,648	-57.6		29	42.7
20	18	26,145	-57.8		29	47.4
15	12	28,038	-58.0			
10	7	30,664	-57.9			

◆ MAJURO, MARSHALL IS. 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	3	28.9	24.1	06	5.5
1000	31	93	27.3	20.7	06	6.6
950	31	537	23.2	17.3	07	9.0
900	31	1,015	20.2	13.1	07	9.1
850	31	1,507	17.3	9.1	08	7.5
800	31	2,023	15.0	5.5	09	7.0
750	31	2,567	13.3	-.3	09	6.2
700	31	3,147	10.9	-4.1	09	7.1
650	31	3,756	7.7	-8.6	08	8.5
600	31	4,417	3.9	-13.7	08	9.1
550	31	5,112	.0	-18.8	08	9.0
500	31	5,876	-4.7	-22.9	07	9.4
450	31	6,691	-9.7	-26.9	07	10.0
400	31	7,599	-15.0	-32.9	07	8.4
350	31	8,596	-21.8	-38.8	06	5.5
300	31	9,714	-30.0	-45.8	04	3.7
250	31	10,986	-40.1	-53.4	03	.4
200	31	12,471	-52.3		26	.8
175	31	13,321	-59.4		32	1.0
150	31	14,269	-67.1		33	2.6
125	30	15,349	-75.3		02	1.8
100	30	16,617	-82.4		06	4.7
80	29	17,864	-81.1		07	4.6
70	28	18,623	-74.9		07	.6
60	26	19,538	-69.0		27	3.8
50	24	20,638	-64.8		25	3.7
40	21	22,004	-61.3		09	3.9
30	16	23,802	-57.0		09	18.8
25	10	24,959	-53.9			
20	7	26,409	-49.3			
15						
10						
7						

◆ MARCUS IS., N. PACIFIC 1015 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	9	24.9	21.2	09	2.7
1000	31	144	22.9	18.6	09	3.4
950	31	589	19.5	14.6	10	3.4
900	31	1,054	16.9	10.5	13	2.5
850	31	1,540	14.8	6.2	17	2.7
800	31	2,052	12.4	2.4	19	3.3
750	31	2,592	9.8	-2.4	22	4.4
700	31	3,162	7.2	-7.2	24	5.7
650	31	3,768	4.2	-12.5	24	6.6
600	31	4,416	.4	-16.5	25	8.8
550	31	5,104	-3.5	-20.9	25	10.5
500	31	5,857	-7.6	-25.2	26	12.6
450	31	6,669	-12.1	-30.2	26	14.5
400	31	7,562	-17.7	-35.0	26	17.2
350	31	8,548	-24.8	-41.6	26	19.9
300	31	9,651	-32.7	-48.2	26	20.9
250	31	10,910	-42.2		27	21.9
200	31	12,383	-53.3		27	24.4
175	31	13,232	-59.3		27	24.2
150	31	14,182	-65.8		27	21.2
125	31	15,272	-72.3		26	18.1
100	31	16,564	-78.1		25	13.0
80	31	17,838	-77.8		24	7.6
70	31	18,605	-75.2		21	4.5
60	31	19,510	-69.4		15	3.6
50	31	20,614	-63.6		10	5.6
40	30	22,001	-58.5		10	8.1
30	27	23,836	-53.2		10	10.1
25	24	25,019	-50.6		10	11.2
20	22	26,483	-47.8		10	11.1
15	14	28,399	-44.2		11	8.9

* MEDFORD, OREG. 974 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	401	.2	-2.9	04	.2
1000	31	190				
950	31	605	.9	-2.1	11	.2
900	31	1,038	1.2	-4.2	17	2.4
850	31	1,498	.2	-7.2	25	1.8
800	31	1,983	-1.3	-9.6	30	3.8
750	31	2,496	-3.8	-11.6	30	6.1
700	31	3,039	-6.1	-16.2	31	9.6
650	31	3,616	-8.5	-19.4	31	12.4
600	31	4,235	-11.7	-22.9	32	14.1
550	31	4,889	-15.9	-26.0	32	15.8
500	31	5,609	-20.7	-30.6	32	17.3
450	31	6,374	-26.4	-34.5	32	18.8
400	31	7,222	-32.1	-40.0	32	21.9
350	31	8,152	-38.7	-46.1	32	24.4
300	31	9,197	-45.3		32	27.5
250	31	10,395	-51.2		32	29.5
200	31	11,823	-56.4		32	28.2
175	31	12,670	-57.0		32	25.1
150	31	13,644	-57.9		32	24.8
125	28	14,812	-59.9		32	19.9
100	28	16,201	-61.1		32	17.5
80	28	17,589	-60.6		33	13.1
70	28	18,421	-59.9		33	10.9
60	28	19,383	-59.9		33	10.2
50	28	20,524	-59.3		34	9.6
40	27	21,925	-59.5		35	10.2
30	26	23,734	-59.0		35	12.0
25	24	24,866	-59.4		35	12.9
20	22	26,259	-59.7		34	14.1
15	22	28,059	-59.4		33	18.0
10	18	30,595	-56.9		29	26.2
7	11	32,807	-50.8			

MERIDA, MEXICO 1017 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	11	19.4	18.6	09	2.7
1000	31	153	21.4	19.6	10	5.6
950	31	594	19.6	16.5	11	6.9
900	31	1,063	17.4	12.4	12	5.3
850	31	1,551	14.8	8.6	13	3.2
800	31	2,062	12.3	4.4	15	2.7
750	31	2,594	10.4	-1.8	16	3.0
700	31	3,174	7.8	-8.8	17	3.1
650	31	3,774	4.5	-13.8	18	3.2
600	31	4,429	.6	-17.4	19	2.6
550	31	5,112	-3.4	-22.6	21	3.3
500	31	5,871	-8.1	-26.4	22	4.3
450	31	6,674	-13.5	-32.5	23	5.7
400	31	7,568	-20.0	-37.8	23	7.4
350	31	8,545	-26.9	-42.4	25	8.5
300	31	9,637	-35.7	-49.7	25	11.0
250	31	10,878	-45.4		25	14.4
200	30	12,330	-56.1		24	16.2
175	30	13,168	-61.4		25	18.5
150	30	14,110	-67.2		24	20.0
125	30	15,194	-72.3		24	15.5
100	28	16,494	-76.0		24	12.6
80	27	17,781	-77.0		23	6.2
70	23	18,556	-75.1		21	2.9
60	23	19,462	-70.2		15	1.7
50	23	20,562	-64.0		08	1.6
40	23	21,952	-57.1		02	.8
30	23	23,792	-52.4		02	1.0
25	23	24,976	-50.5		06	1.8
20	22	26,448	-47.2		08	3.4
15	18	28,369	-43.9		05	1.3
10	6	31,067	-43.5			

* MIAMI, FLA. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	4	18.9	15.9	05	.9
1000	30	160	20.3	16.4	08	2.1
950	30	601	17.9	13.9	12	3.4
900	30	1,064	15.3	9.4	14	2.6
850	30	1,547	12.6	4.3	18	2.1
800	30	2,055	10.9	-1.0	22	2.2
750	30	2,593	9.2	-6.1	26	2.6
700	30	3,162	6.8	-11.5	27	4.2
650	30	3,766	3.8	-16.6	27	5.0
600	30	4,413	-.2	-20.1	27	7.0
550	30	5,098	-4.5	-23.8	27	9.0
500	30	5,849	-9.3	-26.6	27	10.7
450	30	6,653	-14.8	-30.9	27	13.2
400	30	7,538	-21.3	-36.0	27	14.8
350	30	8,510	-28.6	-41.7	26	16.8
300	30	9,595	-37.2	-48.6	27	19.1
250	30	10,830	-46.7		27	21.5
200	30	12,276	-56.7		27	27.2
175	30	13,114	-61.4		26	29.2
150	29	14,061	-66.0		27	27.7
125	29	15,155	-70.8		27	24.2
100	27	16,467	-74.5		27	19.3
80	27	17,761	-75.4		28	11.2
70	26	18,536	-74.1		28	7.7
60	26	19,441	-71.2		28	4.3
50	25	20,538	-64.7		27	4.8
40	24	21,918	-59.6		28	6.5
30	23	23,739	-54.3		28	7.7
25	23	24,917	-51.0		28	8.1
20	22	26,375	-48.3		28	8.4
15	21	28,292	-43.4		29	6.5
10	13	31,046	-43.7			
7	8	33,461	-40.2			

* MIDLAND, TEXAS 916 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	874	1.1	-3.3	32	.9
1000	31	165				
950	31	580				
900	31	1,021	3.7	-4.4	30	1.3
850	31	1,487	5.4	-6.4	27	4.8
800	31	1,983	5.2	-7.8	26	8.1
750	31	2,506	3.1	-10.5	26	10.9
700	31	3,065	.6	-13.2	26	13.4
650	31	3,651	-2.6	-16.3	26	15.0
600	31	4,287	-6.4	-20.3	25	17.0
550	31	4,956	-10.6	-25.5	26	20.2
500	31	5,688	-15.7	-30.2	26	20.5
450	31	6,466	-21.6	-35.0	25	23.2
400	31	7,332	-27.8	-40.5	25	25.9
350	31	8,278	-34.7	-45.7	25	28.3
300	31	9,337	-42.5		25	32.8
250	31	10,547	-50.7		25	35.9
200	31	11,978	-57.6		25	35.9
175	30	12,815	-59.6		25	33.6
150	30	13,775	-61.4		26	30.8
125	30	14,897	-64.4		26	25.3
100	30	16,254	-66.5		26	19.9
80	27	17,599	-66.2		27	13.2
70	26	18,411	-65.5		27	10.1
60	26	19,350	-64.1		27	6.9
50	25	20,471	-63.1		29	5.1
40	25	21,850	-60.8		28	3.6
30	23	23,649	-57.9		29	6.1
25	23	24,803	-55.4		28	9.9
20	22	26,235	-51.8		28	15.5
15	20	28,115	-49.1		28	19.1
10	20	30,785	-47.7		26	24.4
7	13	33,154	-43.0		25	23.3
5						

MONTGOMERY, ALA. 1013 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	61	8.4	6.2	07	.8
1000	31	162	8.9	5.4	10	1.0
950	31	594	9.8	4.7	22	2.4
900	31	1,038	9.3	2.2	24	5.3
850	31	1,512	8.5	.3	24	7.3
800	31	2,012	6.9	-2.7	25	8.7
750	31	2,540	4.6	-6.4	25	10.3
700	31	3,101	1.9	-10.0	26	12.2
650	31	3,694	-.8	-15.4	26	14.6
600	31	4,331	-4.4	-18.0	26	16.4
550	31	5,008	-8.8	-20.9	26	17.4
500	31	5,743	-13.5	-25.8	26	19.9
450	31	6,535	-19.1	-30.7	26	22.6
400	31	7,404	-25.3	-36.7	25	24.5
350	31	8,360	-32.2	-41.3	25	28.1
300	31	9,429	-40.5	-47.4	26	31.3
250	31	10,648	-49.4		26	33.6
200	31	12,080	-58.0		26	36.6
175	31	12,915	-61.2		26	35.8
150	30	13,860	-64.1		26	34.0
125	30	14,967	-67.3		26	29.3
100	30	16,306	-68.8		26	24.1
80	30	17,637	-69.8		26	17.3
70	29	18,433	-68.9		26	14.5
60	27	19,357	-66.3		27	10.8
50	27	20,467	-64.1		27	7.9
40	25	21,849	-61.2		27	7.6
30	23	23,651	-57.1		27	8.4
25	23	24,811	-54.6		27	9.8
20	23	26,251	-50.9		27	13.1
15	18	28,140	-46.6		27	19.2
10	13	30,860	-43.4		25	25.3
7	6	33,259	-41.4			

* NANTUCKET, MASS. 1018 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	14	1.9	-1.5	34	2.6
1000	31	155	1.7	-3.1	33	2.5
950	31	567	-.2	-5.1	32	5.6
900	31	1,000	-.7	-8.9	31	7.1
850	31	1,457	-1.3	-11.1	30	8.6
800	31	1,939	-2.3	-13.6	29	10.5
750	31	2,450	-4.2	-15.7	28	12.4
700	31	2,992	-6.5	-18.0	28	14.8
650	31	3,566	-9.3	-20.5	28	17.2
600	31	4,184	-12.7	-23.0	28	20.3
550	31	4,841	-16.6	-26.5	28	21.8
500	31	5,554	-21.1	-31.3	28	25.6
450	31	6,320	-26.3	-36.3	28	27.5
400	31	7,166	-32.2	-40.6	28	30.8
350	31	8,096	-38.7	-46.5	28	33.0
300	31	9,138	-45.9		28	38.2
250	31	10,332	-52.9		28	40.2
200	31	11,754	-57.1		28	39.1
175	31	12,598	-57.3		28	35.1
150	30	13,560	-58.1		28	31.3
125	29	14,702	-59.1		28	26.9
100	29	16,092	-61.1		28	20.7
80	28	17,469	-61.7		27	16.7
70	28	18,296	-61.4		27	15.1
60	28	19,253	-61.1		27	11.8
50	28	20,386	-60.7		27	10.4
40	28	21,775	-60.1		26	9.6
30	28	23,579	-57.6		27	10.3
25	28	24,733	-56.4		27	12.0
20	27	26,158	-52.9		27	12.5
15	26	28,030	-49.2		27	15.2
10	22	30,722	-44.2		26	23.9
7	19	33,122	-38.9		26	29.9
5	6	35,603	-32.6			

* NASHVILLE, TENN. 999 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	29	180	3.3	.7	09	.8
1000	29	168			02	1.2
950	29	585	4.0	-.2	21	3.1
900	29	1,026	4.6	-2.0	24	5.7
850	29	1,492	4.1	-3.7	26	7.5
800	29	1,984	2.6	-6.6	26	8.8
750	29	2,503	.6	-8.3	26	11.1
700	29	3,057	-1.7	-11.2	26	13.9
650	29	3,640	-4.8	-16.0	26	15.6
600	29	4,270	-8.4	-19.4	26	17.4
550	29	4,935	-12.5	-22.8	26	19.8
500	29	5,663	-17.2	-28.1	26	23.5
450	29	6,439	-22.5	-32.0	26	26.0
400	29	7,300	-28.7	-37.0	26	29.2
350	29	8,242	-35.7	-41.1	26	32.8
300	29	9,298	-43.2	-44.6	26	35.6
250	29	10,502	-52.1		26	40.5
200	29	11,922	-58.9		26	44.2
175	29	12,757	-60.0		26	41.9
150	29	13,715	-61.8		27	36.3
125	29	14,837	-63.9		26	29.8
100	28	16,193	-66.0		26	24.9
80	25	17,540	-66.0		26	19.4
70	25	18,351	-65.2		27	14.3
60	22	19,286	-64.3		27	11.3
50	22	20,405	-62.5		27	10.4
40	22	21,787	-60.6		27	8.2
30	22	23,587	-57.9		27	9.1
25	22	24,744	-54.8		27	9.6
20	22	26,183	-51.1		27	10.8
15	16	28,076	-48.1		26	13.2
10	16	30,768	-44.7		25	20.6
7	13	33,163	-40.9		25	26.1
5	6	35,538	-36.3			

NOME, ALASKA 1010 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	-12.0	-16.9	06	1.1
1000	31	79	-10.6	-15.5	07	1.5
950	31	478	-10.4	-14.4	12	2.6
900	31	891	-11.2	-15.9	12	2.7
850	31	1,328	-12.5	-17.7	12	2.0
800	31	1,790	-14.1	-19.7	12	1.0
750	31	2,280	-16.6	-22.0	19	.5
700	31	2,794	-19.1	-25.4	23	2.1
650	31	3,340	-22.3	-30.2	23	2.4
600	31	3,926	-26.1	-34.4	22	1.6
550	31	4,549	-30.0	-38.2	22	3.3
500	31	5,224	-34.4	-41.0	23	5.1
450	31	5,952	-38.9	-43.7	23	6.5
400	31	6,755	-43.8	-45.9	25	6.9
350	31	7,641	-49.2		26	8.8
300	31	8,643	-53.4		24	10.0
250	31	9,811	-55.1		24	11.9
200	31	11,239	-53.7		25	12.2
175	31	12,098	-52.9		25	14.6
150	31	13,093	-52.7		26	15.5
125	31	14,270	-53.0		26	18.0
100	31	15,704	-54.2		26	20.1
80	31	17,133	-54.5		26	24.3
70	31	17,987	-54.9		27	25.3
60	31	18,971	-55.5		27	28.8
50	31	20,132	-56.0		27	33.3
40	31	21,549	-56.5		27	36.8
30	31	23,368	-57.7		28	42.6
25	28	24,520	-57.5		28	47.7
20	26	25,952	-58.4		29	52.3
15	15	27,826	-57.1			
10	5	30,863	-54.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

DECEMBER 1967

* NORTH PLATTE, NEBR. 916 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	848	-9.1	-12.6	33	1.0
1000	31	163				
950	31	564				
900	31	986	-5.1	-10.5	32	4.2
850	31	1,438	-3.0	-10.6	31	7.0
800	31	1,917	-4.4	-12.9	30	7.4
750	31	2,421	-6.3	-15.5	30	7.8
700	31	2,962	-8.8	-17.8	29	8.8
650	31	3,527	-12.0	-21.1	28	9.8
600	31	4,142	-15.5	-24.6	28	12.1
550	31	4,789	-19.7	-29.9	28	13.8
500	31	5,495	-24.5	-33.3	27	15.4
450	31	6,248	-29.7	-38.7	27	17.2
400	31	7,086	-35.2	-44.3	27	18.6
350	31	8,005	-41.2	-45.4	27	20.8
300	31	9,039	-47.2		27	22.9
250	31	10,229	-52.8		26	27.0
200	31	11,662	-54.6		26	27.7
175	31	12,517	-54.3		26	25.8
150	31	13,504	-54.9		26	23.9
125	31	14,664	-57.2		27	20.2
100	31	16,068	-59.2		27	17.3
80	31	17,464	-59.9		28	13.4
70	31	18,296	-60.7		28	11.5
60	31	19,256	-60.9		29	11.1
50	31	20,390	-60.8		29	10.9
40	31	21,777	-60.8		30	11.4
30	30	23,566	-60.4		29	10.9
25	30	24,702	-60.3		29	13.5
20	27	26,119	-57.7		28	14.4
15	22	27,942	-53.8		27	18.4
10	19	30,602	-49.0		26	27.7
7	12	32,934	-45.8			
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* OAKLAND, CALIF. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	6	7.1	3.3	35	.9
1000	31	158	8.5	.3	01	1.5
950	31	581	7.0	-3.4	01	4.0
900	31	1,025	6.3	-7.1	36	6.7
850	31	1,493	4.6	-8.9	35	5.4
800	31	1,985	2.4	-12.4	34	5.3
750	31	2,502	.4	-16.4	34	6.6
700	31	3,054	-2.5	-18.6	33	8.3
650	31	3,634	-5.8	-21.5	34	10.7
600	31	4,262	-9.6	-24.9	33	12.8
550	31	4,923	-13.6	-28.8	33	14.0
500	31	5,648	-18.5	-32.8	33	15.3
450	31	6,418	-24.0	-36.5	33	18.0
400	31	7,277	-29.9	-42.4	32	20.6
350	31	8,215	-36.7	-47.8	32	20.4
300	31	9,265	-44.3		32	22.6
250	31	10,466	-52.0		32	23.2
200	31	11,888	-57.7		32	23.3
175	30	12,725	-57.4		32	22.1
150	30	13,696	-58.6		31	21.0
125	30	14,836	-60.9		31	19.0
100	28	16,215	-62.3		32	14.8
80	27	17,591	-62.3		32	11.0
70	27	18,416	-61.8		33	9.0
60	27	19,370	-61.3		35	7.3
50	26	20,505	-60.1		01	7.0
40	26	21,901	-59.4		02	8.1
30	26	23,704	-58.5		02	8.3
25	26	24,852	-57.7		02	7.3
20	23	26,262	-56.9		01	8.2
15	23	28,087	-56.2		34	11.1
10	22	30,674	-54.7		30	15.5
7	13	32,960	-51.3			

OMAHA, NEBR. 969 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	403	-4.4	-7.9	30	.8
1000	31	150				
950	31	554	-3.8	-8.3	31	2.1
900	31	982	-3.6	-10.3	30	4.7
850	31	1,434	-3.3	-12.2	29	6.3
800	31	1,913	-4.2	-14.2	29	7.7
750	31	2,420	-5.8	-15.4	28	9.6
700	31	2,960	-8.0	-18.4	27	11.3
650	31	3,529	-11.2	-21.5	27	13.2
600	31	4,143	-14.9	-24.6	26	15.9
550	31	4,790	-19.0	-28.7	25	18.0
500	31	5,499	-23.8	-33.3	25	20.1
450	31	6,254	-29.3	-37.0	25	23.4
400	31	7,093	-35.1	-42.2	26	27.6
350	31	8,011	-41.5	-44.9	26	30.1
300	31	9,043	-47.2		26	35.1
250	31	10,233	-52.7		26	40.0
200	31	11,664	-55.2		26	35.9
175	31	12,517	-55.2		27	32.9
150	31	13,498	-56.0		26	29.6
125	31	14,651	-58.1		27	24.7
100	29	16,052	-59.4		27	20.1
80	29	17,442	-60.6		27	16.1
70	29	18,271	-61.3		28	13.5
60	29	19,226	-61.5		28	11.8
50	29	20,355	-61.9		29	11.0
40	27	21,731	-61.5		29	12.8
30	25	23,505	-61.9		29	16.1
25	22	24,641	-60.4		28	18.9
20	21	26,049	-57.6		27	22.8
15	15	27,869	-55.5		27	29.1
10	8	30,544	-52.5			

* PAGO PAGO, AMERICAN SAMOA 1008 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	5	28.5	23.6	11	2.1
1000	31	74	27.2	21.6	10	2.2
950	31	520	22.8	17.6	10	2.8
900	31	995	19.4	14.1	09	2.1
850	31	1,486	16.9	9.9	10	1.5
800	31	2,002	15.3	6.6	09	.8
750	31	2,545	13.2	1.3	11	1.0
700	31	3,126	10.3	-2.0	15	.4
650	31	3,735	7.2	-5.9	19	.8
600	31	4,394	3.4	-9.5	21	.9
550	31	5,089	-.6	-13.6	23	1.3
500	31	5,852	-4.9	-19.2	24	1.6
450	31	6,668	-9.6	-24.7	23	2.8
400	31	7,574	-15.3	-30.0	23	3.9
350	31	8,570	-22.2	-36.5	24	5.8
300	31	9,685	-30.5	-44.3	24	6.1
250	31	10,954	-40.5	-52.0	25	6.9
200	31	12,436	-52.6		25	9.5
175	30	13,287	-59.4		24	9.5
150	30	14,236	-66.7		24	9.7
125	29	15,317	-73.8		24	8.3
100	29	16,595	-80.9		23	5.8
80	29	17,849	-79.9		14	3.4
70	28	18,614	-74.5		11	4.8
60	27	19,525	-68.8		10	6.8
50	26	20,630	-63.8		08	8.2
40	25	22,014	-58.6		09	12.2
30	21	23,843	-54.2		08	16.8
25	15	25,018	-51.6		09	21.1
20	10	26,497	-47.8			

* PEORIA, ILL. 994 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	200	-2.3	-4.2	24	.5
1000	31	151				
950	31	562	-2.1	-6.6	27	2.6
900	31	989	-1.4	-8.2	27	5.1
850	31	1,445	-1.9	-8.9	27	7.5
800	31	1,927	-2.2	-10.9	27	8.7
750	31	2,435	-3.9	-12.9	27	10.9
700	31	2,981	-6.3	-16.0	26	14.0
650	31	3,559	-9.2	-19.1	26	16.3
600	31	4,174	-12.4	-22.6	26	18.6
550	31	4,830	-16.7	-26.3	26	21.1
500	31	5,543	-21.6	-30.1	26	23.8
450	31	6,307	-26.7	-34.9	26	26.3
400	31	7,151	-32.6	-40.1	25	33.0
350	31	8,078	-39.4	-45.2	25	35.1
300	31	9,118	-46.5		25	38.1
250	31	10,310	-53.3		25	42.1
200	31	11,732	-57.1		26	40.6
175	31	12,578	-57.2		26	38.7
150	31	13,550	-58.6		26	34.6
125	30	14,688	-59.8		26	28.1
100	30	16,075	-61.9		26	22.7
80	30	17,453	-62.5		27	18.0
70	30	18,276	-62.4		26	14.7
60	30	19,228	-62.4		27	14.1
50	29	20,350	-62.3		28	12.8
40	29	21,728	-62.1		27	12.1
30	25	23,515	-59.5		27	13.7
25	24	24,651	-57.9		27	16.4
20	23	26,065	-54.9		27	18.6
15	22	27,915	-51.2		26	23.1
10	18	30,575	-47.5		26	26.2
7	16	32,994	-41.7		25	26.5
5	6	35,349	-37.1			

* PITTSBURGH, PA. 976 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	359	-.5	-3.9	22	1.9
1000	31	163				
950	31	574	.2	-3.9	23	4.5
900	31	1,007	-.8	-5.4	26	8.1
850	31	1,463	-1.4	-8.7	26	10.0
800	31	1,946	-2.5	-10.2	27	12.6
750	31	2,457	-3.5	-11.4	27	14.8
700	31	3,000	-5.8	-14.7	26	16.8
650	31	3,575	-8.5	-18.2	27	18.8
600	31	4,195	-11.8	-22.3	27	21.5
550	31	4,857	-16.1	-25.7	27	23.4
500	31	5,567	-20.6	-29.2	27	25.2
450	31	6,336	-25.8	-34.3	27	28.6
400	31	7,183	-31.1	-39.3	27	31.4
350	31	8,117	-37.7	-42.5	26	34.6
300	31	9,162	-45.3		26	38.7
250	31	10,360	-52.3		27	42.4
200	31	11,784	-57.0		27	43.7
175	31	12,629	-57.3		27	40.2
150	31	13,599	-58.8		27	34.6
125	30	14,731	-61.3		27	28.7
100	28	16,115	-63.2		27	23.0
80	25	17,480	-63.1		27	20.8
70	24	18,297	-62.9		27	17.5
60	22	19,239	-62.4		27	15.2
50	22	20,365	-62.2		27	12.9
40	22	21,746	-61.1		27	13.0
30	22	23,538	-59.3		27	13.9
25	20	24,691	-56.9		27	14.9
20	18	26,108	-54.9		27	16.2
15	17	27,969	-49.9		26	17.5
10	14	30,676	-45.2		26	20.8
7	12	33,117	-39.8		26	26.1
5	9	35,614	-35.2			

* PONAPE, CAROLINE IS. 1005 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	39	28.5	24.0	06	4.4
1000	31	81	28.1	23.2	07	5.2
950	31	528	23.9	18.5	07	8.3
900	31	1,007	20.9	14.9	07	10.0
850	31	1,501	18.2	10.0	08	8.7
800	31	2,019	16.2	3.8	08	7.8
750	31	2,565	13.8	-2.0	09	6.1
700	31	3,145	10.8	-6.0	10	6.4
650	31	3,756	7.3	-9.7	09	7.6
600	31	4,414	3.6	-14.4	09	8.1
550	31	5,111	-.4	-18.0	10	8.8
500	31	5,872	-5.0	-22.1	11	8.2
450	31	6,691	-9.6	-26.7	11	8.0
400	31	7,596	-14.9	-32.6	10	8.5
350	31	8,594	-21.5	-39.1	11	4.9
300	31	9,712	-30.0	-46.4	11	2.9
250	31	10,983	-40.2	-54.6	14	1.9
200	31	12,465	-52.6		16	2.0
175	31	13,314	-59.6		13	2.6
150	31	14,261	-67.2		10	2.7
125	31	15,338	-75.4		07	4.4
100	31	16,605	-82.4		08	8.0
80	31	17,854	-79.3		09	6.5
70	30	18,622	-74.0		09	1.5
60	30	19,532	-68.8		26	3.5
50	28	20,631	-64.7		28	2.5
40	28	22,004	-61.2		08	3.3
30	27	23,810	-57.1		09	18.9
25	25	24,967	-54.5		09	23.7
20	22	26,408	-50.1		09	27.2
15	18	28,290	-47.6		09	30.2
10	11	31,021	-40.4			

PORTLAND, MAINE 1017 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	20	-4.3	-8.4	33	1.5
1000	31	150	-2.7	-7.7	34	2.2
950	31	554	-3.8	-9.1	33	4.3
900	31	982	-4.6	-10.9	32	5.7
850	31	1,433	-4.6	-13.0	30	7.2
800	31	1,909	-5.4	-15.4	29	9.9
750	31	2,411	-6.7	-17.2	28	12.5
700	31	2,953	-8.8	-19.6	28	15.1
650	30	3,516	-11.6	-22.2	28	17.2
600	30	4,134	-15.2	-24.5	28	18.0
550	30	4,779	-19.2	-28.5	28	19.4
500	30	5,490	-23.5	-32.5	28	21.9
450	30	6,244	-28.7	-36.8	28	24.7
400	30	7,088	-34.1	-40.3	28	28.1
350	30	8,010	-40.6	-43.5	27	30.8
300	30	9,044	-47.5		27	33.7
250	30	10,231	-54.0		27	35.8
200	30	11,651	-55.9		27	34.7
175	30	12,500	-56.4		27	30.6
150	30	13,477	-56.7		27	29.0
125	30	14,628	-58.6		27	24.0
100	30	16,023	-60.0		27	19.9
80	30	17,413	-60.7		27	15.2
70	30	18,243	-60.9		27	14.0
60	30	19,201	-61.3		26	11.8
50	30	20,332	-61.5		26	12.4
40	30	21,717	-60.5		27	10.9
30	29	23,515	-58.9		26	10.9
25	29	24,662	-57.5		26	9.9
20	27	26,083	-55.4		26	13.2
15	24	27,915	-52.0		27	19.0
10	19	30,546	-46.0		26	31.4
7	10	32,994	-41.6			
5	6	35,330	-34.4			

* QUILLAYUTE, WASH. 1012 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	58	3.9	2.7	14	1.7
1000	30	150			13	1.8
950	30	566	2.4	-.1	22	2.6
900	30	1,003	.7	-2.3	25	4.6
850	30	1,461	-.9	-6.4	27	6.6
800	30	1,944	-3.0	-9.2	27	7.1
750	30	2,453	-5.8	-11.7	28	8.6
700	30	2,990	-9.1	-16.1	29	10.4
650	30	3,556	-12.3	-20.5	29	12.7
600	30	4,168	-15.3	-23.8	30	14.9
550	30	4,817	-18.9	-26.9	30	16.7
500	30	5,526	-22.9	-31.3	30	19.7
450	30	6,285	-28.1	-36.5	30	22.2
400	30	7,127	-34.1	-40.2	30	23.2
350	30	8,048	-40.7	-43.8	31	26.8
300	30	9,081	-47.4		31	29.5
250	30	10,271	-52.9		31	30.4
200	30	11,698	-55.9		31	26.5
175	30	12,547	-56.2		31	24.5
150	29	13,525	-56.1		32	23.5
125	26	14,681	-56.6		32	21.2
100	22	16,074	-56.1		32	17.1
80	19	17,483	-55.3		31	13.2
70	17	18,356	-55.4		32	12.7
60	16	19,336	-55.0		33	13.4
50	15	20,489	-55.6		34	13.6
40	14	21,905	-57.0		33	12.2
30	13	23,706	-58.2		34	13.8
25	13	24,856	-57.9		34	13.2
20	12	26,268	-59.5		34	15.5
15	11	28,094	-60.9		34	19.8
10	5	30,680	-59.4			

RAPID CITY, S. DAK. 902 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	966	-7.1	-14.5	32	2.5
1000	31	153				
950	31	560				
900	31	985			31	2.4
850	31	1,433	-4.6	-12.1	31	7.1
800	31	1,909	-6.1	-12.9	31	9.3
750	31	2,405	-8.5	-15.3	31	10.3
700	31	2,944	-11.2	-18.9	30	10.3
650	31	3,502	-14.0	-22.4	29	11.4
600	31	4,114	-17.5	-26.2	29	12.0
550	31	4,753	-21.5	-29.7	29	14.1
500	31	5,456	-26.3	-33.6	29	14.1
450	30	6,207	-30.6	-37.7	29	16.7
400	30	7,043	-36.7	-43.0	29	18.7
350	30	7,955	-43.1	-45.6	29	21.1
300	30	8,979	-49.4		29	22.0
250	30	10,158	-54.6		28	22.8
200	30	11,582	-55.3		26	20.7
175	30	12,437	-54.4		27	19.9
150	30	13,424	-54.6		28	18.6
125	30	14,588	-55.9		28	16.6
100	30	16,000	-58.0		28	14.6
80	30	17,402	-58.8		29	13.8
70	30	18,239	-59.5		29	13.1
60	30	19,200	-60.5		29	12.8
50	29	20,332	-60.9		30	11.9
40	27	21,731	-60.8		31	13.3
30	24	23,526	-61.6		31	13.9
25	24	24,653	-62.2		30	16.5
20	19	26,045	-61.2		30	16.4
15	15	27,854	-58.9		29	17.9
10	7	30,418	-56.4			

ST CLOUD, MINN. 978 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	316	-9.4	-12.9	25	1.4
1000	31	140				
950	31	538	-8.4	-11.9	27	2.8
900	31	958	-8.0	-13.3	27	5.7
850	31	1,402	-7.5	-15.0	28	7.5
800	31	1,874	-8.2	-16.8	28	9.0
750	31	2,373	-9.2	-19.4	28	10.9
700	31	2,906	-11.1	-21.0	28	11.7
650	31	3,468	-14.2	-23.3	27	13.0
600	31	4,076	-17.5	-26.4	27	15.6
550	31	4,718	-21.8	-30.8	27	17.8
500	31	5,418	-26.6	-34.8	27	19.1
450	31	6,160	-31.8	-38.7	26	21.3
400	31	6,995	-37.7	-43.6	27	23.3
350	31	7,904	-44.1	-46.6	26	25.5
300	31	8,926	-49.8		26	28.1
250	31	10,107	-53.7		27	30.5
200	31	11,540	-54.3		27	28.7
175	31	12,396	-54.1		27	25.7
150	31	13,384	-55.1		27	22.9
125	30	14,540	-56.3		27	22.7
100	30	15,951	-58.0		28	20.3
80	30	17,352	-59.1		28	18.8
70	30	18,187	-60.0		28	17.1
60	29	19,142	-61.0		28	16.8
50	29	20,273	-61.5		28	16.8
40	28	21,651	-62.0		28	17.2
30	25	23,436	-61.9		28	18.5
25	24	24,581	-60.6		28	18.8
20	21	25,961	-60.4		27	19.4
15	11	27,754	-56.6		26	25.8
10	6	30,416	-46.0			

ST PAUL IS., ALASKA 1003 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	10	-.2	-3.3	14	2.5
1000	31	35			13	4.9
950	31	443	-3.4	-5.6	16	5.7
900	31	869	-6.4	-8.9	18	7.1
850	31	1,314	-8.4	-12.6	18	7.0
800	31	1,783	-10.9	-16.5	20	6.7
750	31	2,275	-13.7	-20.7	20	6.9
700	31	2,798	-16.3	-24.5	21	7.7
650	31	3,351	-19.1	-27.8	21	7.5
600	31	3,945	-22.7	-31.6	22	7.7
550	31	4,576	-26.6	-35.6	22	8.0
500	31	5,260	-31.1	-39.2	22	8.8
450	31	5,998	-36.0	-40.7	23	9.3
400	31	6,809	-40.8	-43.4	22	11.5
350	31	7,709	-45.3		21	13.9
300	31	8,726	-50.0		21	16.3
250	31	9,911	-51.8		22	16.6
200	31	11,360	-50.2		21	15.0
175	30	12,231	-49.2		22	15.4
150	30	13,242	-49.3		22	14.8
125	30	14,436	-49.3		22	15.2
100	30	15,898	-49.4		23	14.0
80	30	17,361	-49.3		23	11.5
70	30	18,236	-49.2		24	10.2
60	29	19,244	-49.4		26	10.3
50	29	20,438	-49.3		27	13.0
40	28	21,912	-49.3		28	13.3
30	27	23,792	-50.7		30	15.8
25	26	24,975	-51.2		30	18.6
20	23	26,461	-53.0		31	22.4
15	22	28,318	-54.9		32	28.9
10	13	30,898	-57.7			

SALEM, OREG. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	30	61	4.6	1.9	18	2.7
1000	30	165			19	3.3
950	30	582	3.1	.7	21	5.6
900	30	1,020	.9	-2.3	23	5.4
850	30	1,478	-1.0	-5.7	26	5.3
800	30	1,960	-3.1	-10.0	27	6.7
750	30	2,466	-5.5	-13.9	28	8.8
700	30	3,008	-8.0	-16.0	29	10.1
650	30	3,577	-11.1	-18.6	30	12.9
600	30	4,191	-14.2	-21.7	30	15.6
550	30	4,840	-17.9	-26.1	31	17.9
500	30	5,553	-22.1	-29.9	31	20.7
450	30	6,313	-27.5	-35.5	31	22.4
400	30	7,157	-33.6	-40.4	31	23.8
350	30	8,081	-40.1	-45.8	30	25.0
300	30	9,118	-46.6		31	25.2
250	30	10,310	-52.7		31	28.0
200	29	11,726	-56.3		31	25.3
175	29	12,573	-56.9		31	24.1
150	29	13,549	-57.4		31	23.7
125	29	14,700	-57.8		31	20.9
100	28	16,109	-58.5		31	17.4
80	28	17,511	-58.5		31	13.5
70	28	18,351	-58.2		31	12.4
60	28	19,319	-58.5		32	10.8
50	28	20,465	-58.6		33	10.0
40	27	21,872	-59.0		34	11.1
30	24	23,683	-58.4		34	12.2
25	22	24,825	-59.4		34	13.4
20	20	26,240	-59.9		34	17.1
15	15	28,033	-62.0		34	18.2
10	7	30,608	-58.8			

SALT LAKE CITY, UTAH 873 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,288	-4.9	-9.4	17	1.5
1000	31	203				
950	31	613				
900	31	1,041				
850	31	1,494	-3.6	-9.5	19	1.9
800	31	1,972	-5.1	-10.7	21	1.9
750	31	2,478	-7.7	-12.4	25	3.3
700	31	3,011	-10.1	-15.0	29	5.3
650	31	3,577	-12.9	-17.8	30	7.8
600	31	4,186	-16.2	-21.4	30	10.5
550	31	4,833	-20.2	-26.2	30	12.2
500	31	5,536	-25.0	-31.0	30	13.3
450	31	6,290	-29.9	-35.8	30	14.5
400	29	7,125	-35.2	-40.9	30	17.8
350	29	8,044	-41.5	-45.2	30	19.8
300	29	9,077	-47.5		31	20.6
250	29	10,268	-52.5		31	23.2
200	29	11,699	-55.6		30	23.3
175	29	12,548	-55.9		30	21.3
150	29	13,526	-56.9		30	20.4
125	29	14,678	-58.1		30	19.2
100	29	16,079	-59.1		29	15.2
80	29	17,476	-59.8		29	12.9
70	29	18,309	-60.0		30	10.5
60	29	19,270	-60.7		31	8.9
50	28	20,409	-61.0		31	8.8
40	28	21,795	-60.5		32	9.2
30	27	23,585	-60.9		32	10.2
25	25	24,723	-59.6		31	11.8
20	24	26,118	-59.9		29	16.5
15	19	27,927	-57.0		28	22.5
10	13	30,535	-50.9			

SAN DIEGO, CALIF. 1001 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	124	7.6	4.7	07	1.1
1000	31	134			08	.9
950	31	559	10.4	.4	30	.9
900	31	1,011	8.3	-2.7	31	1.7
850	31	1,482	6.4	-6.5	30	2.3
800	31	1,978	4.4	-10.1	30	3.1
750	31	2,500	2.2	-12.6	31	5.2
700	31	3,056	-.7	-16.3	30	6.6
650	31	3,643	-3.9	-18.6	30	7.1
600	31	4,273	-7.6	-23.4	31	8.8
550	31	4,938	-12.1	-27.6	30	10.6
500	31	5,667	-17.3	-31.6	30	13.1
450	31	6,443	-22.8	-36.9	30	14.5
400	31	7,305	-28.9	-42.3	30	15.2
350	31	8,246	-35.7	-48.1	30	15.2
300	30	9,311	-43.2	-50.6	30	15.3
250	30	10,519	-50.5		31	15.7
200	30	11,952	-56.1		30	17.7
175	30	12,797	-57.6		29	18.4
150	30	13,766	-59.3		29	19.8
125	30	14,899	-62.4		29	18.7
100	30	16,269	-64.7		29	13.8
80	30	17,627	-65.1		30	9.4
70	30	18,442	-64.1		31	6.8
60	30	19,388	-62.8		32	4.5
50	30	20,513	-61.9		35	4.4
40	30	21,897	-60.3		01	4.4
30	30	23,703	-57.6		36	5.1
25	28	24,864	-55.9		34	4.6
20	27	26,293	-52.8		30	7.5
15	27	28,156	-51.4		29	13.2
10	16	30,802	-49.6		26	19.6

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	6	22.9	19.7	12	1.2
1000	31	148	22.8	18.5	09	4.4
950	31	591	19.7	15.7	07	6.6
900	31	1,058	16.4	12.8	07	5.8
850	31	1,543	13.6	8.2	07	5.0
800	31	2,052	11.3	1.6	07	4.1
750	31	2,587	10.0	-7.1	06	3.3
700	31	3,161	7.8	-10.8	05	3.6
650	31	3,760	5.0	-16.2	03	3.8
600	31	4,417	1.3	-20.6	02	3.8
550	31	5,102	-2.8	-24.4	36	3.5
500	31	5,861	-7.4	-27.9	35	4.2
450	31	6,666	-12.8	-32.4	34	5.4
400	31	7,561	-19.5	-37.6	32	6.3
350	31	8,538	-27.0	-43.6	32	9.6
300	31	9,631	-35.0	-50.6	31	13.2
250	31	10,878	-44.3		30	17.3
200	31	12,338	-55.0		29	20.1
175	30	13,177	-61.1		29	20.1
150	30	14,120	-67.2		29	19.5
125	30	15,203	-72.9		30	18.1
100	30	16,496	-77.3		31	11.5
80	30	17,769	-78.2		32	8.0
70	30	18,534	-75.8		33	4.6
60	30	19,437	-69.2		35	3.4
50	29	20,548	-61.5		02	2.4
40	29	21,949	-56.4		07	2.9
30	28	23,789	-52.8		08	6.3
25	28	24,970	-50.7		08	11.1
20	28	26,431	-48.1		09	13.7
15	24	28,334	-45.5		09	13.7
10	16	31,069	-41.4		09	12.0
7	14	33,487	-39.1		11	8.1
5	5	35,752	-36.9			
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SAN NICOLAS, CALIF. 996 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	30	174	10.7	5.1	33	3.3
1000	30	137				
950	30	567	11.2	-1.7	34	4.8
900	30	1,017	8.9	-5.8	34	4.4
850	30	1,488	6.9	-9.9	33	4.7
800	30	1,984	4.9	-13.6	32	6.2
750	30	2,508	2.3	-15.6	31	7.3
700	30	3,062	-.7	-19.1	31	8.0
650	30	3,650	-4.1	-21.7	31	9.2
600	30	4,276	-8.1	-24.4	31	10.4
550	30	4,946	-12.5	-28.3	31	12.6
500	30	5,668	-17.3	-33.2	31	13.8
450	30	6,448	-23.0	-38.8	31	15.4
400	30	7,300	-29.3	-43.9	31	16.3
350	30	8,241	-36.1	-49.2	31	17.0
300	30	9,294	-43.7	-55.5	32	18.0
250	30	10,498	-51.0	-61.7	31	18.7
200	30	11,929	-56.6	-66.8	30	17.3
175	30	12,774	-57.8	-68.0	29	18.3
150	30	13,742	-59.6	-69.9	29	17.9
125	29	14,876	-62.2		30	20.6
100	29	16,245	-65.1		30	11.5
80	28	17,607	-65.5		31	9.4
70	28	18,422	-64.0		33	6.3
60	28	19,368	-62.9		34	4.3
50	28	20,494	-62.0		01	4.2
40	28	21,879	-60.6		02	5.7
30	28	23,681	-58.4		01	6.5
25	28	24,833	-56.6		35	6.1
20	28	26,256	-53.8		31	7.2
15	28	28,111	-51.7		29	12.4
10	26	30,741	-51.0		28	16.7
7	25	33,069	-48.4		28	20.8
5	16	35,327	-45.7		28	25.7
4	8	36,805	-44.9			

* SAULT STE MARIE, MICH. 989 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	221	-6.4	-8.3	19	.3
1000	31	135				
950	31	536	-6.2	-9.2	27	2.1
900	31	958	-7.5	-10.6	27	4.4
850	31	1,403	-8.6	-12.6	27	6.1
800	31	1,872	-9.5	-15.4	28	7.3
750	31	2,372	-10.6	-18.0	28	9.9
700	31	2,899	-12.3	-20.9	27	12.5
650	31	3,461	-15.1	-24.3	27	13.8
600	31	4,065	-18.2	-26.4	27	17.4
550	31	4,705	-22.1	-30.0	27	20.0
500	31	5,405	-26.6	-34.3	27	21.9
450	31	6,152	-31.5	-38.7	27	24.5
400	30	6,981	-37.6	-43.6	27	26.8
350	30	7,890	-43.9		27	29.1
300	30	8,911	-49.8		27	32.2
250	29	10,091	-54.1		27	33.1
200	29	11,521	-54.2		26	31.9
175	29	12,377	-54.2		26	30.5
150	29	13,364	-54.8		27	26.8
125	29	14,526	-56.4		27	23.7
100	29	15,936	-58.3		26	19.8
80	29	17,333	-59.9		27	18.3
70	29	18,165	-60.6		26	17.2
60	29	19,123	-61.2		27	16.2
50	29	20,254	-61.3		26	16.8
40	28	21,626	-61.5		26	16.8
30	28	23,410	-61.2		26	16.8
25	28	24,545	-59.8		26	18.4
20	26	25,961	-57.0		26	21.0
15	23	27,782	-53.9		25	24.3
10	19	30,410	-47.5		26	32.5
7	12	32,803	-43.1			
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SHEMYA, ALASKA 995 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	38	.5	-1.7	22	4.3
1000	31	-3				
950	31	409	-2.1	-5.0	25	5.0
900	31	835	-5.3	-7.0	26	5.3
850	31	1,281	-8.2	-10.8	27	4.3
800	31	1,750	-11.2	-16.1	27	3.1
750	31	2,243	-14.1	-19.8	27	4.2
700	31	2,764	-16.8	-23.1	27	4.8
650	31	3,317	-19.8	-26.5	27	5.8
600	31	3,908	-23.5	-30.0	26	7.0
550	31	4,536	-27.4	-34.4	26	8.1
500	31	5,219	-32.2	-39.0	25	9.4
450	31	5,954	-37.0	-39.7	25	9.2
400	31	6,764	-42.1	-42.6	24	9.1
350	31	7,659	-46.1		23	10.6
300	31	8,678	-48.6		23	10.2
250	31	9,871	-49.9		24	11.4
200	31	11,334	-48.7		24	12.8
175	31	12,211	-48.7		24	13.9
150	31	13,224	-48.3		24	12.0
125	31	14,426	-48.0		23	13.1
100	29	15,884	-47.0		23	13.2
80	28	17,359	-47.7		23	14.2
70	28	18,240	-47.2		23	13.6
60	28	19,262	-47.2		24	13.5
50	28	20,471	-46.4		23	13.6
40	28	21,953	-46.3		24	13.9
30	28	23,866	-46.2		24	12.2
25	27	25,083	-46.5		25	12.2
20	27	26,563	-47.1		27	11.4
15	26	28,471	-48.4		28	10.0
10	25	31,130	-50.3		31	13.0
7	20	33,503	-51.3			
5	9	35,696	-52.7			
4						

* SHREVEPORT, LA. 1009 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	79	6.6	4.8	12	.2
1000	31	149			10	.8
950	31	578	7.9	2.9	24	4.2
900	31	1,020	8.3	.9	24	6.5
850	31	1,492	6.7	-2.1	24	7.6
800	31	1,989	5.5	-5.5	25	8.8
750	31	2,514	3.8	-8.9	25	10.6
700	31	3,074	1.1	-12.8	25	13.1
650	31	3,665	-2.3	-16.9	25	15.2
600	31	4,299	-6.0	-22.2	25	17.3
550	31	4,969	-10.4	-25.9	25	19.4
500	31	5,703	-15.1	-30.1	25	21.7
450	31	6,486	-20.5	-34.6	25	23.5
400	31	7,355	-26.9	-38.8	25	25.9
350	31	8,304	-33.9	-44.2	25	28.3
300	31	9,366	-41.9	-47.1	25	32.9
250	31	10,576	-51.0		25	37.0
200	31	11,999	-58.6		26	40.2
175	31	12,833	-60.9		25	38.3
150	31	13,766	-62.7		26	34.3
125	31	14,901	-65.8		25	27.4
100	30	16,244	-67.4		26	22.4
80	30	17,565	-67.9		25	17.1
70	28	18,384	-66.8		26	14.3
60	27	19,317	-65.4		26	10.8
50	27	20,432	-62.9		27	8.4
40	25	21,615	-60.8		28	8.7
30	24	23,611	-58.1		27	7.7
25	23	24,766	-55.7		27	9.7
20	22	26,197	-51.6		28	9.6
15	20	28,081	-48.3		27	14.6
10	19	30,771	-45.8		27	17.6
7	15	33,182	-42.2		25	13.7
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4						

SPOKANE, WASH. 933 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	717	-3.0	-5.1	17	2.0
1000	31	161				
950	31	569				
900	31	1,000	-2.5	-6.0	21	3.7
850	31	1,453	-3.7	-8.2	24	5.5
800	31	1,930	-5.5	-10.3	26	6.0
750	31	2,429	-8.1	-13.0	27	7.1
700	31	2,967	-11.1	-16.2	28	8.6
650	31	3,528	-14.2	-20.0	29	9.6
600	31	4,136	-17.4	-24.1	30	11.5
550	31	4,776	-21.3	-28.1	29	14.2
500	31	5,480	-25.4	-33.5	30	15.1
450	31	6,230	-30.1	-37.1	30	17.5
400	31	7,066	-35.6	-41.2	31	19.5
350	31	7,983	-41.9	-45.2	31	21.8
300	31	9,012	-48.3		31	24.9
250	31	10,199	-53.0		31	27.4
200	31	11,628	-55.3		31	26.4
175	31	12,481	-54.9		31	23.5
150	31	13,466	-54.8		31	21.4
125	31	14,630	-55.5		31	17.9
100	30	16,045	-56.7		30	15.5
80	30	17,459	-56.9		30	13.3
70	29	18,308	-57.4		31	13.7
60	29	19,279	-58.3		31	14.3
50	29	20,425	-58.8		32	12.9
40	27	21,840	-58.6		33	13.3
30	23	23,666	-58.7		33	12.5
25	23	24,809	-59.3		33	13.8
20	19	26,261	-59.2		35	15.1
15	15	28,063	-61.8		35	22.4
10	6	30,525	-63.1			
7						
5						

SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	30	10	25.5	21.9	07	4.9
1000	30	125	24.7	21.3	07	6.1
950	30	576	21.2	18.7	09	6.6
900	30	1,042	18.2	14.8	09	6.7
850	30	1,531	15.6	11.0	10	5.8
800	30	2,044	12.7	7.6	10	4.9
750	30	2,586	10.3	2.4	10	4.6
700	30	3,157	7.8	-6.2	10	4.8
650	30	3,763	4.8	-11.0	11	4.3
600	30	4,414	1.3	-18.2	12	3.7
550	30	5,099	-2.4	-22.3	12	3.8
500	30	5,859	-6.9	-26.3	14	2.7
450	29	6,667	-12.5	-29.6	17	2.2
400	29	7,563	-18.8	-34.8	20	2.9
350	29	8,543	-26.2	-41.0	22	3.2
300	29	9,639	-34.8	-48.5	23	6.1
250	29	10,886	-44.4		23	9.3
200	29	12,346	-55.0		24	13.7
175	28	13,188	-60.8		24	12.2
150	27	14,133	-67.2		24	11.2
125	27	15,215	-73.6		25	9.6
100	25	16,503	-77.3		24	4.8
80	24	17,776	-78.2		16	2.0
70	24	18,540	-76.7		12	2.6
60	24	19,439	-71.3		10	2.6
50	24	20,535	-64.6		09	2.5
40	24	21,920	-58.4		09	3.2
30	23	23,751	-54.1		08	7.0
25	22	24,926	-51.6		08	9.4
20	21	26,380	-48.4		09	12.4
15	18	28,283	-45.7		10	15.4
10	9	30,967	-45.5			
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TAMPA, FLA. 1019 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	8	15.2	13.3	08	1.4
1000	31	166	17.4	14.4	11	2.7
950	31	603	15.7	10.6	17	4.0
900	31	1,062	13.4	7.1	21	4.2
850	31	1,543	11.8	2.8	22	4.6
800	31	2,049	10.3	-3.3	24	5.7
750	31	2,585	8.1	-6.0	25	6.7
700	31	3,152	5.2	-11.2	26	7.8
650	31	3,755	2.5	-15.1	26	9.5
600	31	4,397	-1.5	-18.5	26	11.2
550	31	5,079	-5.6	-21.9	27	13.1
500	31	5,826	-10.4	-25.5	26	14.7
450	31	6,627	-15.8	-30.3	26	16.9
400	31	7,508	-22.1	-35.4	26	19.4
350	31	8,476	-29.1	-41.4	26	21.9
300	31	9,561	-37.4	-49.1	26	26.0
250	31	10,795	-46.8		26	28.8
200	31	12,240	-56.9		26	33.2
175	31	13,077	-61.4		26	34.8
150	31	14,023	-65.4		26	33.0
125	31	15,123	-69.1		27	28.3
100	31	16,444	-72.5		26	24.2
80	31	17,751	-72.9		27	16.1
70	31	18,535	-72.1		27	10.7
60	31	19,450	-69.2		27	6.5
50	31	20,551	-64.8		27	4.5
40	31	21,929	-59.9		28	5.5
30	31	23,748	-54.9		28	7.8
25	31	24,921	-52.0		27	11.4
20	31	26,380	-48.1		27	11.7
15	29	28,294	-44.1		27	12.3
10	17	31,010	-42.9		25	21.4
7	[illegible]	33,460	-40.5			
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TOPEKA, KANS. 986 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	269	-1.1	-4.5	31	.5
1000	31	153				
950	31	564	-1.0	-6.2	27	1.6
900	31	993	-1.7	-7.9	27	3.3
850	31	1,449	-1.5	-8.7	27	5.0
800	31	1,931	-2.3	-10.0	27	7.5
750	31	2,441	-3.8	-12.0	26	9.6
700	31	2,986	-6.4	-14.9	26	11.3
650	31	3,560	-9.2	-17.8	26	12.4
600	31	4,178	-12.9	-21.6	26	15.7
550	31	4,835	-17.2	-25.4	26	17.4
500	31	5,546	-21.5	-30.4	26	20.2
450	31	6,311	-27.0	-35.8	26	21.2
400	31	7,155	-33.2	-40.4	26	24.7
350	31	8,080	-39.6	-43.1	26	28.8
300	31	9,121	-46.3		26	32.7
250	31	10,316	-52.6		26	32.2
200	31	11,745	-55.8		26	32.2
175	31	12,594	-56.1		26	30.4
150	31	13,570	-57.9		27	25.8
125	31	14,713	-60.0		27	22.0
100	31	16,099	-62.0		27	19.8
80	31	17,476	-62.7		27	15.6
70	31	18,297	-63.1		28	13.5
60	31	19,247	-62.9		28	12.0
50	30	20,370	-62.5		28	11.4
40	29	21,755	-61.4		29	9.3
30	29	23,542	-60.3		28	10.6
25	27	24,683	-59.0		28	12.9
20	25	26,094	-56.8		27	16.6
15	20	27,931	-54.3		27	21.4
10	18	30,541	-51.2		27	21.9
7	13	32,866	-50.3			
5	[illegible]	35,030	-47.7			

* TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	2	28.4	23.9	04	4.0
1000	31	92	27.5	22.3	06	5.5
950	31	544	23.6	17.9	07	8.2
900	31	1,017	20.4	14.0	07	9.0
850	31	1,510	17.6	9.6	08	7.3
800	31	2,027	15.7	2.9	08	6.2
750	31	2,575	13.2	-1.8	08	5.6
700	31	3,151	10.4	-7.5	09	5.4
650	31	3,764	6.8	-10.9	09	6.0
600	31	4,418	2.9	-14.1	10	6.6
550	31	5,113	-1.1	-19.0	10	7.1
500	31	5,873	-5.6	-22.1	11	6.1
450	31	6,692	-9.9	-27.3	10	6.5
400	31	7,595	-15.1	-32.7	10	6.4
350	31	8,592	-21.8	-38.7	10	5.0
300	31	9,709	-30.1	-45.5	10	4.6
250	31	10,981	-40.6	-52.7	13	4.5
200	31	12,462	-52.9		14	4.9
175	30	13,310	-60.0		13	4.7
150	30	14,255	-67.9		11	5.6
125	30	15,329	-76.1		09	7.3
100	30	16,593	-83.0		09	10.2
80	30	17,838	-79.5		09	7.2
70	29	18,606	-74.1		13	.8
60	29	19,515	-69.3		27	2.6
50	29	20,614	-65.1		29	1.9
40	29	21,986	-61.2		09	5.2
30	26	23,791	-56.3		09	18.6
25	25	24,956	-54.2		09	23.7
20	22	26,392	-50.8		09	27.9
15	14	28,253	-47.2		10	31.1
10	5	30,941	-42.0			
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* TUCSON, ARIZ. 924 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	789	5.1	.3	15	2.5
1000	31	140				
950	31	563				
900	31	1,009	8.1	-.9	17	3.2
850	31	1,480	6.6	-4.6	21	3.6
800	31	1,976	4.2	-8.0	23	4.2
750	31	2,495	1.5	-10.7	24	6.8
700	31	3,052	-1.0	-14.0	25	8.2
650	31	3,634	-4.2	-17.9	26	9.1
600	31	4,268	-7.9	-23.1	27	11.9
550	31	4,933	-12.2	-27.2	27	13.2
500	30	5,666	-17.1	-31.5	27	15.2
450	30	6,442	-22.6	-36.1	26	19.5
400	30	7,303	-28.9	-41.7	26	22.9
350	30	8,245	-35.7	-47.5	26	24.8
300	30	9,299	-43.6		27	25.2
250	30	10,503	-51.0		26	26.5
200	29	11,943	-56.7		27	25.9
175	29	12,787	-58.0		27	26.6
150	29	13,753	-60.1		27	23.3
125	29	14,882	-63.1		27	21.4
100	29	16,247	-65.4		27	14.6
80	28	17,601	-65.1		28	10.6
70	28	18,414	-64.8		28	8.0
60	27	19,354	-63.4		29	5.9
50	26	20,475	-62.1		30	4.5
40	26	21,859	-60.4		30	3.2
30	26	23,664	-57.6		32	4.4
25	26	24,819	-55.8		30	5.9
20	25	26,247	-52.7		28	9.9
15	23	28,112	-51.1		27	15.7
10	18	30,751	-49.2		27	21.1
7	11	33,119	-44.8		27	19.4
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* VANDENBERG AFB, CALIF. 1006 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	100	6.0	1.9	08	1.1
1000	31	148			07	1.4
950	31	578	10.4	-2.3	36	2.5
900	31	1,024	8.5	-5.9	34	3.2
850	31	1,494	6.4	-9.4	34	3.5
800	31	1,990	4.4	-13.0	34	4.5
750	31	2,511	1.8	-15.6	32	6.4
700	31	3,066	-1.1	-17.7	32	8.3
650	31	3,649	-4.3	-20.6	31	9.3
600	31	4,280	-8.4	-25.3	31	11.0
550	31	4,943	-12.9	-29.7	32	12.0
500	31	5,670	-17.7	-33.7	32	13.4
450	31	6,443	-23.2	-39.0	32	15.9
400	31	7,303	-28.8	-44.3	32	18.0
350	31	8,245	-35.9	-49.2	32	19.3
300	31	9,300	-43.3		32	19.7
250	31	10,506	-51.1		32	19.8
200	31	11,934	-57.6		31	18.4
175	31	12,776	-57.6		31	18.4
150	31	13,745	-59.7		30	17.0
125	31	14,878	-62.2		30	16.6
100	31	16,250	-63.9		31	13.2
80	31	17,613	-64.8		31	9.2
70	31	18,430	-63.6		32	6.9
60	31	19,378	-62.3		33	5.7
50	31	20,506	-61.5		35	5.6
40	30	21,893	-60.3		02	5.7
30	28	23,691	-59.1		02	5.9
25	27	24,839	-57.5		01	6.3
20	27	26,257	-55.0		32	6.8
15	26	28,101	-53.7		31	9.4
10	23	30,723	-51.5		29	15.6
7	20	33,061	-49.0		28	16.7
5	7	35,304	-43.9			
4						

VICTORIA, TEXAS 1014 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	33	9.9	7.5	02	2.2
1000	31	145	11.3	6.7	03	2.0
950	31	573	11.4	5.8	22	2.7
900	31	1,027	10.8	2.9	22	3.7
850	31	1,504	10.0	-.8	23	4.5
800	31	2,007	8.9	-3.5	24	6.4
750	31	2,537	6.2	-8.3	25	8.6
700	31	3,102	3.3	-12.6	25	10.1
650	31	3,694	.0	-15.7	25	12.3
600	31	4,336	-4.1	-19.5	25	14.3
550	31	5,012	-8.6	-23.4	25	16.2
500	31	5,750	-13.5	-27.4	25	18.1
450	31	6,537	-19.0	-31.7	25	20.4
400	31	7,411	-25.1	-36.4	25	22.5
350	31	8,368	-32.0	-43.0	25	26.1
300	31	9,439	-39.7	-47.7	25	29.8
250	31	10,662	-48.9		25	34.4
200	31	12,098	-57.9		25	38.2
175	31	12,932	-61.9		25	36.8
150	31	13,880	-64.3		25	34.0
125	31	14,987	-67.4		25	28.1
100	31	16,322	-69.9		25	23.1
80	30	17,643	-70.5		25	15.7
70	29	18,437	-69.5		26	11.6
60	28	19,358	-67.3		26	7.2
50	25	20,469	-64.0		26	5.3
40	22	21,846	-60.4		27	4.5
30	21	23,653	-57.1		27	5.9
25	21	24,811	-55.0		27	9.2
20	21	26,246	-51.9		27	13.6
15	19	28,123	-49.3		27	18.3
10	16	30,804	-46.4		26	27.0
7	6	33,193	-45.7			
5						
4						

* WAKE IS., PACIFIC AREA 1015 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	5	25.2	20.9	07	6.8
1000	31	140	24.1	20.0	07	7.5
950	31	582	20.4	17.6	08	8.1
900	31	1,054	17.1	13.8	08	7.6
850	31	1,541	15.0	7.6	08	7.3
800	31	2,054	14.5	-.7	07	7.1
750	31	2,594	12.5	-5.6	06	6.4
700	31	3,174	10.0	-9.4	06	5.2
650	31	3,782	6.9	-14.3	05	4.8
600	31	4,441	3.5	-17.9	05	3.9
550	31	5,137	-.7	-21.5	02	2.4
500	31	5,896	-5.7	-24.7	36	2.1
450	31	6,711	-11.3	-29.3	33	2.8
400	31	7,608	-17.2	-34.5	33	5.0
350	31	8,596	-24.4	-40.0	31	7.1
300	31	9,702	-32.3	-47.3	31	8.7
250	31	10,962	-42.0		31	8.7
200	31	12,435	-53.8		30	9.1
175	31	13,280	-60.4		30	9.1
150	31	14,225	-67.3		30	8.2
125	31	15,305	-74.1		31	6.2
100	29	16,584	-80.0		33	2.8
80	27	17,837	-80.9		08	3.2
70	26	18,596	-77.1		10	5.2
60	26	19,493	-71.0		10	6.5
50	26	20,586	-65.8		10	6.3
40	25	21,962	-60.5		10	4.7
30	25	23,775	-55.5		07	6.4
25	25	24,945	-52.4		08	8.2
20	23	26,388	-49.5		09	10.1
15	22	28,279	-47.4		09	8.5
10	21	30,968	-46.2		11	8.7
7	18	33,346	-44.8		12	5.8
5	12	35,619	-41.1			
4	6	37,211	-38.8			

* WALLOPS IS., VA. NASA 1021 MB

Standard pressure surface (mb)	No of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s
SURFACE	31	3	3.0	-.7	33	1.5
1000	31	172	4.9	-1.6	32	2.7
950	31	592	4.8	-3.4	29	4.3
900	31	1,031	3.8	-5.2	28	6.5
850	31	1,496	3.3	-7.0	28	9.1
800	31	1,987	2.1	-8.3	28	10.4
750	31	2,508	-.2	-9.6	27	13.1
700	31	3,056	-2.5	-12.6	27	15.4
650	31	3,638	-5.3	-16.6	27	17.7
600	31	4,265	-9.3	-20.6	27	20.0
550	31	4,929	-13.6	-23.7	27	21.9
500	31	5,653	-18.0	-27.1	27	24.6
450	31	6,427	-23.2	-31.3	27	27.7
400	31	7,286	-29.1	-38.0	27	31.1
350	31	8,228	-36.0	-44.2	27	33.9
300	31	9,281	-43.7	-43.6	27	36.4
250	31	10,485	-51.7		27	42.0
200	30	11,908	-58.0		28	42.4
175	30	12,748	-59.3		28	40.1
150	30	13,708	-61.5		27	34.4
125	30	14,831	-64.2		27	29.1
100	30	16,192	-65.4		27	24.6
80	26	17,534	-66.0		27	18.1
70	25	18,339	-65.4		27	15.3
60	25	19,280	-63.9		27	13.4
50	25	20,400	-63.0		27	11.6
40	25	21,778	-61.6		26	10.4
30	23	23,576	-58.6		27	9.9
25	23	24,727	-56.7		27	10.1
20	23	26,151	-53.4		27	11.9
15	23	28,017	-50.1		27	17.3
10	19	30,676	-45.8		26	31.9
7	10	33,056	-43.0			
5						
4						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	WASHINGTON DULLES INT. AP 1011 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	WINNEMUCCA, NEV. 871 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	85	-1.2	-3.2	34	1.0	31	1,310	-6.3	-8.7	14	.8
1000	31	170	2.0	-3.3	33	1.2	31	217				
950	31	589	2.1	-4.8	29	3.9	31	627				
900	31	1,021	1.3	-5.0	28	6.8	31	1,057				
850	31	1,481	1.4	-8.1	28	9.5	31	1,505	-3.4	-9.5	13	.4
800	31	1,969	.8	-10.4	28	12.1	31	1,984	-4.3	-10.8	29	1.4
750	31	2,492	-.9	-11.0	27	14.0	31	2,489	-6.3	-13.5	29	4.5
700	31	3,035	-3.5	-13.3	27	15.2	31	3,028	-8.7	-16.2	30	5.7
650	31	3,617	-7.0	-16.3	27	18.4	31	3,595	-11.7	-19.6	31	7.8
600	31	4,238	-10.3	-20.4	27	20.9	31	4,209	-14.9	-24.0	31	11.4
550	31	4,905	-14.2	-24.3	27	22.5	31	4,857	-18.3	-27.8	31	13.4
500	31	5,621	-18.9	-27.8	27	24.7	31	5,569	-22.6	-32.4	32	15.6
450	31	6,396	-24.1	-31.8	27	26.9	31	6,329	-27.8	-35.7	32	16.9
400	31	7,247	-30.1	-37.7	26	31.6	31	7,170	-33.9	-40.9	32	19.1
350	31	8,185	-36.7	-42.9	27	34.8	31	8,093	-40.1	-45.8	32	22.6
300	31	9,236	-44.3		27	37.4	31	9,131	-46.3		32	23.7
250	31	10,436	-52.4		27	41.9	31	10,326	-52.3		32	24.1
200	31	11,858	-57.9		27	45.5	31	11,754	-56.0		32	23.2
175	31	12,699	-58.6		27	41.8	31	12,600	-57.2		31	22.1
150	30	13,665	-60.0		27	36.4	31	13,574	-57.2		31	20.4
125	30	14,797	-62.6		27	31.4	31	14,726	-57.6		30	17.3
100	28	16,179	-64.5		27	25.9	30	16,122	-59.6		31	14.0
80	28	17,540	-64.7		27	20.1	28	17,514	-59.2		31	10.4
70	28	18,355	-64.1		27	14.9	28	18,349	-59.7		32	7.8
60	27	19,297	-63.4		27	11.1	27	19,313	-59.8		32	7.0
50	27	20,418	-62.4		27	10.6	27	20,453	-59.4		35	7.8
40	26	21,794	-61.1		27	11.4	25	21,851	-59.2		01	8.4
30	26	23,587	-59.0		27	11.1	19	23,657	-58.8		36	9.4
25	24	24,730	-58.3		27	15.5	17	24,812	-58.2		01	11.7
20	23	26,134	-55.4		27	16.4	12	26,224	-57.5			
15	23	27,983	-51.8		27	21.8	7	28,078	-57.4			
10	17	30,627	-48.8		26	30.4						
7	7	33,095	-42.7									

Standard pressure surface (mb)	WINSLOW, ARIZ. 851 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.	YAKUTAT, ALASKA 1007 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	1,492	-8.6	-12.6	21	1.5	31	12	-4.5	-6.0	10	1.3
1000	31	219					31	66			11	2.1
950	31	622					31	475	-1.2	-6.7	11	4.0
900	31	1,051					31	905	-3.4	-8.1	13	4.4
850	31	1,498			16	.8	31	1,356	-5.8	-10.4	16	3.5
800	31	1,976	-2.7	-7.8	24	3.1	31	1,829	-8.5	-13.6	18	3.5
750	31	2,487	-2.7	-10.4	25	6.3	31	2,327	-11.4	-16.0	20	3.8
700	31	3,035	-4.5	-13.8	26	6.0	31	2,854	-14.3	-19.8	21	4.6
650	31	3,613	-6.9	-17.1	26	8.6	31	3,411	-17.8	-23.9	22	5.6
600	31	4,237	-10.4	-21.4	27	10.0	31	4,007	-21.6	-27.0	22	6.8
550	31	4,895	-14.9	-24.9	27	10.9	31	4,642	-25.8	-30.8	23	6.8
500	31	5,617	-19.8	-30.0	27	12.5	31	5,328	-30.7	-35.3	24	8.3
450	31	6,385	-25.2	-35.5	27	14.9	31	6,066	-36.0	-39.5	25	9.8
400	31	7,238	-31.2	-41.2	27	16.8	31	6,880	-41.1	-42.9	26	11.2
350	31	8,172	-37.7	-45.9	27	18.9	31	7,777	-46.0		26	13.9
300	31	9,220	-44.6		27	21.3	31	8,792	-50.1		27	15.8
250	31	10,422	-51.5		27	23.7	31	9,976	-52.4		28	18.3
200	31	11,855	-55.5		28	22.7	31	11,413	-53.4		27	20.6
175	31	12,704	-56.5		27	22.9	31	12,273	-53.3		28	20.1
150	31	13,680	-57.8		27	21.9	31	13,265	-53.0		28	21.1
125	31	14,824	-60.1		27	19.3	30	14,431	-53.8		28	21.2
100	31	16,204	-63.1		27	15.7	30	15,859	-55.3		28	22.4
80	30	17,575	-63.3		28	10.2	29	17,291	-55.6		28	23.7
70	30	18,395	-63.1		29	7.6	29	18,140	-55.9		28	24.5
60	30	19,344	-62.5		30	5.4	28	19,120	-56.2		28	25.0
50	30	20,471	-61.9		31	4.7	28	20,276	-57.1		29	28.8
40	30	21,854	-60.8		33	4.4	28	21,684	-58.4		29	30.6
30	29	23,648	-59.1		32	5.2	25	23,486	-59.2		29	35.7
25	28	24,796	-57.1		31	6.2	21	24,635	-59.6		29	38.7
20	22	26,213	-55.1		29	9.7	18	26,070	-60.1		30	43.8
15	21	28,058	-52.7		28	14.5	10	27,864	-60.4			
10	8	30,709	-51.8									

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1009 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	31	17	27.6	23.6	07	3.5
1000	31	94	26.8	22.1	07	4.7
950	31	540	23.1	18.2	08	8.0
900	31	1,017	20.0	14.0	08	8.5
850	31	1,509	17.5	9.5	09	7.4
800	31	2,026	15.2	4.6	09	6.4
750	31	2,564	13.0	-1.2	09	5.9
700	31	3,149	10.1	-4.9	09	6.1
650	31	3,756	6.7	-8.2	09	5.5
600	31	4,415	3.0	-10.9	10	6.4
550	31	5,108	-.8	-15.6	09	5.9
500	31	5,871	-5.0	-19.9	09	4.8
450	31	6,689	-9.7	-26.3	09	5.8
400	31	7,595	-15.4	-31.4	09	6.3
350	31	8,590	-22.3	-38.3	09	6.0
300	31	9,705	-30.6	-45.7	09	5.8
250	31	10,974	-40.8	-55.0	11	5.6
200	31	12,453	-53.2		13	5.7
175	31	13,299	-60.3		13	5.8
150	31	14,243	-68.0		13	7.9
125	31	15,317	-75.6		12	10.0
100	31	16,585	-82.4		11	8.1
80	29	17,835	-79.9		10	4.8
70	28	18,593	-74.8		06	1.7
60	28	19,499	-69.6		03	.6
50	28	20,599	-64.9		07	1.6
40	27	21,974	-60.0		09	7.6
30	26	23,784	-56.1		10	17.6
25	25	24,949	-53.6		09	22.8
20	22	26,393	-50.1		09	26.6
15	22	28,285	-46.7		10	28.6
10	5	30,965	-42.9			

Standard pressure surface (mb)	YUCCA FLAT, NEV. 886 MB No. of observations	Dynamic height	Temperature	Dew Point	Resultant Wind Direction	Resultant Wind Speed M.p.s.
SURFACE	16	1,196	-4.0	-8.2	28	1.7
1000	16	228				
950	16	638				
900	16	1,073				
850	16	1,527	2.0	-7.6	35	4.2
800	16	2,015	.1	-10.0	36	5.8
750	16	2,528	-1.3	-12.8	34	5.2
700	16	3,079	-4.0	-16.6	33	6.1
650	16	3,658	-7.4	-20.4	32	8.3
600	16	4,280	-10.6	-25.6	32	9.9
550	16	4,941	-15.0	-29.7	32	11.0
500	16	5,658	-19.8	-34.3	31	11.2
450	16	6,431	-25.0	-39.8	31	15.1
400	16	7,279	-31.4	-44.6	31	15.2
350	16	8,210	-38.4	-48.8	31	16.0
300	16	9,254	-45.4		31	17.0
250	16	10,449	-52.8		31	16.8
200	16	11,868	-57.7		30	21.7
175	16	12,708	-59.1		30	22.3
150	16	13,673	-59.4		30	21.2
125	16	14,809	-61.3		29	18.7
100	15	16,194	-63.8		29	15.8
80	15	17,557	-65.1		30	11.7
70	15	18,371	-64.0		29	10.4
60	15	19,317	-63.1		30	8.0
50	15	20,443	-61.9		31	7.4
40	15	21,826	-61.0		32	6.9
30	14	23,618	-59.5		31	8.0
25	14	24,763	-58.1		29	10.3
20	11	26,174	-55.1		28	16.9
15	10	28,040	-52.1			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i. e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

\+ Observations for these stations are scheduled at 0000 G.C.T.

† Dew Point temperatures are based on a minimum of 5 observations. Therefor, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. DECEMBER 1967

Date	Sun's zenith distance A.M. 78.7°	75.7°	70.7°	60.0°	*	P.M. 60.0°	70.7°	75.7°	78.7°

MADISON, WIS.

Date	Air mass 4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Dec.									
31----	----	----	----	----	S 1.30	----	S 1.20	S 1.08	S 0.97

TUCSON, ARIZ.

Date	Air mass 4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Dec.									
1-----	----	----	0.11	0.34	----	0.71	1.16	1.04	0.94
2-----	0.93	1.03	1.19	1.33	1.38	1.36	1.21	1.11	1.02
5-----	----	----	----	1.20	1.30	----	1.11	1.02	.93
6-----	.88	.94	1.13	1.30	1.34	1.28	1.17	1.04	.93
8-----	.89	.97	----	.92	----	----	----	----	----
9-20--		Pyrheliometer inoperative							
21----	----	----	----	----	----	----	1.11	1.00	.93
22----	.98	1.09	1.20	1.34	1.40	1.38	1.22	1.12	1.03
25----	.94	1.05	1.16	1.32	1.38	1.32	1.19	1.08	.99
26----	.91	1.02	1.14	1.29	1.34	1.30	1.16	1.05	.97
27----	.89	1.00	1.14	1.32	1.36	1.33	1.19	1.07	.96
28----	.97	1.08	1.17	1.32	1.36	1.30	1.16	1.04	.93
29----	----	----	----	----	1.30	----	----	----	----
31----	.86	1.00	1.12	1.29	1.33	1.29	1.12	.99	.84
Averages	0.91	1.02	1.04	1.17	1.34	1.25	1.16	1.05	0.95

OMAHA, NEBR.

Date	Air mass 4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Dec.									
1-----	HS0.94	#	#	----	#	----	----	----	----
3-----	----	----	----	----	----	----	HS1.20	HS1.08	HS0.98
15----	----	----	1.14	----	----	----	----	----	----
18----	----	----	----	----	HS1.26	----	HS1.17	HS1.03	HS .92
22----	HS .91	HS1.00	HS1.12	----	HS1.26	----	HS1.13	HS1.01	HS .92
27----	----	----	----	----	HS1.24	----	----	----	----
28----	----	----	----	----	----	----	HS1.18	----	HS1.00
31----	----	----	HS1.15	----	HS1.26	----	----	----	----
Averages	0.93	1.00	1.14	----	1.25	----	1.17	1.04	0.95

ALBUQUERQUE, N. MEX.

Date	Air mass 4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
		No observations due to replacing of equipment							

BLUE HILL OBS., MASS.

Date	Air mass 4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Dec.									
1-----	0.96	1.06	1.18	----	1.28	----	1.16	1.04	0.89
2-----	1.01	1.11	1.23	----	1.33	----	----	----	----
4-----	----	----	----	----	1.34	----	1.23	1.11	1.01
5-----	.89	1.01	1.13	----	1.25	----	1.13	1.00	.89
10----	1.01	1.10	1.21	----	----	----	----	----	----
13----	.83	.94	1.07	----	1.20	----	----	----	----
15----	----	----	----	----	1.25	----	1.13	1.00	.90
16----	.87	1.07	1.20	----	1.28	----	1.17	1.04	.91
17----	.94	1.07	1.21	----	1.28	----	1.20	1.07	1.00
18----	.76	.87	1.04	----	1.16	----	1.06	.89	.79
20----	.99	1.07	1.21	----	----	----	----	----	----
24----	.96	1.06	1.18	----	1.25	----	1.11	----	----
25----	.83	.95	1.10	----	1.16	----	----	----	----
26----	----	----	----	----	----	----	----	1.11	.99
27----	1.00	1.10	1.20	----	1.24	----	1.08	.93	.82
Averages	0.92	1.03	1.16	----	1.25	----	1.14	1.02	0.91

MAUNA LOA OBS., HAWAII

Date	Air mass 3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Dec.									
1-----	1.16	1.25	1.34	1.48	----	----	----	----	----
12----	1.20	1.29	1.38	1.50	1.58	----	----	----	----
13----	1.17	1.25	1.35	1.46	1.58	1.45	1.33	1.22	1.13
14----	1.16	1.25	1.35	1.45	1.55	1.45	1.34	1.24	1.16
15----	1.20	1.28	1.38	1.50	1.58	1.48	----	----	----
16----	1.23	1.31	1.40	1.50	1.60	----	----	----	----
19----	----	----	----	1.48	----	----	----	----	----
20----	1.13	1.21	1.32	1.45	1.55	----	----	----	----
21----	1.18	1.27	1.37	1.48	1.55	----	----	----	----
22----	1.18	1.28	1.37	1.49	1.57	----	----	----	----
23----	1.17	1.28	1.38	1.50	1.59	----	----	----	----
24----	1.18	1.28	1.37	1.48	----	----	----	----	----
26----	1.15	1.24	1.34	1.48	1.58	1.46	1.33	1.23	1.14
27----	1.13	1.22	1.32	1.45	1.55	1.46	1.33	1.23	1.14
28----	1.15	1.25	1.34	1.46	----	----	----	----	----
Averages	1.17	1.26	1.36	1.48	1.57	1.46	1.33	1.23	1.14

GUAM, M. I.

Date	Air mass 4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Dec.									
26----	----	S 0.77	S 0.84	----	----	----	----	----	----
29----		Sunshine switch off							

S Slight haze - indeterminable
* Values corresponding to true solar noon
HS Slight haze
\# Malfunction

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

DECEMBER 1967

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	324	326	305	237	289	317	272	193	305	309	294	192	70	---	151	165	---	128	160	301	324	319	321	316	347	264	332	317	100	327	348	264
AMES IOWA	14	45	215	78	188	32	32	21	17	48	45	158	149	122	195	113	135	173	176	74	127	210	167	125	204	209	195	162	67	93	221	123
ANNETTE ALASKA	9	6	13	56	24	22	13	8	6	57	16	38	11	4	32	66	74	78	79	79	13	9	9	36	11	8	50	29	40	11	63	31
APALACHICOLA FLORIDA	297	260	355	379	211	318	101	65	166	6	149	339	310	137	231	108	200	293	166	156	---	202	379	368	282	345	254	284	214	346	110	234
ARGONNE NAT. LAB.	35	29	230	185	69	33	97	33	31	26	36	80	197	128	229	246	31	89	107	166	30	205	186	206	91	250	112	126	210	93	173	121
ASTORIA OREGON	30	64	64	38	76	21	107	52	24	34	115	160	172	112	154	89	24	74	46	133	20	24	48	53	35	53	77	71	126	33	66	71
ATLANTA GEORGIA	307	43	64	303	283	163	210	133	86	51	51	192	226	213	89	281	230	61	54	208	74	42	311	286	236	298	216	64	226	170	30	168
BARROW ALASKA †	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BETHEL ALASKA	43	49	41	52	17	30	9	4	23	16	0	0	23	8	16	4	10	0	11	49	48	52	46	2	1	9	12	0	0	0	0	19
BISMARCK N.DAK.	142	---	130	177	180	128	69	36	41	121	82	88	141	177	180	108	56	181	177	83	160	184	171	113	187	172	155	140	148	---	134	133
BLUE HILL MASS.	223	221	22	222	208	162	37	29	53	179	33	33	186	163	180	198	201	74	187	160	169	19	39	187	160	162	199	34	65	194	82	132
BOISE IDAHO	---	69	---	74	100	176	33	184	73	167	166	203	199	199	186	82	117	68	174	130	136	62	42	53	33	102	147	178	191	188	54	124
BOSTON MASSACHUSETTS	217	187	17	220	199	152	27	19	70	180	24	18	172	165	157	194	198	66	180	---	---	---	---	---	---	---	---	---	---	---	---	---
BROWNSVILLE TEXAS	258	180	352	387	225	98	139	303	226	178	422	408	286	91	78	95	86	196	376	294	306	284	425	416	372	336	331	403	41	163	62	252
BURLINGTON VERMONT	125	175	12	67	90	147	67	21	40	130	48	11	82	124	90	75	180	59	25	179	108	25	49	88	63	179	169	41	57	179	66	89
CAPE HATTERAS N.C.	77	298	62	320	306	290	268	173	268	90	54	217	294	284	120	304	305	134	229	89	185	202	77	298	236	164	255	28	231	282	74	200
CARIBOU MAINE	154	143	46	75	164	---	159	48	51	163	92	26	103	108	113	119	102	115	53	128	161	14	67	114	201	74	202	71	71	---	133	106
CHARLESTON S.C.	336	178	267	336	312	289	196	100	202	109	68	315	311	297	72	130	209	256	269	251	221	288	320	322	263	262	250	80	241	306	147	232
CLEVELAND OHIO	207	49	26	240	42	40	86	21	23	28	23	19	63	93	55	140	126	47	154	167	58	71	80	73	103	193	162	127	162	171	69	94
COLUMBIA MISSOURI	80	8	260	167	71	126	126	239	44	9	44	94	46	48	191	174	204	221	222	125	40	265	248	102	218	270	115	143	135	137	233	142
DAVIS CALIFORNIA	211	253	68	140	227	197	248	261	244	254	198	266	265	265	256	229	113	187	190	207	184	227	242	232	230	242	241	251	257	252	102	217
DODGE CITY KANSAS	---	302	296	185	278	267	247	269	79	280	262	87	132	133	114	49	218	264	166	238	254	260	250	246	262	227	189	---	142	67	284	209
E. LANSING MICHIGAN	101	21	177	230	73	43	---	---	53	---	23	38	206	141	159	198	65	58	111	157	22	78	93	75	46	141	169	221	156	83	108	109
EL CENTRO CALIF. NPF	307	322	321	306	298	292	285	276	327	267	291	230	164	59	116	214	225	226	169	215	288	300	288	289	290	282	283	278	162	291	230	255
EL PASO TEXAS	386	402	203	200	312	370	351	370	156	395	372	364	153	53	107	142	204	287	352	368	374*	369*	337	256	363	350	358	359	348	281	98	292*
ELY NEVADA	234	313	304	305	251	298	224	287	287	294	285	204	292	194	218	123	196	163	206	289	298	282	276	266	271	272	163	142	264	239	286	249
EPPLEY NEWPORT R.I.	218	208	26	210	200	133	63	25	66	153	34	30	179	107	163	187	188	57	181	187	166	22	30	200	156	154	183	39	68	162	60	124
FAIRBANKS ALASKA	10	3	4	4	3	4	3	5	3	4	4	1	0	1	3	1	1	1	1	2	9	14	12	11	5	0	1	1	1	1	2	4
FORT WORTH TEXAS	178	356	369	333	63	337	344	219	220	85	256	344	85	41	38	45	331	340	326	65	207	347	333	289	315	332	70	186	305	81	37	222
FRESNO CALIFORNIA	266	280	255	170	116	251	61	137	230	246	187	136	282	268	217	245	179	138	136	237	255	225	239	233	228	213	223	172	176	69	70	198
GAINESVILLE FLORIDA	522	475	467	551	508	483	368	127	312	410	335	323	280	---	228	231	152	209	236	248	219	238	322	308	180	188	295	170	148	298	178	303
GLASGOW MONTANA	184	109	132	111	141	138	157	75	77	116	66	136	117	167	164	63	59	111	170	121	154	101	146	85	153	164	73	69	107	171	75	120
GRAND JUNCTION COLO.	69	319	327	302	267	301	132	186	288	217	269	138	110	182	107	173	222	143	147	165	317	270	269	250	248	202	279	228	179	184	313	219
GREAT FALLS MONTANA	200	131	153	184	102	188	105	125	42	60	57	83	80	191	186	61	69	88	123	198	170	108	96	47	81	89	55	130	64	185	61	113
GREENSBORO N.C.	135	171	168	267	259	213	209	218	77	14	21	244	239	215	153	261	239	47	119	54	42	17	264	261	183	257	144	19	215	211	49	161
INDIANAPOLIS INDIANA	49	17	239	199	109	---	---	94	37	33	39	45	77	71	236	259	35	133	239	117	21	170	245	235	31	177	76	296	219	204	59	130
INYOKERN CALIFORNIA	290	290	293	278	285	282	193	272	280	281	282	252	294	131	62	222	283	229	185	283	285	282	291	277	271	276	275	274	270	281	287	259
LAKE CHARLES LA.	78	113	372	323	136	265	70	168	3	39	183	333	156	80	39	38	23	268	101	---	114	280	357	326	304	339	11	240	342	50	62	174
LAKELAND FLORIDA	305	269	197	358	---	204	286	174	202	265	45	349	254	255	324	229	251	305	326	285	308	292	390	365	249	223	319	103	299	348	287	269
LARAMIE WYOMING	95	240	227	201	255	187	182	134	217	103	155	139	172	204	139	145	164	171	119	90	207	165	192	115	148	76	185	166	121	180	208	163
LAS VEGAS NEVADA	310	304	299	291	282	283	177	299	302	285	293	252	155	83	34	195	284	63	131	243	---	283	282	277	273	274	276	257	282	289	288	245
LITTLE ROCK ARKANSAS	268	236	353	330	193	187	---	232	101	90	64	301	---	---	66	137	141	264	269	134	56	288	277	255	246	279	73	148	132	150	47	190
LOS ANGELES CALIF.	338	347	319	308	256	292	164	264	298	320	307	276	353	331	327	259	331	96	210	337	307	321	349	290	308	279	278	78	290	295	331	286
MADISON WISCONSIN	22	35	232	181	64	24	19	42	24	18	35	165	195	185	205	207	29	37	142	183	33	220	147	137	177	224	112	115	136	150	231	120
MANHATTAN KANSAS	55	113	246	64	185	124	218	95	10	42	149	46	64	95	118	27	210	242	194	91	220	226	204	127	229	87	112	108	94	74	243	133
MATANUSKA ALASKA	21	52	10	14	17	11	5	19	6	8	7	2	8	4	4	11	19	8	33	12	19	17	30	12	12	8	15	7	3	8	19	14
MAUNA LOA OBS.HAWAII	365	350	239	225	209	237	144	293	248	300	555	491	540	544	536	548	453	387	528	525	448	517	528	530	503	522	526	429	220	246	514	410
MEDFORD OREGON	108	106	109	34	141	86	122	112	161	45	126	97	202	209	203	76	50	107	155	119	45	66	159	87	45	97	33	33	43	26	62	99
MIAMI FLORIDA	344	208	247	355	225	279	348	374	354	342	346	151	296	315	313	345	343	364	327	340	363	399	320	364	167	343	297	256	399	369	393	319
MIDLAND TEXAS	213	339	312	126	312	281	309	304	274	318	309	305	87	21	99	99	317	305	282	263	305	---	297	167	305	309	226	309	240	229	37	243
NASHVILLE TENNESSEE	227	17	172	267	272	54	274	279	161	90	122	259	281	40	113	280	89	---	272	45	139	80	296	290	210	279	163	48	235	112	50	174
NEW YORK N.Y. U	245	172	8	235	190	80	24	133	134	87	17	16	192	79	161	101	168	33	200	189	146	6	113	163	79	211	42	6	186	152	30	116
NORTH OMAHA NEBRASKA	20	---	253	63	185	63	60	74	32	92	89	161	203	155	221	50	203	233	208	113	185	240	170	147	241	91	273	145	157	129	258	150
OAK RIDGE TENNESSEE	266	82	38	272	253	161	133	239	142	23	132	110	219	118	195	283	201	18	57	107	107	68	252	266	225	236	209	46	183	195	26	157

Note. --Langley is the unit used to denote one gram calorie per square centimeter. Values with an asterisk are interpolated.

† Sun below horizon continuously

U Indicates Urban sites

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

DECEMBER 1967

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
OKLAHOMA CITY OKLA.	136	287	330	179	276	311	305	277	58	40	269	251	106	32	50	34
PAGE ARIZONA	277	281	298	291	276	282	238	298	299	284	294	286	141	141	112	218
PALMER AAES ALASKA	17	40	11	17	16	10	5	18	7	10	9	5	6	6	6	11
PHOENIX ARIZONA	314	346	227	267	317	313	278	265	339	309	326	223	110	74	99	139
PORTLAND MAINE	219	218	12	169	205	216	58	13	45	206	35	14	147	179	162	137
PROSSER WASHINGTON	149	120	110	46	98	64	142	159	75	122	149	171	182	183	171	127
RAPID CITY S.DAK.	78	224	208	211	222	148	189	88	223	158	182	176	150	193	198	176
RENO NEVADA	237	237	187	208	224	180	184	238	198	204	215	223	210	220	202	192
RICHLAND 25 NW WASH.	149	92	108	51	82	65	151	100	57	115	172	172	170	170	164	132
RIVERSIDE CALIFORNIA	246	265	265	247	127	214	126	199	251	243	233	184	198	199	111	91
RUSTON LOUISIANA	139	157	312	304	82	122	151	59	42	41	31	279	153	64	18	73
SAINT CLOUD MINN.	10	74	164	160	150	16	11	20	54	25	15	58	141	145	173	77
SALT LAKE CITY	---	---	242	241	43	269	68	190	170	113	68	233	248	193	---	42
SAN ANTONIO TEXAS	147	361	365	317	109	300	209	88	229	67	356	360	112	38	71	69
SANTA MARIA CALIF.	301	307	278	184	213	289	147	291	285	294	287	290	287	289	265	143
SAULT STE MARIE MICH	81	41	140	138	60	29	37	169	174	60	129	34	137	88	40	40
SEATTLE TACOMA WASH.	45	24	59	41	81	35	90	68	71	40	147	148	182	---	137	50
SPOKANE WASHINGTON	170	53	59	32	60	139	78	69	47	67	73	160	158	152	146	107
STATE COLLEGE PENN.	255	113	45	220	191	144	48	43	81	13	16	39	111	116	115	43
STERLING VIRGINA	299	210	175	283	171	144	130	207	188	21	27	---	252	92	193	241
STILLWATER OKLAHOMA	128	145	290	152	236	269	266	---	---	---	---	---	---	---	---	---
SWAN ISLAND W.I.	409	310	299	459	287	394	302	428	366	---	397	193	454	428	445	481
TAMPA FLORIDA	312	373	210	385	344	213	300	140	301	304	28	382	256	271	358	340
TUCSON ARIZONA	336	343	134	271	301	329	325	293	---	---	---	309	267	93	36	104

Station	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OKLAHOMA CITY OKLA.	301	290	286	109	166	306	296	253	178	288	118	297	224	30	125	200
PAGE ARIZONA	287	192	83	---	310	297	---	181	184	285	---	---	295	266	---	246
PALMER AAES ALASKA	19	10	25	19	15	15	24	12	12	7	10	8	3	7	16	13
PHOENIX ARIZONA	334	46	53	218	311	330	305	317	315	312	310	312	224	308	331	257
PORTLAND MAINE	188	88	153	190	166	16	35	200	157	160	200	44	83	190	76	128
PROSSER WASHINGTON	81	55	90	125	53	48	130	26	76	110	132	160	154	37	126	112
RAPID CITY S.DAK.	118	179	152	66	183	176	181	94	199	81	196	151	164	149	153	163
RENO NEVADA	89	201	107	178	167	181	203	201	207	184	201	127	219	224	178	194
RICHLAND 25 NW WASH.	78	67	110	128	55	69	139	43	56	139	141	159	102	34	130	110
RIVERSIDE CALIFORNIA	247	4	46	216	237	245	251	253	245	244	240	212	208	194	245	203
RUSTON LOUISIANA	56	276	269	111	67	295	---	---	255	285	---	---	110	---	23	145
SAINT CLOUD MINN.	7	130	92	48	83	126	140	47	151	157	119	175	77	139	177	95
SALT LAKE CITY	73	79	252	129	184	168	214	225	80	64	90	197	91	163	190	154
SAN ANTONIO TEXAS	85	350	309	78	120	290	363	216	348	338	289	341	---	30	60	214
SANTA MARIA CALIF.	255	219	215	271	288	270	283	282	280	278	273	276	201	280	280	261
SAULT STE MARIE MICH	70	51	162	49	14	---	73	144	---	---	140	182	82	180	104	94
SEATTLE TACOMA WASH.	41	16	65	90	36	20	38	26	23	29	29	46	32	23	33	59
SPOKANE WASHINGTON	64	55	88	115	66	56	92	48	33	68	41	49	37	30	98	81
STATE COLLEGE PENN.	201	63	201	214	107	51	121	99	120	228	209	33	239	173	47	119
STERLING VIRGINA	255	45	247	235	---	20	190	257	148	261	216	27	226	160	46	171
STILLWATER OKLAHOMA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SWAN ISLAND W.I.	459	445	367	367	457	363	445	200	121	465	424	444	421	---	482	383
TAMPA FLORIDA	338	375	365	348	377	364	424	408	223	275	354	161	272	386	335	307
TUCSON ARIZONA	136	31	218	229	284	---	---	---	---	---	252	310	292	249	320	237

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (8 a.m. to 8 a.m.) at Palmer, Alaska

DECEMBER 1967

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-84	-89	-63	-59	-73	-18	-2	-32	-16	-39	-3	-8	-49	-12	-30	-57	-64	-34	-54	-85	-156	-141	-103	-64	-5	-2	-24	6	8	-16	-65	-46

The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (< 3900 A) Ames, Iowa

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	1.08	2.34	8.12	3.97	7.49	1.89	1.80	1.26	0.99	2.52	2.43	6.49	6.40	5.23	----	5.23	5.41	6.85	7.03	3.70	4.96	6.49	6.40	5.41	6.49	6.58	6.31	5.32	3.33	4.15	6.76	4.7

These data are from an U - V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. It is at the same location (Agronomy Building, Iowa State University, Ames) as the published total solar radiation instrumentation. This instrument has not been checked by the ESSA, Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Albuquerque, N. Mex.	00285	00270	-----	00266	05270	00262	00288	00290	05291	06252	05270	00290	00271	00252	05291
Bedford, Mass.	-----	-----	-----	-----	00295	00275	05321	05324	-----	-----	-----	-----	00268	00271	05353
Bismarck, N. Dak.	00351	00289	34311	00320	00322	34325	35359	35360	35364	20337	35290	20315	20336	00366	00301
Boulder, Colo.	-----	-----	-----	-----	00298	00327	00347	05403	-----	-----	00258	-----	-----	00308	05322
Caribou, Maine	35392	02395	-----	34325	02339	02334	02319	-----	-----	00367	35344	-----	00287	35298	35390
Green Bay, Wis.	35336	37349	00312	00303	02299	35342	-----	37358	35354	35386	34340	02307	00298	33323	00323
Huancayo, Peru	00269	00259	00259	00264	03264	00263	00262	00263	00266	00266	00260	00263	00260	00275	00255
Mauna Loa, Hawaii	00280	06270	-----	06276	05282	00281	-----	05271	05272	-----	00290	00281	00264	00272	00258
Nashville, Tenn.	00275	-----	04302	00277	00278	-----	00293	00305	00311	04268	04289	00286	00269	05263	05259
Tallahassee, Fla.	00264	-----	00284	00271	02280	02277	05280	05327	06286	-----	05293	00304	00291	02283	06252
Wallops Island, Va.	00285	00270	-----	00266	05270	00266	00288	00290	05291	06252	05270	00290	00271	00252	05291

Station	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex.	00306	00268	-----	00277	00265	-----	-----	-----	00325	00345	05333	00337	-----	-----	-----	05361	290
Bedford, Mass.	-----	-----	35277	00297	00287	00287	32286	-----	-----	-----	00387	00376	-----	35341	-----	-----	310
Bismarck, N. Dak.	20273	-----	00329	00339	36366	00367	00315	00288	20322	00325	00338	20305	36339	35334	35374	-----	330
Boulder, Colo.	-----	-----	00312	00306	06388	05367	00282	-----	-----	-----	05344	00329	06357	06348	-----	-----	331
Caribou, Maine	35330	-----	02325	-----	35327	00300	-----	35360	35341	02384	-----	32391	34364	-----	00360	33428	350
Green Bay, Wis.	00285	34321	-----	02314	00299	35326	34423	00314	00332	00370	00391	00374	00363	00338	36384	00405	340
Huancayo, Peru	06263	05253	00263	00258	00266	00262	00273	00266	00270	00265	00260	35250	00263	00267	00266	00270	263
Mauna Loa, Hawaii	00247	-----	00272	00288	00283	00278	00270	00266	-----	-----	00285	00278	00267	05276	04266	-----	274
Nashville, Tenn.	00291	04276	05293	00277	04281	04258	04277	00306	00328	00353	00370	00355	35368	03369	04350	-----	301
Tallahassee, Fla.	02293	34284	03288	04279	00270	00259	02257	00280	-----	-----	00304	00298	04307	-----	-----	-----	284
Wallops Island, Va.	00306	00268	-----	00277	00265	-----	-----	-----	00325	00345	05333	00337	-----	-----	-----	05361	290

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick The code λ s designates the type of measurement made

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
June 1967										
Alaska	Clear Water	93	17	Anaktuvuk Pass	-1	25	Cape Hinchinbrook	9.27	Attu	0.04
Hawaii	Mauna Kea Beach	95	21	Mauna Loa Slope Obs	33	9+	Piihonua 89	16.06	Halepohaku 111	.14
July 1967										
Alaska	Anaktuvuk Pass	91	14	Anaktuvuk Pass	8	20	Ketchikan	17.57	Larsen Bay	.36
Hawaii	Mauna Kea Beach	95	4	Mauna Loa Slope Obs	35	22	Piihonua 89	37.40	Kaunakakai 536	.00
August 1967										
Alaska	Clear Water	85	7	McKinley Park	23	30	Ketchikan	21.27	Summit Nike Site	.19
Hawaii	Mana 1026, Kauai	94	27	Mauna Loa Slope Obs	33	19	Kahana 883	41.00	Kaunakakai 536	.00
September 1967										
Alaska	2 Stations	76	18+	Chisana	8	30+	Little Port Walter	37.38	Allakaket	T
Hawaii	Mauna Kea Beach	96	2	Haleakala Summit 338.4	32	29	Lupi Upper 442	30.30	2 Stations	.00
October 1967										
Alaska	Tree Point Light Sta	67	2	Canyon Village	-22	26	Little Port Walter	36.25	do	.05
Hawaii	Mauna Kea Beach	94	22	Mauna Loa Slope Obs	34	24	Kahana 883	24.55	Kihei 311	.07
November 1967										
Alaska	Tree Point Light Sta	58	15	Kobuk	-50	23	Little Port Walter	18.95	Wainwright	.10
Hawaii	Mauna Kea Beach	95	11	Mauna Loa Slope Obs	30	24+	Piihonua 89	48.00	Malauea 676	.12

See reference notes with current data

CORRECTIONS

Month: 1965 Annual

page 12: Raton, N. Mexico — Missing excessive precipitation values for the 5 minute through 180 minute intervals, consecutively are: 0.46, 0.67, 0.99, 1.24, 1.81, 2.04, 2.81, 3.11, 3.67, 3.86, 4.22, 4.51.

Month: January 1967

page 34: Palmer, Alaska — Net radiation values for the 5th through 31st are minus (-) values, and the average should be -72. The instrument is a CSIRO Funk net radiometer.

Month: April 1967

page 176: Iowa — Number of tornadoes should be 17.

Month: June 1967

page 279: Orlando, Fla. — Heating degree days for October should be 2. (also on page 497 in the October 1966 issue)

page 280: Lincoln, Neb. (U) — Heating degree days for November should be 729, and for December 1133. (also on pages 549, November 1966 and 599, December 1966 issues, respectively)

Blue Hill Obs., Mass. (R) — Heating degree days for March 1967 should be 1052. (also on page 121 of the March 1967 issue)

Month: July 1967

page 342: Minnesota — Property damage under "hailstorms" should be category 5.

Month: August 1967

page 392: Minnesota — Property damage under "hailstorms" should be category 4.

Month: September 1967

page 445: Texas — There were a total of 124 tornadoes on 7 days, 5 deaths, 34 injuries, and damage in category 6. Under "all others" there were 8 deaths and 3 injuries.

RAWINSONDE DATA

Average monthly values

DELAYED DATA

EMPALME, MEXICO 4/ 1011 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	12	27.0	23.7	04	.7
1000	30	112	26.9	22.8	09	.7
950	30	561	25.8	19.3	15	2.3
900	30	1,042	23.7	15.8	15	2.2
850	30	1,540	20.8	13.0	13	1.8
800	30	2,062	17.4	10.7	10	2.3
750	30	2,609	13.5	8.0	10	3.6
700	29	3,191	9.9	3.7	09	3.5
650	29	3,802	5.7	-.1	09	3.8
600	29	4,454	1.3	-4.0	09	3.2
550	29	5,146	-2.3	-10.2	08	3.1
500	29	5,902	-6.4	-16.4	06	3.0
450	29	6,716	-11.4	-23.4	04	1.9
400	29	7,614	-16.9	-29.4	04	2.1
350	29	8,602	-24.0	-36.2	07	1.9
300	29	9,708	-32.4	-43.6	12	1.7
250	29	10,967	-42.1		16	2.2
200	29	12,437	-54.0		15	1.8
175	29	13,281	-60.4		07	.9
150	29	14,226	-66.7		05	3.2
125	29	15,311	-72.0		07	5.0
100	29	16,622	-71.8		08	5.4
80	29	17,949	-67.4		08	8.1
70	28	18,759	-64.0		09	9.5
60	27	19,707	-61.5		09	10.4
50	26	2[illegible],845	-58.7		09	12.7
40	26	22,254	-56.0		09	14.0
30	25	24,1[illegible]	-52.4		9	14.9
25	25	25,282	-50.4		09	14.0
20	25	26,744	-48.6		09	15.4
15	22	28,642	-46.0		08	17.3
10	9	31,356	-41.8			
7						

MONTERREY, MEXICO 1/ 965 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	423	21.0	17.9	05	.3
1000	30	111				
950	30	560	20.9	16.9	07	1.3
900	30	1,026	19.5	14.7	13	2.0
850	30	1,518	18.4	6.4	15	2.9
800	30	2,037	17.1	3.0	19	2.6
750	30	2,583	14.3	-.2	23	2.4
700	30	3,164	10.5	-3.6	27	3.8
650	30	3,773	6.1	-8.1	28	4.6
600	30	4,427	1.1	-11.9	29	4.6
550	30	5,112	-3.9	-17.9	28	5.4
500	30	5,866	-8.9	-23.4	27	6.0
450	30	6,671	-14.3	-28.6	27	6.9
400	30	7,558	-20.8	-34.0	26	9.8
350	30	8,533	-27.9	-39.1	26	12.6
300	30	9,623	-36.1	-46.4	26	16.2
250	30	10,864	-45.6		26	13.2
200	29	12,316	-56.9		27	24.6
175	29	13,151	-62.6		27	25.7
150	29	14,089	-67.5		27	21.8
125	29	15,181	-69.4		27	16.9
100	29	16,507	-71.4		27	10.6
80	29	17,822	-71.7		27	5.6
70	29	18,613	-69.3		24	1.9
60	29	19,544	-63.8		06	2.2
50	29	2[illegible],677	-58.8		09	3.8
40	27	22,095	-54.6		09	4.6
30	27	23,952	-50.6		08	6.[illegible]
25	26	25,146	-48.4		07	5.0
20	25	26,62[illegible]	-46.1		08	3.7
15	20	28,555	-41.8		06	1.5
10	7	31,298	-37.0			

MONTERREY, MEXICO 2/ 965 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	29	423	23.4	20.5	13	2.9
1000	29	104				
950	29	556	22.4	20.0	12	3.9
900	29	1,024	19.2	17.8	13	6.6
850	29	1,517	18.2	13.6	14	7.5
800	29	2,035	16.2	6.6	13	6.9
750	29	2,580	13.6	-.5	14	3.2
700	29	3,161	10.9	-5.5	12	.8
650	29	3,772	6.9	-9.5	32	2.7
600	29	4,428	2.5	-12.9	35	2.8
550	29	5,11[illegible]	-2.0	-19.3	02	2.0
500	29	5,876	-6.8	-24.4	06	1.7
450	29	6,69[illegible]	-11.6	-28.8	04	1.0
400	29	7,587	-17.4	-33.9	33	1.0
350	29	8,574	-24.4	-39.9	34	1.4
300	29	9,679	-32.6	-46.9	30	3.0
250	29	10,937	-42.7		31	4.1
200	28	12,407	-54.4		31	4.9
175	28	13,251	-60.7		30	5.9
150	28	14,194	-67.7		31	3.4
125	28	15,273	-74.0		32	1.6
100	28	16,565	-74.8		06	2.6
80	28	17,881	-69.5		08	6.3
70	28	18,681	-65.0		07	8.1
60	28	19,628	-62.1		09	10.3
50	28	20,763	-58.5		09	10.8
40	28	22,181	-54.1		08	11.9
30	27	24,046	-49.5		08	12.5
25	27	25,244	-47.8		09	12.7
20	27	26,723	-45.5		08	11.7
15	20	28,661	-42.6		08	10.4
10	5	31,477	-35.8			

MONTERREY, MEXICO 3/ 968 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	30	423	23.0	19.2	12	1.5
1000	30	136				
950	30	589	22.2	18.5	12	3.9
900	30	1,054	18.9	17.0	13	5.0
850	30	1,547	19.3	12.3	14	7.5
800	30	2,068	16.9	6.8	14	6.7
750	30	2,607	13.5	3.4	14	4.5
700	30	3,193	9.8	-1.5	13	1.9
650	30	3,797	5.7	-6.2	01	.9
600	30	4,455	1.3	-10.2	01	1.6
550	30	5,144	-3.0	-15.9	05	2.2
500	30	5,900	-7.9	-18.7	08	3.3
450	30	6,705	-13.1	-23.6	08	3.6
400	30	7,601	-19.1	-29.9	07	4.8
350	30	8,582	-25.7	-36.7	06	6.4
300	30	9,680	-34.2	-44.7	05	7.1
250	30	10,930	-44.2		04	8.1
200	30	12,388	-55.9		05	11.0
175	30	13,226	-61.7		05	12.9
150	30	14,167	-67.4		05	13.5
125	30	15,253	-71.8		05	12.4
100	30	16,567	-71.4		07	10.1
80	30	17,903	-66.1		08	9.6
70	30	18,715	-64.3		08	10.6
60	30	19,662	-61.6		08	11.5
50	30	20,799	-58.6		08	13.9
40	30	22,209	-55.5		08	17.0
30	30	24,062	-50.7		08	17.8
25	28	25,267	-48.4		08	16.8
20	26	26,743	-46.1		08	17.5
15	21	28,666	-44.5		08	18.2
10	7	31,431	-39.9			

MONTERREY, MEXICO 4/ 968 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	25	423	21.9	19.8	09	.8
1000	25	141				
950	25	592	21.3	18.7	10	2.3
900	25	1,057	18.8	16.7	12	4.[illegible]
850	25	1,548	17.9	12.0	13	5.9
800	25	2,066	14.9	7.6	13	5.8
750	25	2,606	11.9	3.0	12	4.9
700	25	3,185	8.7	-2.2	12	4.1
650	25	3,795	4.9	-5.4	06	2.7
600	25	4,445	.8	-7.8	03	2.[illegible]
550	25	5,136	-3.2	-11.7	04	1.6
500	25	5,888	-7.6	-16.2	07	1.[illegible]
450	25	6,700	-12.8	-21.7	07	1.6
400	25	7,592	-18.5	-28.6	07	1.9
350	25	8,575	-25.3	-36.1	01	1.6
300	25	9,676	-33.8	-44.6	36	1.8
250	25	10,927	-43.9		34	1.9
200	25	12,387	-55.6		35	4.4
175	25	13,226	-61.6		36	6.0
150	25	14,168	-67.4		01	6.5
125	25	15,254	-71.6		03	7.6
100	25	16,569	-70.9		05	7.4
80	25	17,904	-66.0		08	9.5
70	25	18,716	-63.9		08	10.4
60	25	19,667	-61.7		08	11.6
50	25	20,802	-58.5		08	14.0
40	25	22,216	-55.2		08	18.0
30	25	24,068	-51.0		08	17.0
25	25	25,260	-46.8		08	15.9
20	22	26,736	-46.9		08	16.0
15	20	28,654	-44.6		08	17.0
10	12	31,376	-40.7		08	16.3
7	5	33,784	-40.0			

SAN NICOLAS, CALIF. 5/ 994 MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	31	176	16.0	11.5	31	2.3
1000	31	123				
950	31	564	21.1	.0	35	1.5
900	31	1,031	20.6	-2.2	36	1.6
850	31	1,521	18.0	-5.1	34	1.1
800	31	2,036	15.3	-7.0	36	1.0
750	31	2,579	12.4	-11.0	36	1.5
700	31	3,153	9.1	-14.4	35	2.2
650	31	3,763	5.8	-18.0	33	3.0
600	31	4,412	1.4	-21.6	33	3.8
550	31	5,106	-3.3	-25.1	33	4.2
500	31	5,852	-8.8	-30.2	32	6.1
450	31	6,659	-14.9	-34.2	32	7.6
400	31	7,538	-21.9	-38.9	31	9.0
350	31	8,505	-29.9	-44.8	32	10.3
300	31	9,583	-38.6	-52.2	32	11.5
250	31	10,809	-48.4	-59.9	31	13.5
200	31	12,247	-57.7	-68.1	31	14.1
175	30	13,080	-62.1	-71.8	31	14.0
150	30	14,024	-65.8	-75.1	31	13.4
125	30	15,122	-69.5		30	12.2
100	30	16,445	-72.0		31	8.9
80	30	17,764	-70.0		32	5.0
70	30	18,564	-67.3		34	4.4
60	30	19,500	-64.4		1	3.3
50	30	20,623	-61.5		03	1.8
40	30	22,020	-57.4		34	1.3
30	30	23,851	-54.2		28	2.7
25	30	25,027	-51.9		27	5.9
20	29	26,477	-50.6		27	6.8
15	28	28,356	-49.6		28	9.2
10	27	31,028	-47.2		29	11.1
7	25	33,4[illegible]9	-43.3		28	9.2
5	19	35,674	-40.3		27	14.7
4	10	37,197	-38.0			

SAN NICOLAS, CALIF. 6/ [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	28	174	14.7	12.8	28	.7
1000	28	127				
950	28	563	14.7	9.0	2[illegible]	1.5
900	28	1,021	14.3	3.8	18	3.1
850	28	1,5[illegible]2	12.5	-1.2	18	4.1
800	28	2,007	9.7	-4.5	19	4.2
750	28	2,540	7.[illegible]	-9.6	19	4.0
700	28	3,104	3.9	-12.4	20	3.9
650	28	3,702	.2	-15.1	21	4.1
600	28	4,338	-3.9	-20.0	21	4.3
550	28	5,019	-8.4	-24.9	21	4.7
500	28	5,752	-13.3	-29.4	23	5.1
450	28	6,544	-19.4	-3[illegible].6	24	6.4
400	28	7,409	-26.0	-37.4	24	6.7
350	28	8,362	-33.2	-43.9	24	8.9
300	28	9,427	-41.1	-52.[illegible]	24	11.8
250	28	10,644	-49.1	-59.7	24	12.8
200	28	12,086	-55.7	-67.3	25	13.0
175	28	12,930	-59.1	-70.3	25	13.5
150	28	13,888	-62.6	-73.2	25	12.2
125	28	15,005	-65.6		25	9.1
100	27	16,358	-67.2		26	7.0
80	27	17,702	-68.0		27	3.6
70	27	18,507	-66.3		27	1.9
60	27	19,446	-63.7		04	1.5
50	27	20,572	-61.1		06	2.9
40	27	21,966	-58.6		07	4.6
30	26	23,784	-56.1		07	5.3
25	26	24,946	-54.7		06	5.0
20	26	26,378	-53.5		07	4.9
15	25	28,238	-47.7		33	2.4
10	24	30,880	-50.2		3[illegible]	5.0
7	23	33,230	-47.8		31	6.0
5	18	35,467	-45.1		29	6.6
4	11	36,929	-44.5			

YUMA, ARIZ. 1/ [illegible] MB

Standard pressure surface (mb)	No. of observations	Dynamic height	Temperature	Dew Point	Wind Direction	Wind Speed
SURFACE	21	131	19.4	.9	[illegible]8	.1
1000	21	9[illegible]				
950	21	540	22.7	1.0	26	2.5
900	21	1,008	20.0	-.6	26	2.9
850	21	1,497	16.8	-3.5	24	3.3
800	21	2,009	13.3	-6.5	22	4.1
750	21	2,541	9.6	-10.0	22	4.2
700	21	3,117	5.6	-13.0	24	4.6
650	21	3,710	1.6	-17.4	23	6.1
600	21	4,357	-3.2	-20.0	23	7.4
550	21	5,027	-8.1	-24.6	24	8.8
500	21	5,771	-13.3	-27.3	24	10.3
450	21	6,552	-18.9	-33.2	24	12.9
400	21	7,431	-25.5	-37.3	24	15.1
350	21	8,385	-32.9	-43.7	24	16.6
300	21	9,450	-41.4	-47.3	24	21.3
250	20	10,663	-50.6		24	23.3
200	18	12,[illegible]73	-58.9		25	27.4
175	17	12,915	-6[illegible].2		25	24.7
150	15	13,895	-60.8		25	22.0
125	13	15,012	-62.6		25	17.8
100	11	16,384	-64.9		26	15.0
80	9	17,769	-64.9			
70	9	18,584	-63.9			
60	9	19,535	-61.7			
50	8	20,669	-59.1			
40	6	22,095	-55.3			
30	5	23,938	-53.5			
25	5	25,119	-51.3			

1/ May 1967
2/ June 1967
3/ July 1967
4/ August 1967
5/ October 1967
6/ November 1967

Also see reference notes with current data

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
MAY 1966																																
MAUNA LOA OBS.HAWAII	454	662	612	845	848	810	817	724	817	694	592	781	763	501	524	601	863	841	804	518	354	709	823	837	726	846	837	744	829	783	744	719
JUNE 1966																																
MAUNA LOA OBS.HAWAII	791	853	848	853	854	777	803	697	801	709	795	828	820	---	---	---	874	563	856	864	821	843	835	857	844	801	849	---	827	846		812
JULY 1966																																
MAUNA LOA OBS.HAWAII	841	848	845	829	826	709	---	---	---	---	825	831	608	640	857	---	---	842	608	730	801	---	845	613	528	370	545	679	544	772	740	720
AUGUST 1966																																
MAUNA LOA OBS.HAWAII	454	507	797	804	767	---	825	593	630	795	725	812	785	629	672	755	530	824	---	820	825	653	549	427	349	159	238	781	597	774	668	646
SEPTEMBER 1966																																
MAUNA LOA OBS.HAWAII	463	306	441	631	757	774	725	680	576	---	---	462	472	759	778	775	636	736	743	748	621	471	265	301	399	379	313	507	721	505		569
OCTOBER 1966																																
MAUNA LOA OBS.HAWAII	727	725	721	621	672	463	684	585	229	---	250	453	324	426	341	212	160	129	301	---	534	482	540	647	---	644	638	---	552	628	626	493
NOVEMBER 1966																																
MAUNA LOA OBS.HAWAII	462	282	286	260	102	235	361	588	603	575	544	464	271	506	412	301	396	477	414	361	643	241	---	---	---	---	---	---	525	418		405
DECEMBER 1966																																
MAUNA LOA OBS.HAWAII	376	356	543	496	535	409	146	247	523	556	541	---	---	552	544	---	---	545	565	580	---	563	495	358	538	381	307	---	---	---	---	462
JANUARY 1967																																
MAUNA LOA OBS.HAWAII	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585	589	569	540	610	500	310	---
SEATTLE WASHINGTON	91	12	52	6	71	47	66	33	50	17	31	21	9	11	150	94	45	19	5	83	82	69	35	154	22	31	18	108	53	177	168	59
FEBRUARY 1967																																
MAUNA LOA OBS.HAWAII	403	476	425	565	396	583	621	640	417	566	567	642	454	299	505	584	656	682	638	659	679	678	678	685	672	698	544	608				572
SEATTLE WASHINGTON	113	37	77	121	202	138	166	121	40	120	36	25	48	89	106	39	44	139	259	166	215	146	271	190	93	152	195	62				122
MARCH 1967																																
MAUNA LOA OBS.HAWAII	460	451	499	650	663	711	402	610	543	196	369	380	533	589	625	735	553	302	436	175	146	230	486	406	454	368	291	319	471	414	340	445
SEATTLE WASHINGTON	93	218	265	312	328	96	216	106	194	337	176	391	223	99	82	145	122	306	335	383	216	79	277	214	226	255	270	88	241	283	157	217
APRIL 1967																																
MAUNA LOA OBS.HAWAII	376	617	386	382	444	294	430	761	801	467	562	719	722	796	702	732	825	806	688	785	835	462	373	271	325	568	510	500	475	431		568
SEATTLE WASHINGTON	491	484	468	206	383	517	388	173	325	306	530	160	285	384	---	---	---	68	337	147	394	427	427	569	248	442	51	337	394	437		347
MAY 1967																																
MAUNA LOA OBS.HAWAII	513	716	690	719	761	711	511	565	588	462	483	214	324	401	315	499	485	675	362	655	706	735	680	---	649	415	665	515	811	452	408	556
JUNE 1967																																
DAVIS CALIFORNIA	191	197	737	624	382	386	696	763	685	737	659	703	708	762	758	745	743	679	751	762	758	757	780	750	766	764	739	758	730	740		674
GAINESVILLE FLORIDA	541	496	428	521	484	441	628	646	604	416	651	632	641	697	744	638	726	635	644	483	573	380	316	420	565	444	475	403	440	632		545
MAUNA LOA OBS.HAWAII	489	465	604	643	532	794	542	825	629	832	601	427	356	775	415	471	843	831	846	828	793	838	847	800	766	832	629	331	547	797		664
PROSSER WASHINGTON	---	686	---	---	734	750	708	774	722	662	590	628	670	744	764	696	764	---	686	682	398	610	750	748	---	612	718	745	772	768		695
PULLMAN WASHINGTON	541	566	139	507	699	435	715	626	551	544	481	381	657	740	728	731	493	723	723	687	144	477	683	720	734	644	615	775	744	751		598
SEATTLE WASHINGTON	607	77	256	711	705	527	363	303	489	313	590	573	424	569	711	659	698	701	663	316	86	455	533	691	701	317	543	545	694	728		518

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys. DELAYED DATA

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
JUNE 1967																																
STILLWATER OKLAHOMA	303	396	587	655	595	461	564	664	647	278	510	440	535	666	641	480	615	466	636	269	438	709	440	611	166	561	628	632	545	500		521
JULY 1967																																
SEATTLE WASHINGTON	694	702	699	446	655	347	662	188	584	670	647	550	483	505	675	654	567	418	254	206	543	673	622	579	405	342	422	506	616	474	407	522
STILLWATER OKLAHOMA	521	420	563	367	478	548	506	620	548	684	641	353	---	---	520	125	533	236	515	587	480	623	670	600	270	593*	593	183	---	591	482	495
AUGUST 1967																																
SEATTLE WASHINGTON	643	516	476	418	503	141	340	592	469	403	535	588	588	567	569	559	541	566	525	419	333	541	222	548	535	488	456	484	457	282	308	471
STILLWATER OKLAHOMA	327	569	93	279	539	---	599	590	---	528	614	645	611	527	528	451	260	439	543	561	536	443	557	550	499	322	599	514	516	178	509	480
SEPTEMBER 1967																																
MAUNA LOA OBS.HAWAII	788	800	600	584	415	426	603	673	493	676	719	600	488	387	173	375	710	589	727	697	739	689	635	622	697	717	711	751	640	722		615
SEATTLE WASHINGTON	234	405	489	462	467	424	407	416	119	193	286	453	452	432	433	425	350	398	397	364	336	403	407	358	377	368	353	345	114	118		360

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code A S Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms. DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
Albuquerque, N. Mex.																																
Apr. 1967	00284	02277	05281	03268	00283	00291	00283	06278	05287	02297	05311	00333	05381	05297	05285	00313	03292	00311	05284	00305	00305	00297	00297	00308	00310	00305	06298	05294	00313	00278		298
May	00102	02350	00317	00317	05307	00301	00290	03271	05253	00270	00289	00297	00307	00354	00324	00319	02307	03291	02306	00319	00302	00312	00302	00301	00312	02313	03281	00321	00325	05327	00323	311
June	00300	00297	06268	06272	00276	00287	00307	00311	00307	00320	02330	00312	00292	00280	00298	00289	00280	00268	05247	00270	00279	00266	00271	05245	00260	00272	00277	00307	-----	-----		285
July	-----	00292	00284	-----	00290	00287	00280	-----	-----	-----	-----	-----	-----	-----	-----	-----	05291	00291	00287	00277	00288	-----	-----	00289	00282	02271	00289	05324	-----	-----	05283	288
Bedford, Mass.																																
May 1966	-----	00366	00420	05512	00433	00430	-----	-----	-----	00439	00418	04443	00396	-----	-----	00382	00416	00396	05392	00375	-----	-----	00367	-----	-----	-----	-----	-----	-----	-----	-----	412
June	-----	-----	-----	-----	-----	-----	00346	00370	-----	-----	-----	-----	-----	-----	32355	-----	-----	-----	-----	-----	00315	00353	00355	-----	-----	-----	-----	-----	-----	02361		351
July	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	06341	00343	-----	-----	-----	-----	-----	04277	03275	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	309
Aug.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	04324	-----	-----	05385	04356	05344	00328	00329	-----	-----	-----	-----	00316	00320	00334	-----	-----	00337	-----	05334	337
Sep.	-----	-----	-----	-----	-----	00326	00409	00339	00327	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	05283	-----	02347	-----	-----	00305	03325	03328	-----	00369		336
Oct.	-----	-----	00323	-----	00315	00333	00309	-----	-----	-----	00369	00362	00313	-----	-----	-----	05442	00448	-----	05430	00409	-----	-----	05390	-----	00326	-----	00272	-----	-----	06313	357
Nov.	00315	-----	-----	00299	-----	-----	00329	00344	-----	-----	-----	-----	-----	00308	00287	00367	00308	-----	-----	-----	00278	-----	00315	-----	-----	-----	-----	-----	00333	00345		319
Apr. 1967	-----	-----	-----	00379	00386	04412	-----	-----	-----	00395	00381	00415	00354	00352	-----	-----	05397	-----	05418	00381	00352	-----	-----	-----	00387	00371	00381	00375	-----	-----		384
May	00356	00352	00356	00410	00416	-----	-----	05396	05456	05422	00385	00385	-----	-----	-----	00351	00406	00421	05381	-----	-----	00386	00389	00382	-----	-----	-----	-----	00370	-----	00384	390
June	00402	00387	-----	-----	00368	00361	00367	-----	00331	-----	-----	00353	05340	05343	00340	00330	-----	-----	06392	-----	06368	00336	35375	-----	-----	00349	00359	00370	00365	04413		362
July	-----	-----	00360	-----	05380	05403	00344	-----	-----	00325	00349	00329	00345	00332	-----	-----	00337	00333	00323	34340	00327	-----	-----	00340	00342	00339	00337	05343	-----	-----	00340	343
Oct.	-----	00280	00278	00277	06283	05303	-----	-----	05280	04295	00284	06287	-----	-----	-----	00257	00248	00253	00289	00284	-----	-----	-----	-----	00272	02298	00282	-----	-----	00287	00270	279
Bismarck, N. Dak.																																
Apr. 1967	04409	00439	00349	00358	05360	03402	00379	00395	00372	05367	05370	05372	05430	06421	00372	06421	00356	00354	00358	05415	06418	00409	00430	05385	05382	05391	00366	05361	05382	-----		387
May	04112	05430	00443	00424	00443	00396	06403	00390	00376	-----	00393	05408	00454	00405	00405	00399	00383	00403	00382	00381	00376	00361	00353	00355	04357	00352	00349	00364	00339	04316	04350	387
June	00352	00332	00346	00369	05339	00337	06325	06337	05358	06360	05384	05383	05366	00362	04352	00351	00340	05370	00376	00336	00352	35347	00359	06369	00378	00375	00358	04336	00330	00324		353
July	00392	05375	00366	00335	00322	00331	00324	00330	00340	00346	00333	00334	00316	00336	00348	00333	00338	00330	00321	00328	00328	06335	00338	00335	00343	04316	00357	00344	00333	00336	00321	338
Oct.	00308	00302	03252	00270	04264	-----	05314	05286	05290	00292	05298	06267	00270	04299	00317	00283	00286	00263	00266	00282	00283	00308	04312	05343	05288	04337	05329	05280	00330	00320	03277	294
Boulder, Colo.																																
July 1967	-----	-----	05341	-----	00323	00324	00317	-----	-----	00313	06305	00314	00312	00315	-----	-----	05313	00320	00324	00321	00311	-----	-----	00325	00316	00318	05320	00325	-----	-----	05316	319
Oct.	-----	00283	00268	06278	00263	00290	-----	-----	00275	00286	00273	00275	00262	-----	-----	00264	00268	00259	00276	00280	00292	-----	00291	00279	05283	-----	00302	-----	-----	00303	00280	279
Canton Is., Pacific																																
July 1967	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00260	00256	00258	00264	04227	00266	00249	00255	00255	00255	00257	255
Caribou, Maine																																
Apr 1967	06364	00375	05386	00415	35433	00409	05412	00385	00386	-----	06429	00389	00392	00270	05423	05402	00407	05421	00394	05433	00381	05365	04422	-----	00407	00408	00403	00384	05442	00381		401
May	00361	00352	-----	00391	00434	05434	00412	-----	05457	-----	05402	-----	06384	00437	06415	05414	35402	05417	05427	-----	05413	00444	00446	00387	05396	05384	-----	05418	00403	-----	06393	409
June	05394	00384	00372	00362	00366	00341	04355	00351	-----	00365	00338	05377	00377	05358	-----	05325	05318	00350	00353	00349	00356	05388	05359	00344	05332	00392	00385	00365	00381	00387		362
July	00367	35348	-----	02336	34380	05370	05318	00348	35341	00330	00338	04436	06340	00336	05321	-----	00339	00324	00327	00336	00351	00337	00376	05338	05354	05348	06339	-----	00340	00335	05354	347
Oct.	00318	05288	04296	06286	04295	05348	00341	05313	-----	-----	05289	04327	05323	05289	05278	05291	05289	05282	06278	03307	05318	35344	00298	00284	00274	-----	05286	-----	05325	00312	04289	303
Fairbanks, Alaska																																
Apr. 1967	04407	-----	00388	-----	04379	06475	05401	04429	00421	04438	05463	00418	-----	00432	-----	04377	-----	00371	04414	05429	06485	-----	-----	05474	00428	00454	04398	00387	00378	00396		419
May	00414	00400	00398	00395	06457	00443	00397	05422	05395	-----	00398	04430	00393	03387	05421	00445	00433	05440	06420	06395	06383	-----	04381	00389	05390	00380	00398	00366	06368	00385	02393	404
June	06394	05384	00332	04346	05367	06391	00363	00342	05368	00340	00337	00335	00343	-----	00339	00322	00316	00322	06304	04310	05310	06329	00341	00341	00345	00364	04336	00364	-----	00357		341
July	00377	06350	05350	06362	-----	05337	03334	04352	03336	00329	05332	03340	00327	03332	03322	04292	04322	04319	-----	06370	05365	-----	00320	-----	04337	03328	-----	04337	06317	05324	04306	335
Oct.	35317	-----	-----	00257	00270	20302	34321	20325	34300	34315	35320	35333	36321	35313	35333	-----	35353	33341	32323	34326	34330	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	317
Green Bay, Wis.																																
Apr. 1967	00349	04352	00377	04379	04360	04397	00403	00366	00370	00345	00364	04336	05358	02349	00368	05363	08441	00373	00366	00371	03363	05387	00381	00412	00389	00422	00410	00380	05360	-----		376
May	00379	05436	00458	00432	00422	00418	00434	06417	00431	04401	05435	00401	00387	00404	00451	00421	00424	00395	05421	00427	04477	00420	04469	00386	00376	00359	00349	05379	00355	00370	00369	412
June	00382	00387	00370	00354	04366	04365	04362	00346	00346	04352	04318	04338	00350	00325	00321	00330	00359	00349	04394	00352	04355	00350	07385	-----	00369	00380	00388	-----	04378	00341		359
July	00336	04130	04399	05398	00387	00343	00329	04358	03311	00340	00329	00353	04374	00360	00362	00373	00368	04361	00353	00329	00314	00334	00338	00365	00361	00360	05347	00333	00360	00354	00359	357
Oct.	00303	00297	00290	00272	00282	04299	04322	06349	00351	06316	04335	00293	05312	-----	-----	00300	00303	04367	00316	00329	00294	00296	04301	05332	05363	05330	04359	00332	04294	05330	00283	316
Huancayo, Peru																																
Apr. 1967	00276	-----	33270	05267	00285	00267	00278	00278	05274	00272	00229	00263	00269	00290	00262	00266	00264	00261	00261	00259	00267	00269	00267	00265	00263	00256	00260	00262	02256	00264		266
May	00265	00265	00270	00269	00266	00268	-----	-----	-----	-----	00255	00251	00260	00257	00260	00252	00255	00249	00260	00259	00263	00255	00256	00260	00264	00257	-----	00253	00250	00253	00257	259
June	05269	00256	00259	00265	00265	00259	00261	05260	00263	00263	00260	00263	00257	00249	00258	00260	-----	-----	00261	00263	00261	00273	00262	00266	00260	00256	00256	00261	00260	00267		261
July	06218	00254	00255	00252	00255	00248	00251	00249	00261	00265	00254	00257	05266	00254	00252	00264	00259	00265	00277	00272	00273	00264	00267	00266	-----	-----	-----	-----	-----	-----	00263	260
Oct.	00284	-----	-----	00265	04275	00272	00298	00279	00276	-----	-----	-----	-----	05272	00271	00267	00260	00265	00264	00261	00267	00262	05262	00258	00254	-----	00266	-----	00261	00261	00262	268
Mauna Loa, Hawaii																																
Apr. 1967	-----	-----	05314	-----	-----	05291	05288	-----	-----	00339	00325	00323	00303	00308	-----	-----	00310	00309	00305	00289	00311	00312	-----	05316	06301	-----	03315	06333	00314	-----		313
May	00307	00318	00309	-----	00295	00306	-----	05298	-----	-----	05311	05306	-----	-----	05310	00290	00292	00298	00244	00299	-----	00308	00311	00307	03297	00303	00295	-----	00282	00291	00289	299
June	-----	00292	-----	-----	00280	00287	00287	05278	02294	-----	00304	00300	00303	00290	00281	-----	00274	-----	00282	00284	-----	00285	00298	00290	-----	00282	00288	-----	00299	02288		289
July	-----	-----	00278	-----	-----	00290	00277	06253	05251	00277	02263	00275	05269	06283	00276	-----	00282	05274	00282	00285	-----	05304	-----	00286	06271	00282	00255	00275	00276	-----	00279	276
Oct.	-----	00277	00275	00282	00283	00269	00273	-----	00270	00283	00259	00261	-----	00264	-----	00274	05264	04273	-----	00270	00279	-----	06270	00272	00279	-----	00262	00266	-----	00270	00279	272

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere at the location of the station. The amount of ozone [illegible] is expressed in terms of the thickness of a layer it would occupy at standard temperature and pressure, [illegible] thousandths of a centimeter thick. The code A S designates the type of measurement made.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code . s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units. Milli-atmo-cms. DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Nashville, Tenn.																																
Apr. 1967	00313	00363	04299	00338	00333	00328	00335	00327	00327	-----	00317	00310	04286	05300	00332	00307	05315	00315	00334	00321	05317	00329	00317	00325	05314	00327	00342	00369	00339	00310		327
May	04309	04377	00390	00361	00345	05382	00365	00418	00389	00358	04321	04327	05364	05350	05347	00368	00380	00361	00356	05371	05384	00381	00391	00370	00345	00355	00347	00355	00356	00341	35351	362
June	00343	05366	35393	00363	00340	00319	00326	00326	00331	00337	00319	00324	00332	00329	00320	00329	00339	00330	00334	00330	00326	35351	00324	00321	00316	00334	00336	34365	34349	00344		337
July	00346	00335	00341	00339	35355	35369	00375	04367	00328	34338	04311	00322	00333	00363	00383	00334	00354	00337	00333	00328	00320	00321	00311	00322	00320	-----	00389	00373	00339	00329	00319	341
Oct.	00296	00290	00291	00279	00290	00305	00280	05317	05319	00302	00304	00311	00286	00282	00277	04264	05279	00292	00298	00287	00284	00273	00281	00281	00298	00282	00299	00328	00286	04268	04289	291
Sterling, Va.																																
Mar. 1967	00412	00345	00344	-----	-----	-----	00357	00372	00352	00313	00323	05369	05351	00314	05358	00401	00414	00397	00341	05351	-----	05375	05424	00360	00326	00325	00333	05364	00355	00340	00331	358
Apr.	00327	00297	00296	00382	04363	-----	-----	00344	03351	-----	-----	00311	-----	00361	00334	04316	-----	00366	05360	00316	05346	04334	00329	00352	00333	-----	-----	00395	00363	05341		340
May	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00379	00369	00364	05384	05384	00378	00376	00396	-----	00335	00337	-----	05334	34369	367
June	00351	00361	00369	00372	00353	35343	00334	00327	00334	00319	00323	00323	00319	31367	-----	00314	00333	05323	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		339
Tallahassee, Fla.																																
Apr. 1967	00313	00316	00305	00319	00323	00328	00318	00310	-----	00316	06305	00303	00307	00297	04324	00297	00291	00294	00303	00308	00308	00296	36293	02294	00301	00295	00307	00341	-----	02339		309
May	02325	03327	00330	05336	05332	36294	00322	00354	00356	00344	00326	00306	00360	00302	00306	00313	00322	00343	00343	00348	03336	00355	04377	00334	00331	00328	00327	00328	00332	00331	00322	330
June	06314	04344	04311	03327	00338	05329	00321	00322	00318	00318	36308	00313	00325	00311	05303	00318	00323	35315	00323	00314	04377	00307	00305	35318	00309	00312	06309	00301	00302	05321		319
July	-----	-----	05315	00306	00312	03312	00314	-----	03340	00312	00308	00314	00311	05315	00320	00330	05319	03292	00312	03299	05291	00303	05300	00315	00320	00306	00303	00303	34313	00312	00327	312
Oct.	-----	00279	00278	00294	00311	00299	00290	00286	03281	00287	00288	04291	00288	-----	00315	00279	04286	00293	00294	00287	00285	03286	00284	03272	00276	00283	00288	-----	-----	05272	05281	287
Wallops Island, Va.																																
July 1967	04317	-----	05353	05337	00344	06327	00332	-----	00330	00314	00317	00329	-----	-----	-----	-----	00333	05310	-----	-----	00335	-----	-----	04297	00316	00315	00321	00314	00311	-----	00328	321

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e. the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer of ozone at standard temperature and pressure; e.g., 300 milli-atmo-cm ozone implies an ozone layer 0.300 centimeter thick. The code s designates the type of measurement made.

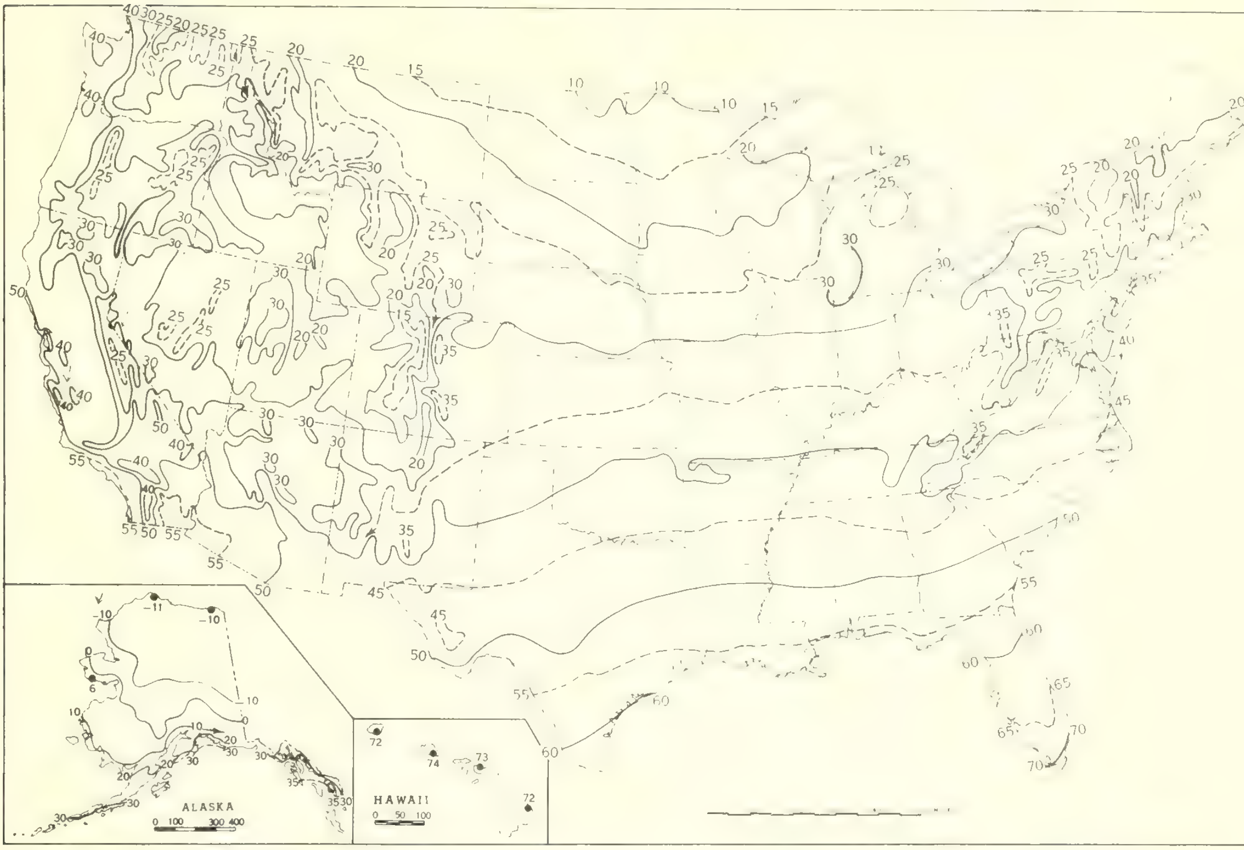
SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (3900 Å) Ames, Iowa

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Ave.
Langleys. . .																																
July 1967	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	31.20	26.28	-----	22.96	22.96	24.26	21.23	25.27	26.28	24.98	27.73	21.80	21.96	17.69	29.46	27.85	11.01	-----	----
Aug. 1967	10.83	25.13	27.87	28.16	17.04	18.05	22.38	13.57	22.82	24.26	26.92	26.14	23.11	18.31	24.12	21.12	20.65	14.44	26.72	24.70	21.23	10.54	17.18	21.52	23.68	19.21	27.58	26.00	14.87	21.52	24.84	21.4
Sep. 1967	23.40	25.27	20.07	23.11	19.70	19.93	18.77	14.01	22.73	22.24	19.50	10.68	2.16	12.27	18.92	20.22	7.94	7.22	10.68	6.64	21.66	21.37	18.25	21.52	19.50	5.05	14.01	19.50	19.21	18.63		16.4
Oct. 1967	16.46	17.62	15.84	9.83	13.08	16.06	3.12	3.33	5.95	9.65	16.60	15.16	16.78	15.97	7.22	15.34	15.16	12.90	14.53	14.71	14.07	13.62	11.91	8.48	10.19	2.25	3.70	11.28	2.07	4.24	8.66	11.1
Nov. 1967	2.25	3.61	9.02	5.77	7.49	10.28	11.19	11.19	10.46	2.61	10.28	9.22	5.68	10.19	9.56	1.69	9.83	9.74	7.03	6.22	5.68	5.50	-----	-----	-----	-----	-----	-----	-----	-----		----

These data are from an U - V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. It is at the same location (Agronomy Building, Iowa State University, Ames) as the published total solar radiation instrumentation. This instrument has not been checked by the ESSA, Weather Bureau.

Chart 1. A. Normal Daily Average Temperature (F. 1931-60), December



B. Temperature Departure from 30 - Year Mean (F 1931-60), December 1967.

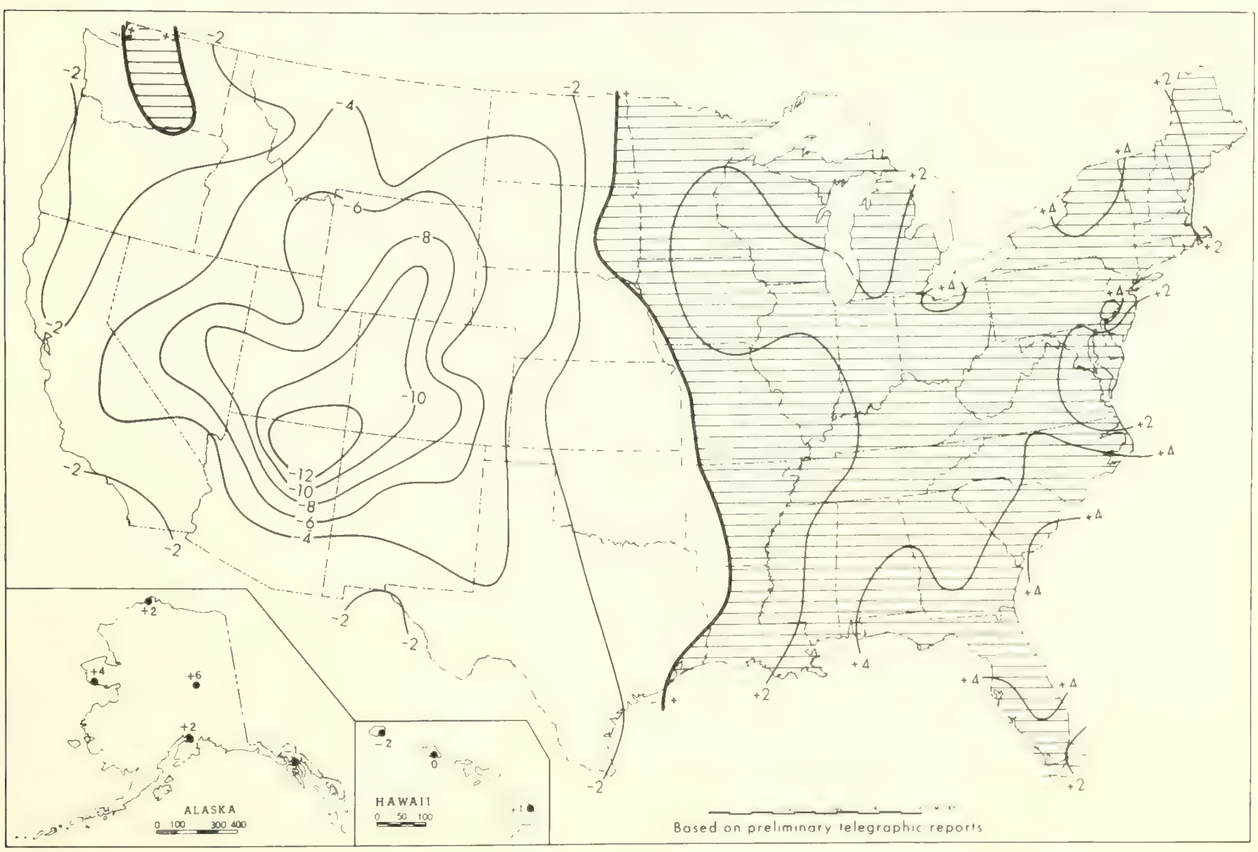


Chart II. Total Precipitation (Inches), December 1967.

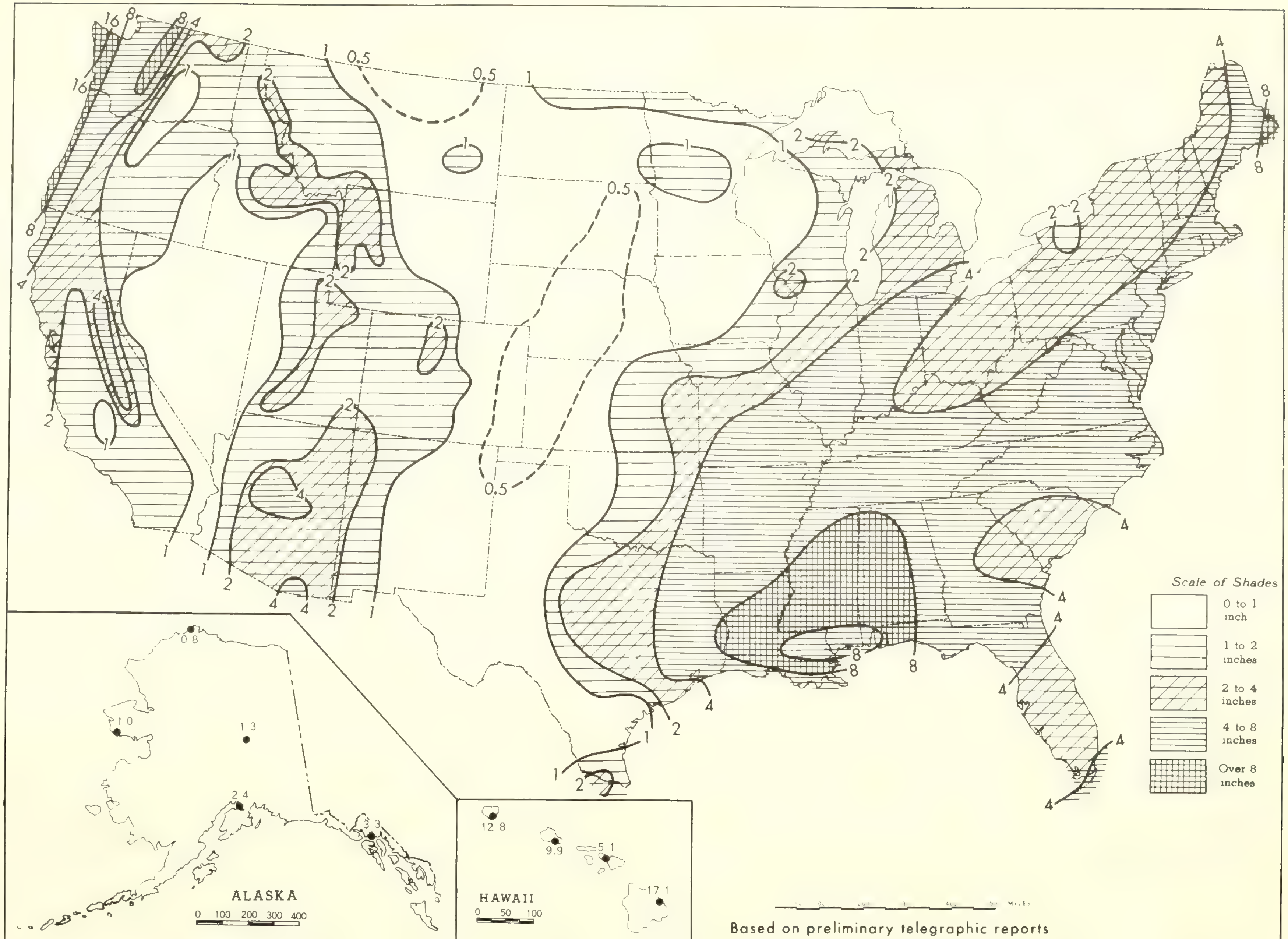


Chart III. Percentage of Normal Precipitation, December 1967.

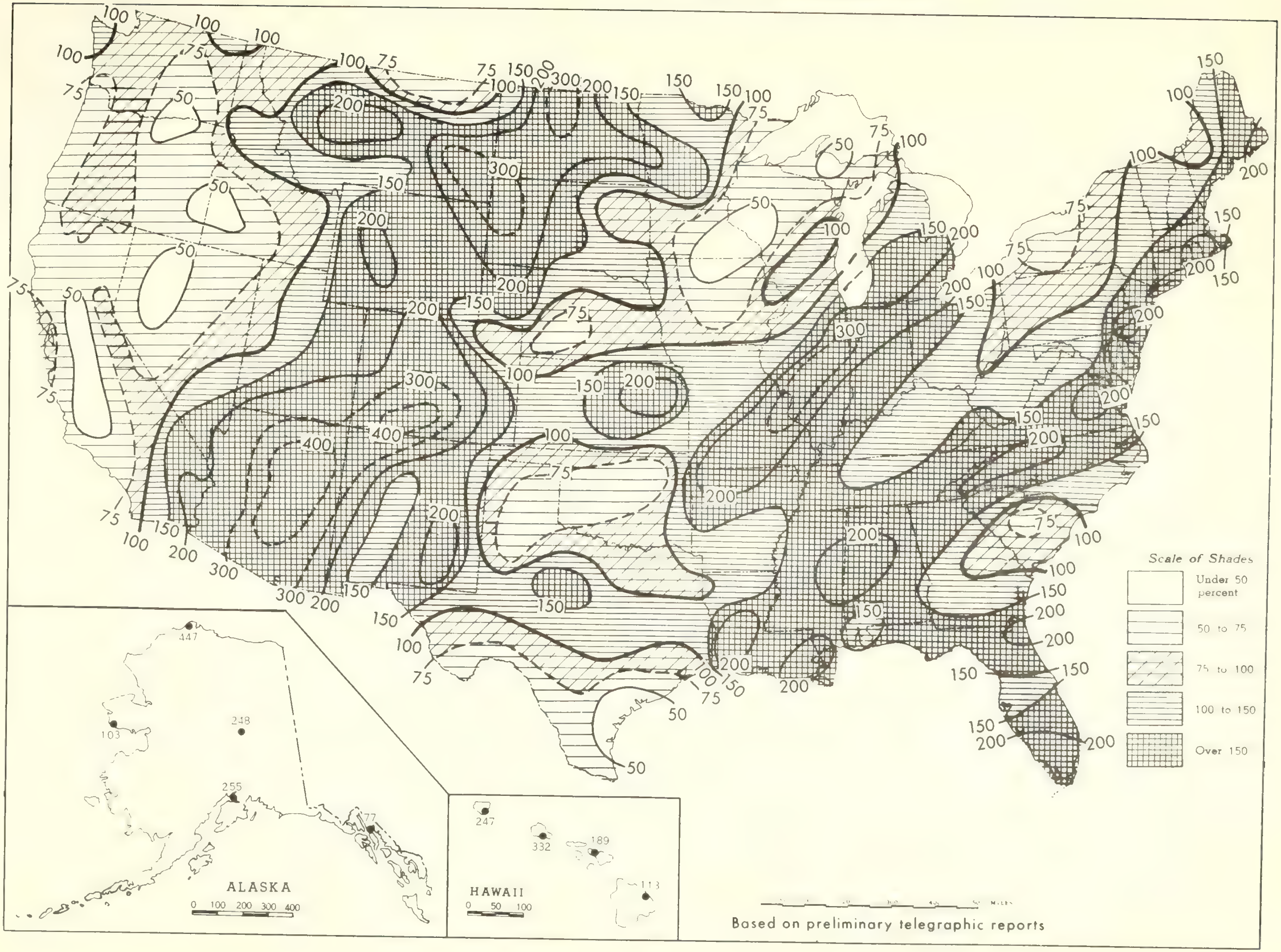
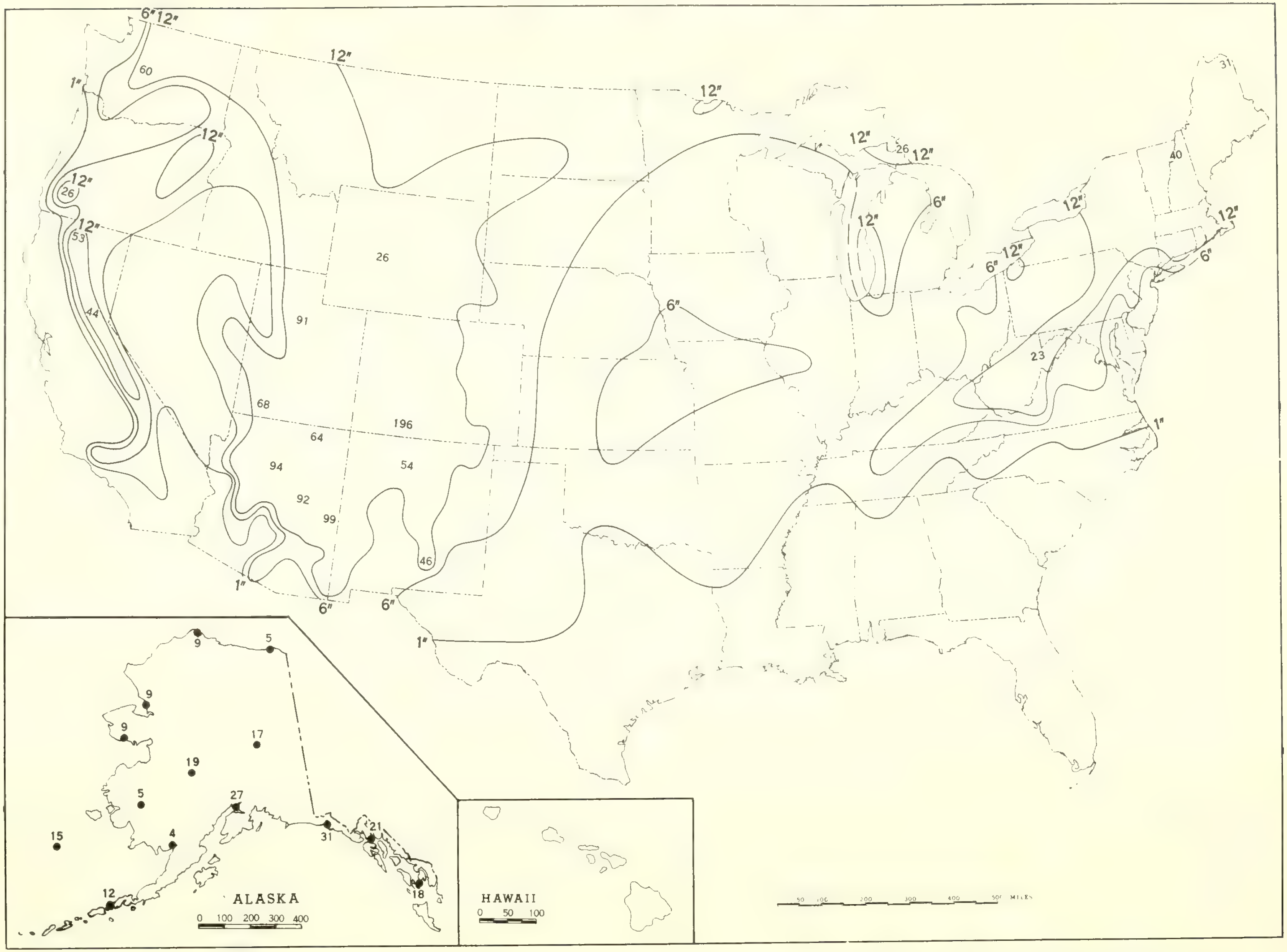
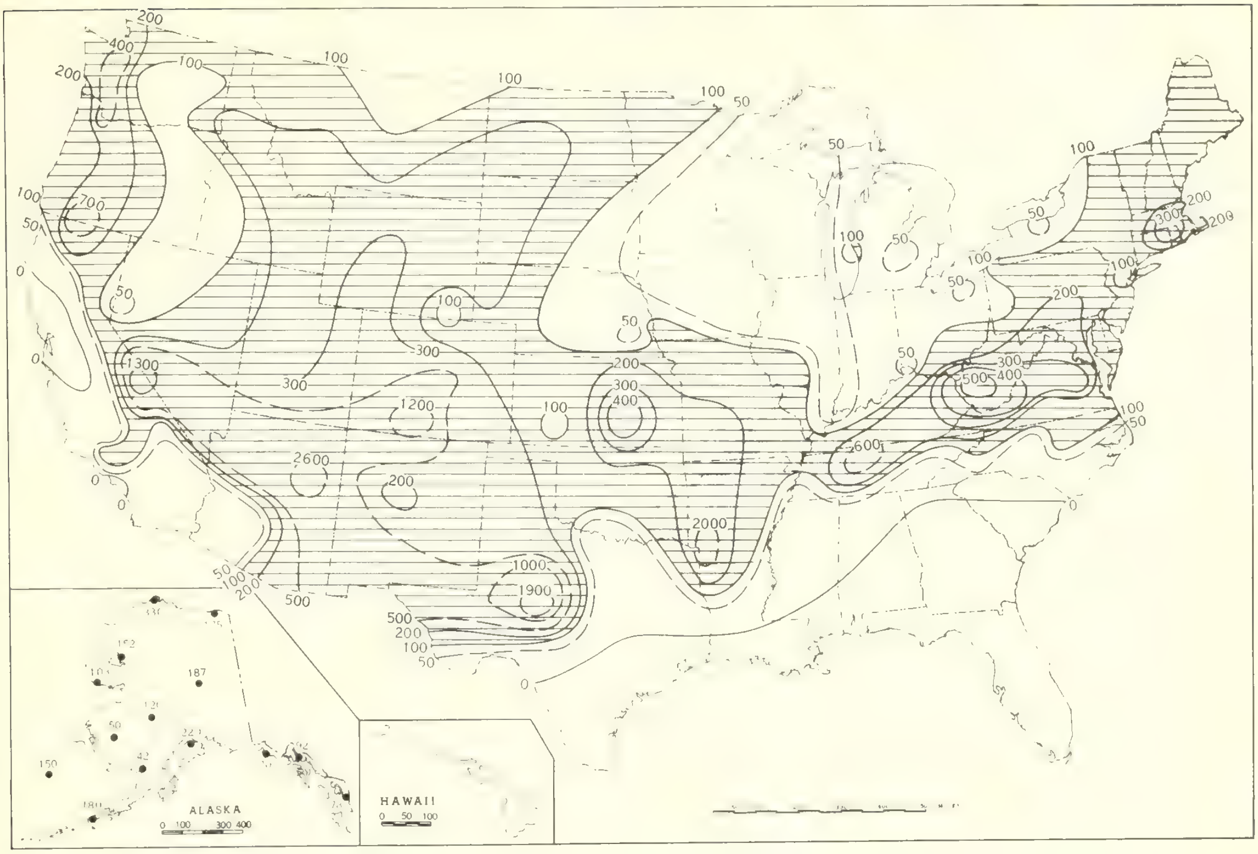


Chart IV. Total Snowfall (Inches), December 1967.

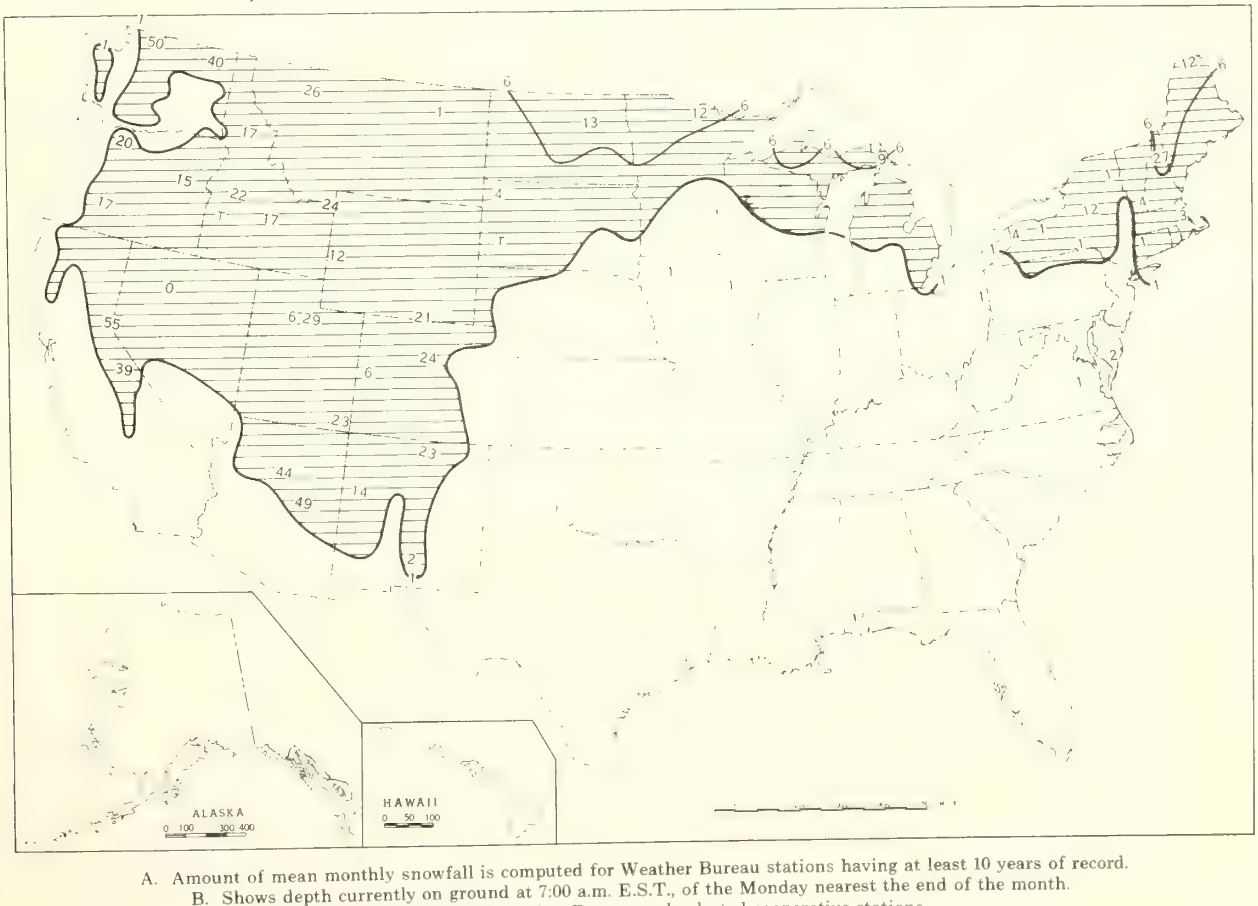


This is the total of unmelted snowfall recorded during the month at Weather Bureau and selected cooperative stations. This Chart and Chart V are published only for the months of November through April, although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, December 1967.

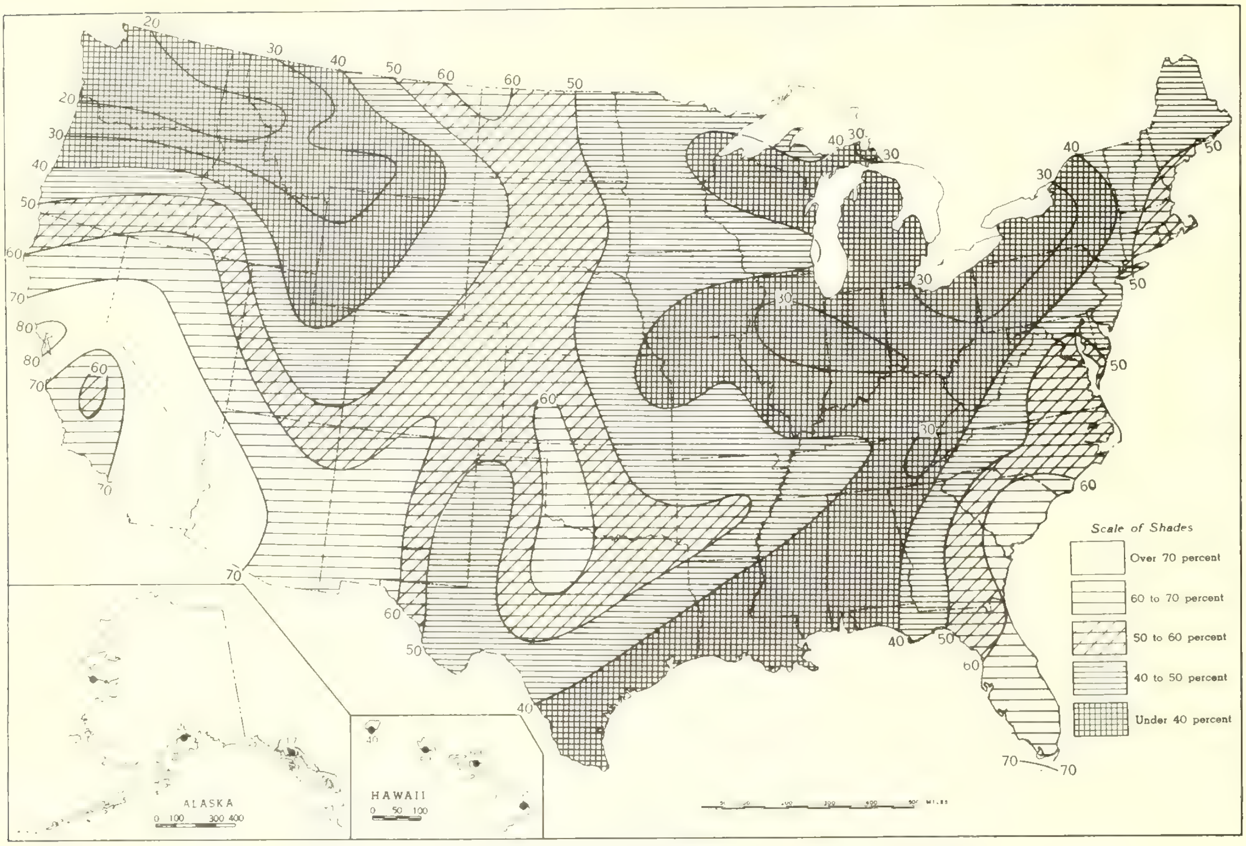


B. Depth of Snow on Ground (Inches), 7:00 a.m. E. S. T., December 25,1967

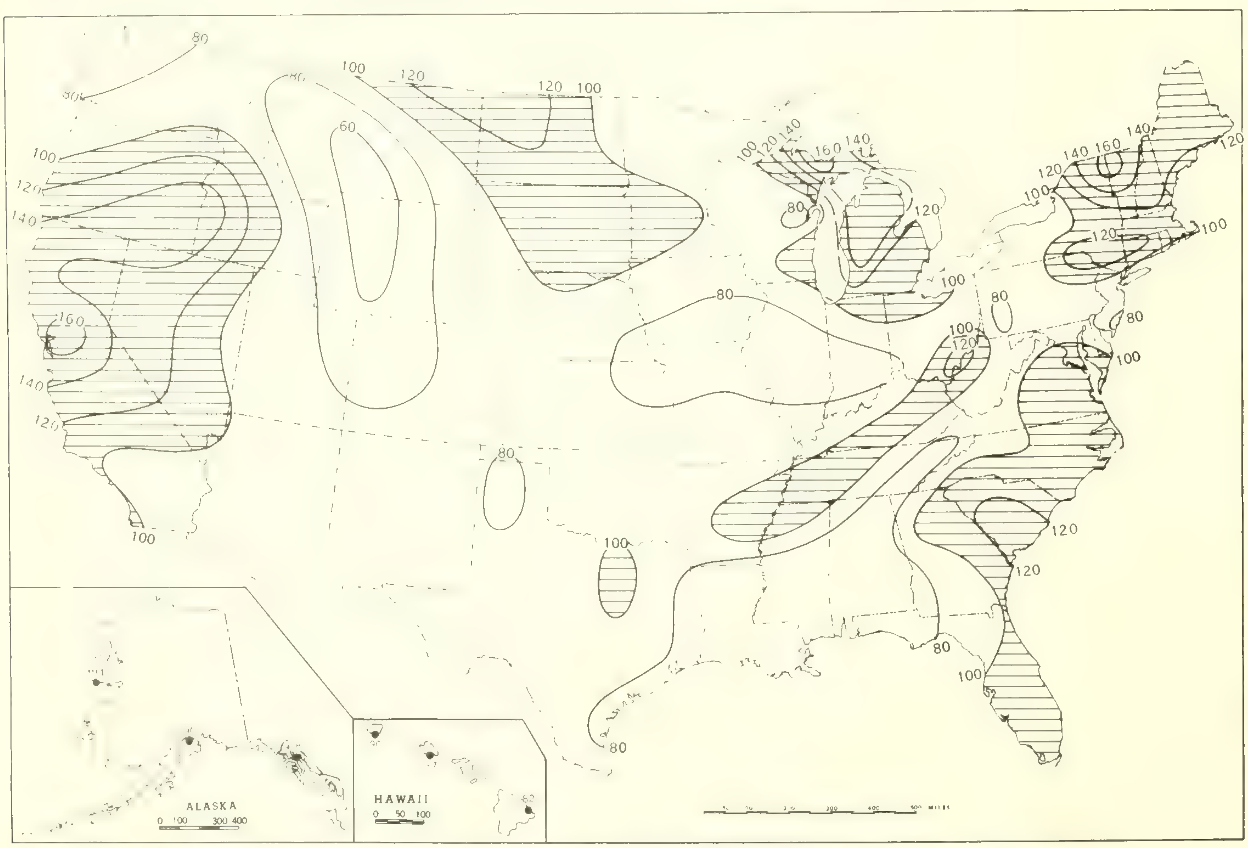


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a.m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and selected cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, December 1967.

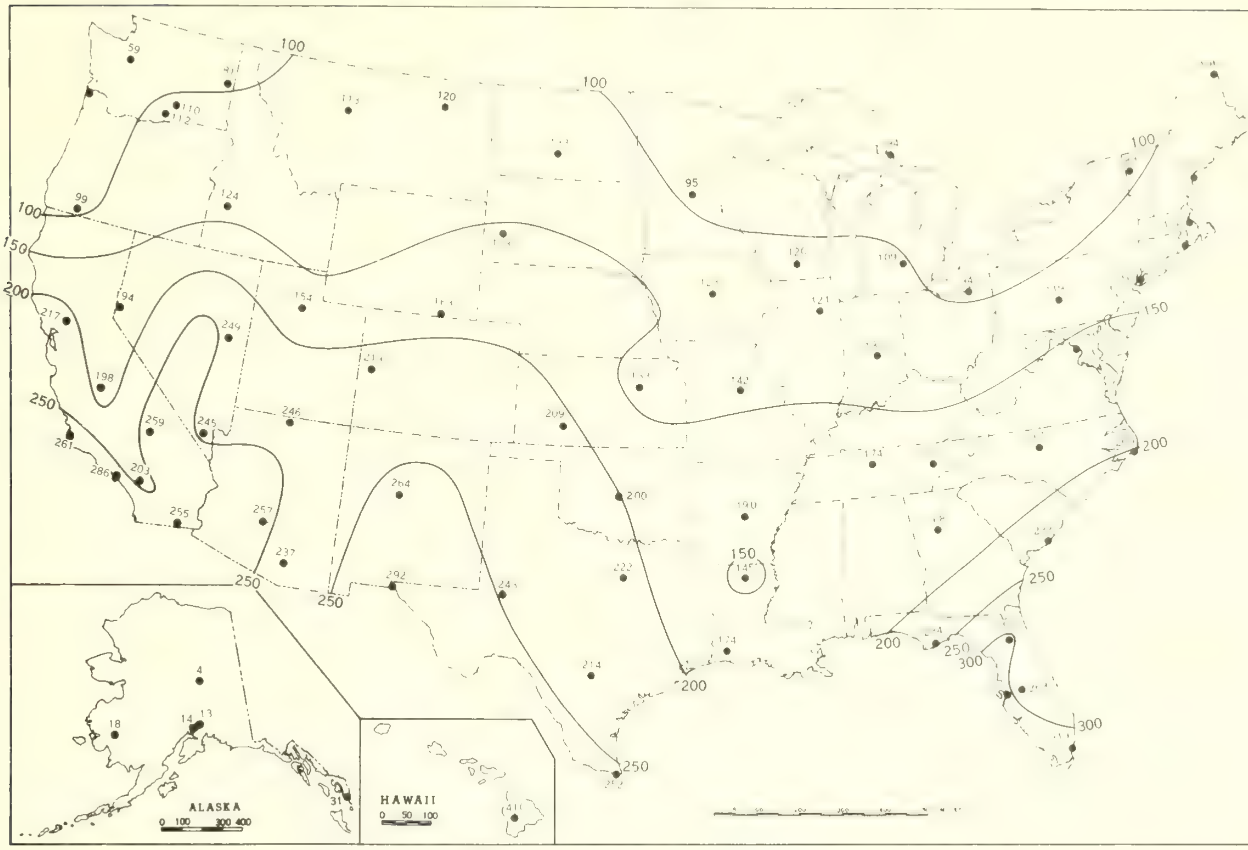


B. Percentage of Mean Monthly Sunshine, December 1967.

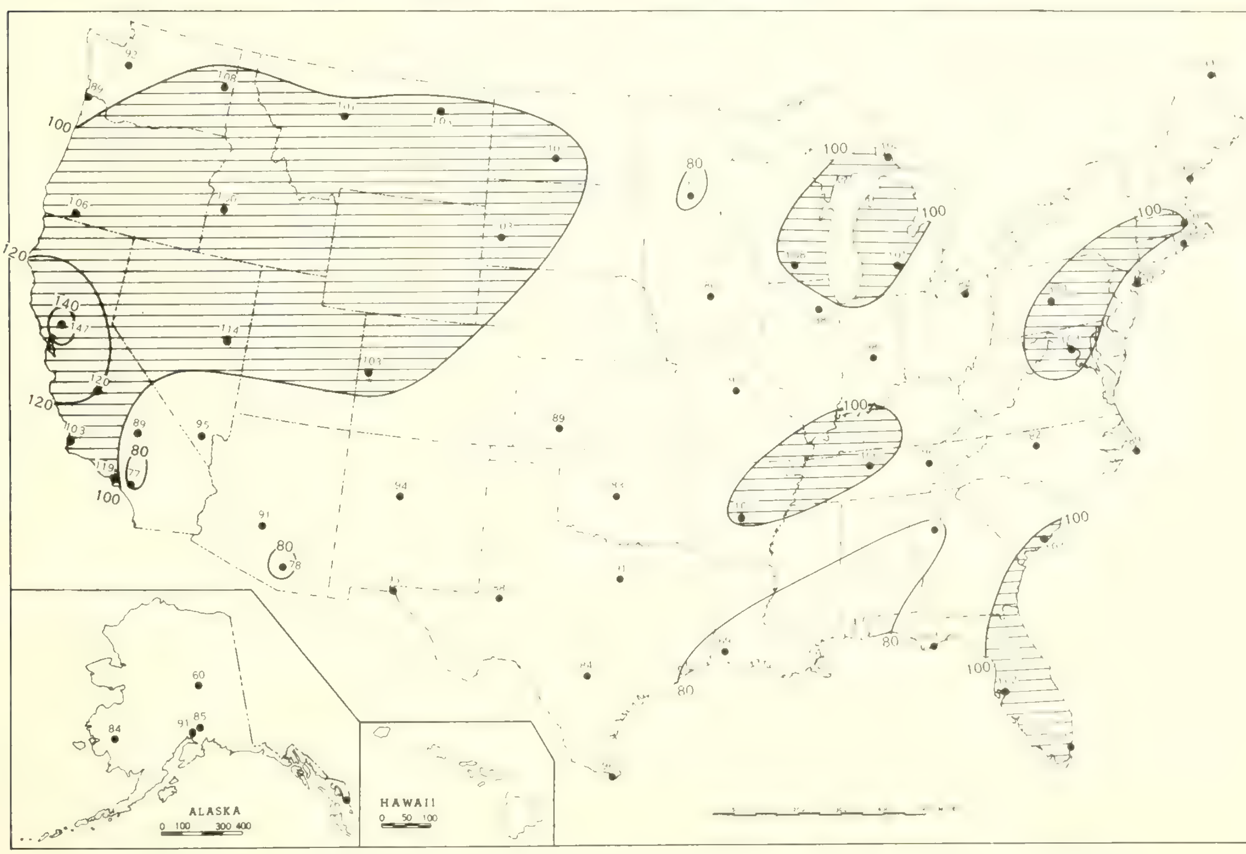


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, December 1967.

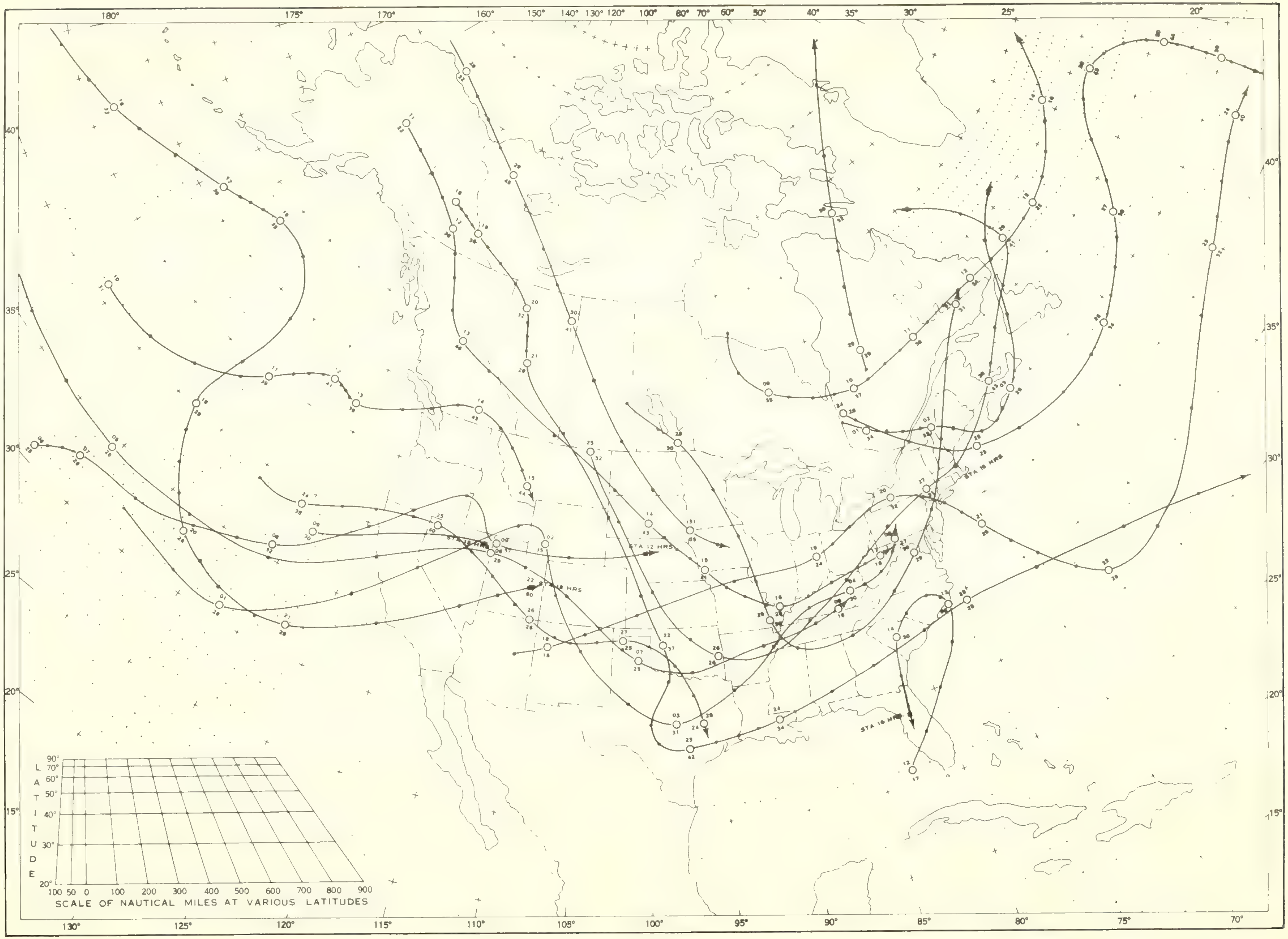


B. Percentage of Mean Daily Solar Radiation, December 1967.



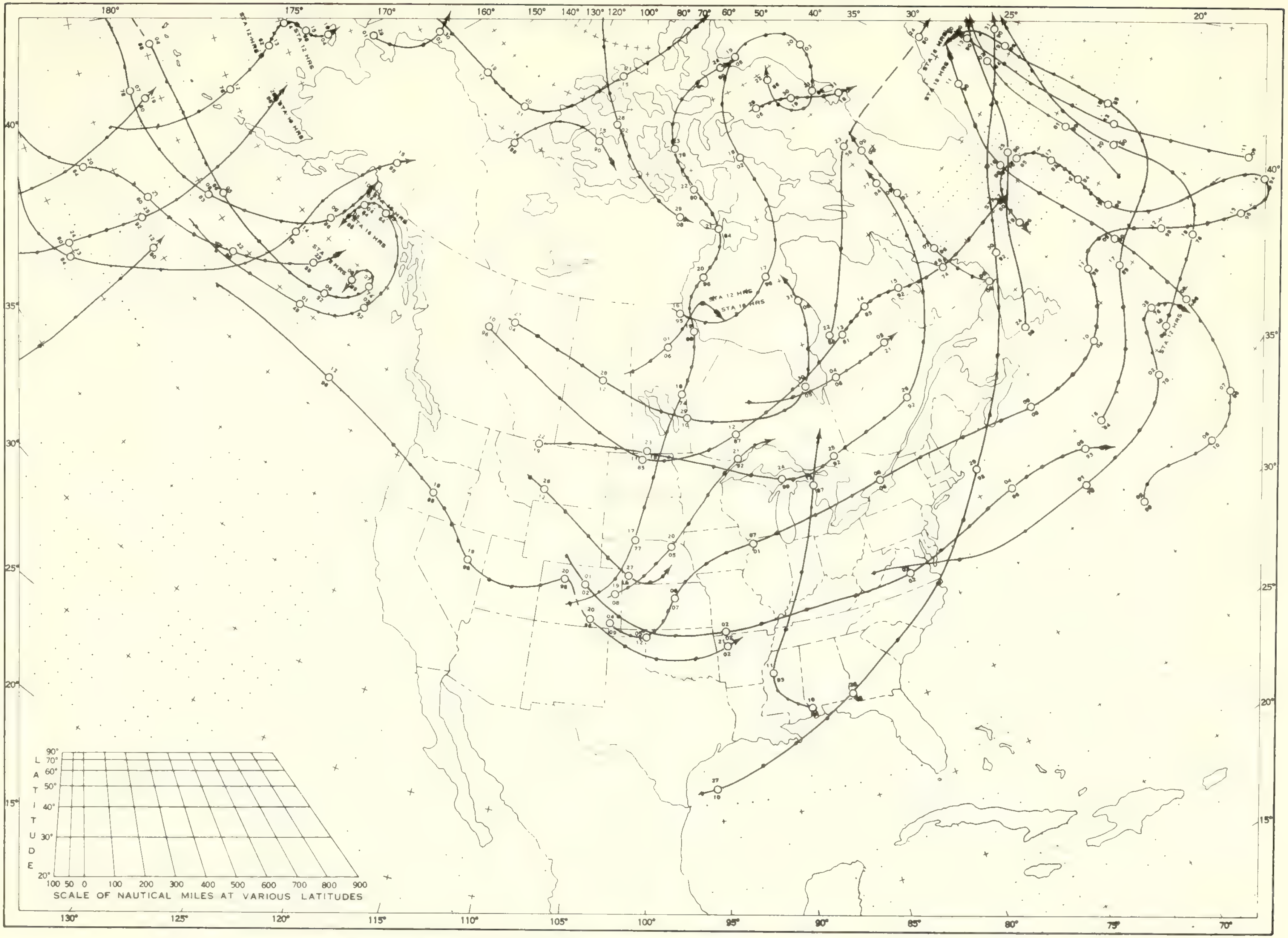
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, **December 1967**.



Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, **December 1967.**



Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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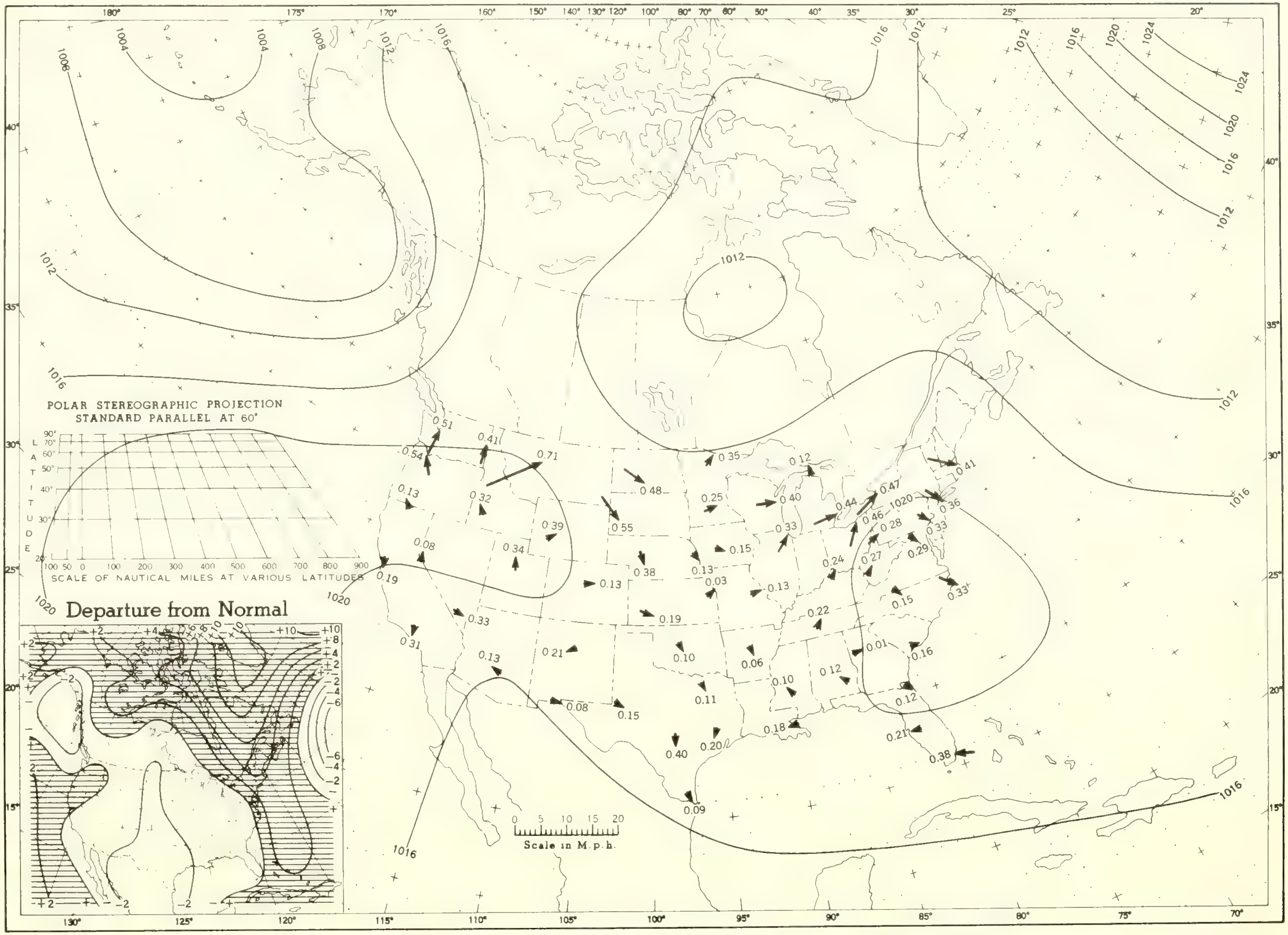
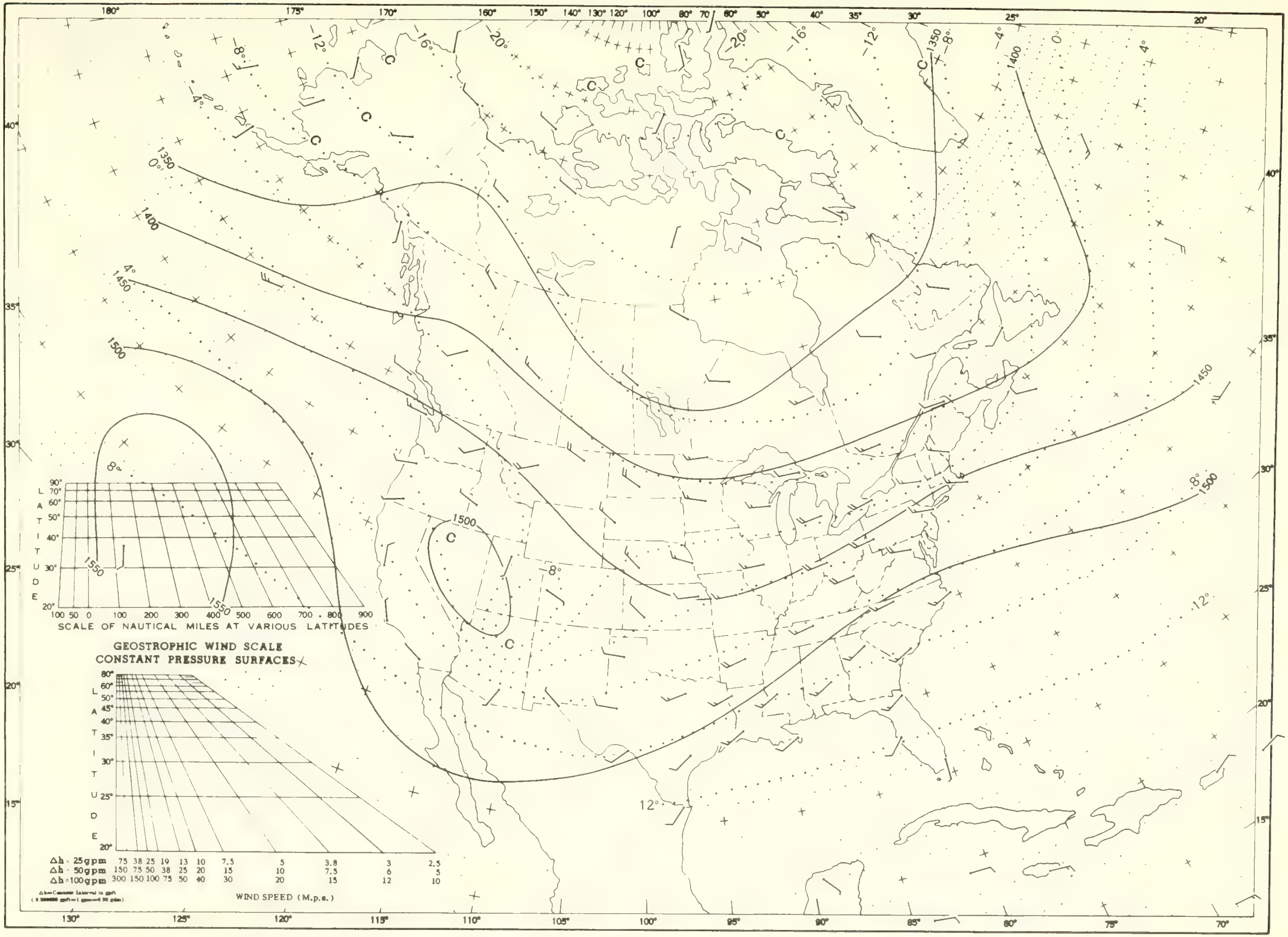
Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, **December 1967**. Inset: Departure of Average Pressure (mb) from Normal, **December 1967**.



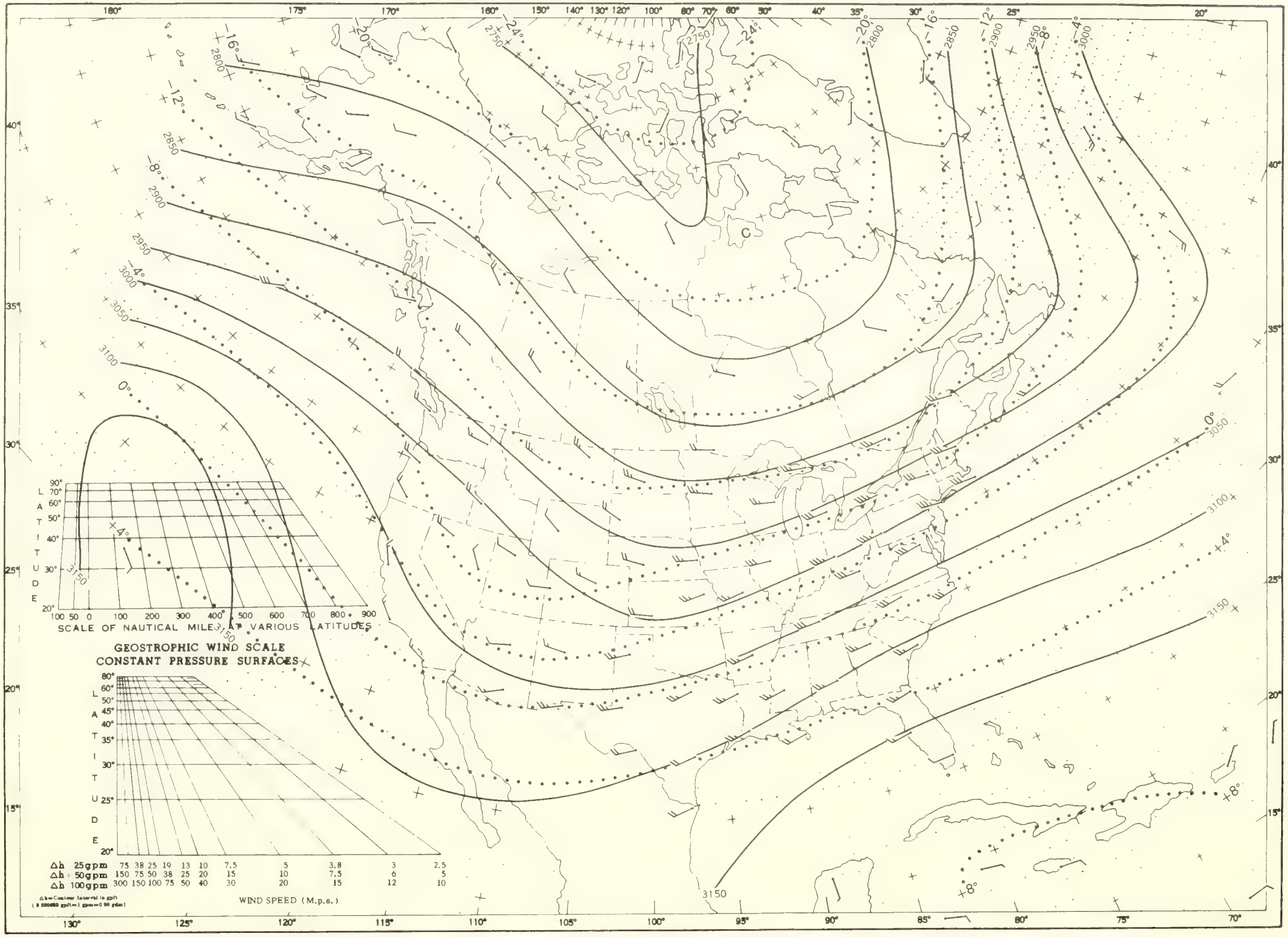
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, December 1967. Average Height and Temperature, and Resultant Winds.



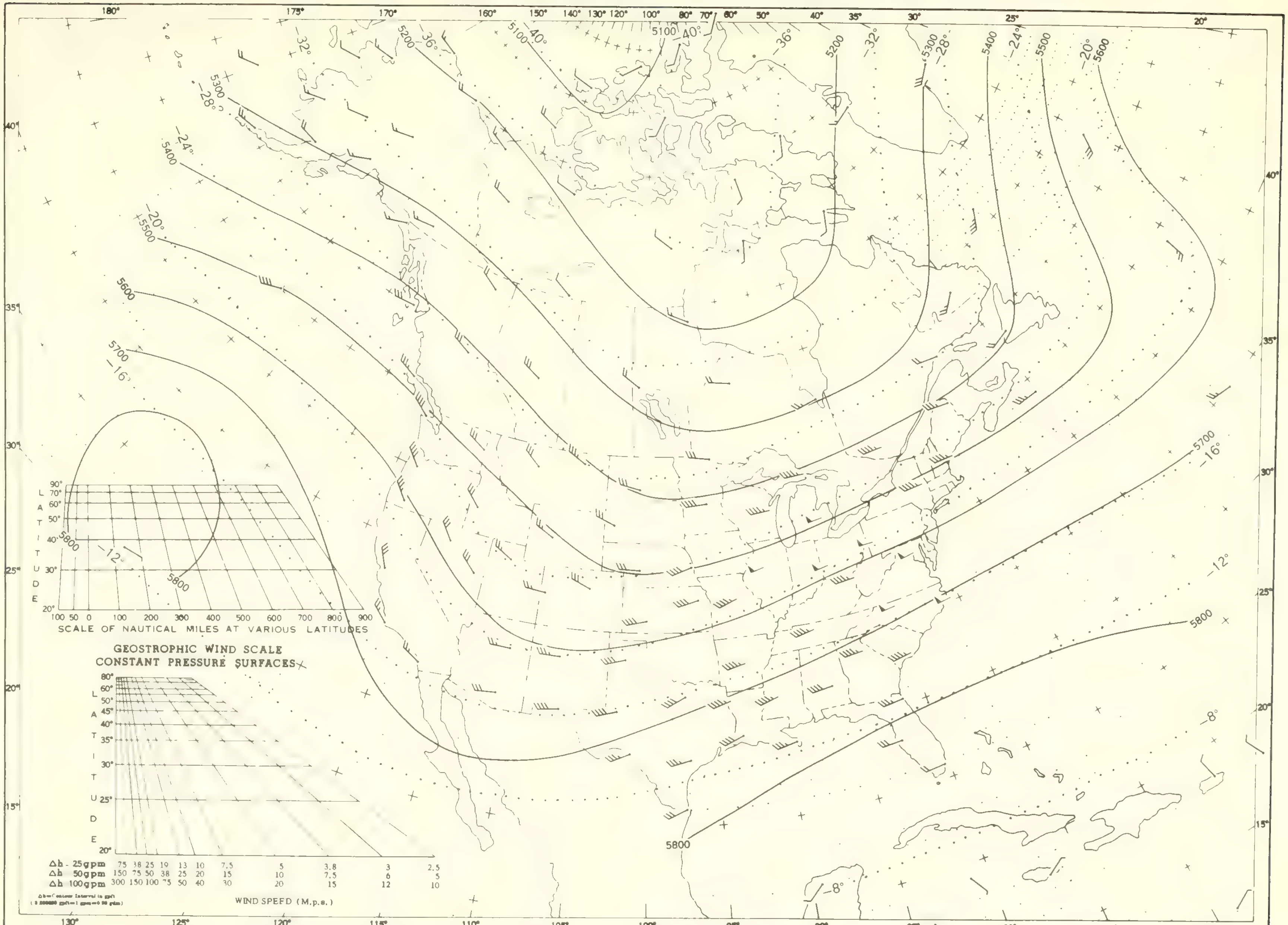
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25mps, full feather 5mps, and half feather 2.5mps. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, **December 1967**. Average Height and Temperature, and Resultant Winds.



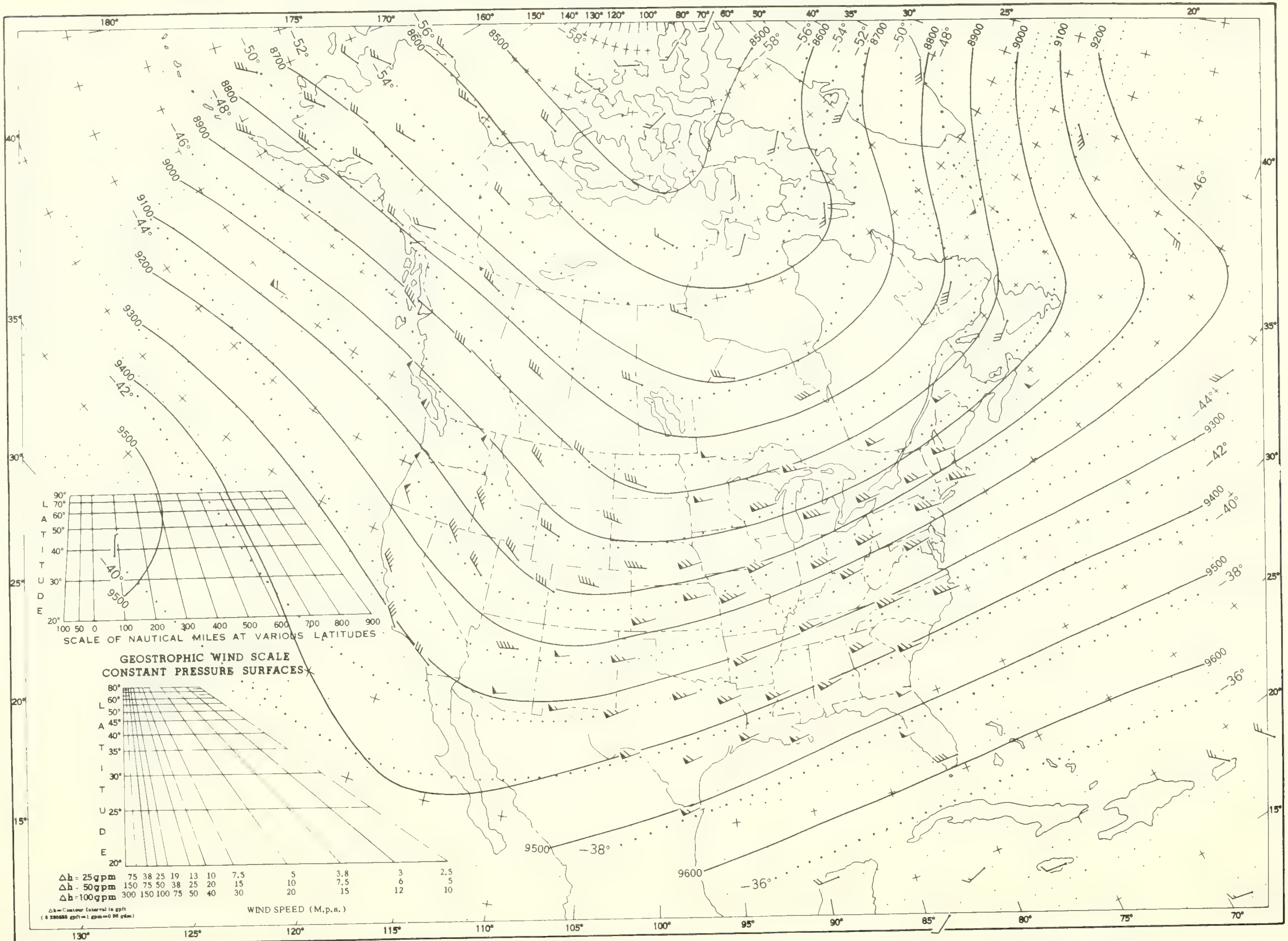
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIII. 500-mb. Surface, 1200 GMT, December 1967. Average Height and Temperature, and Resultant Winds.



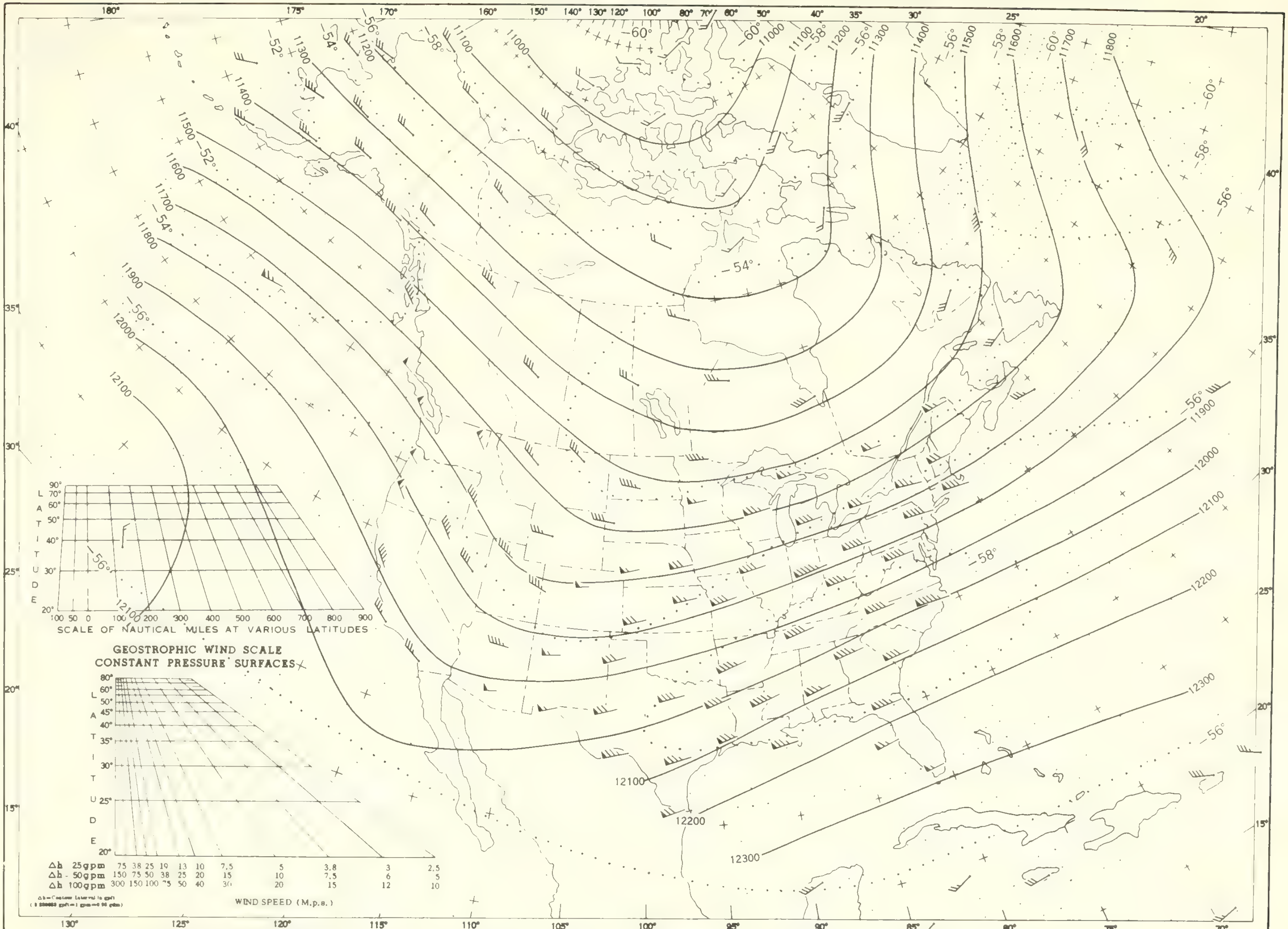
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XIV. 300-mb. Surface, 1200 GMT, December 1967. Average Height and Temperature, and Resultant Winds.



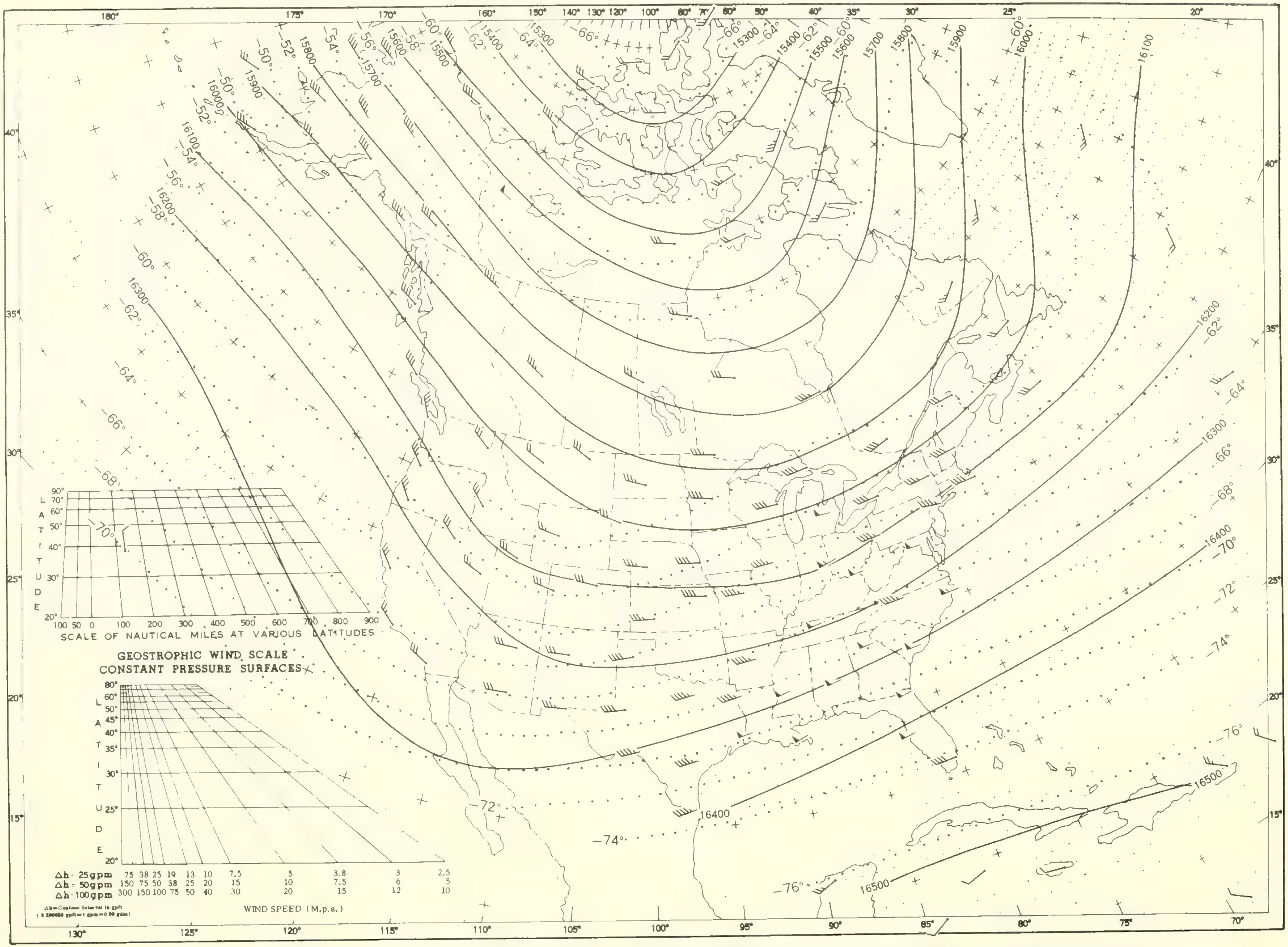
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XV. 200-mb. Surface, 1200 GMT, December 1967. Average Height and Temperature, and Resultant Winds.



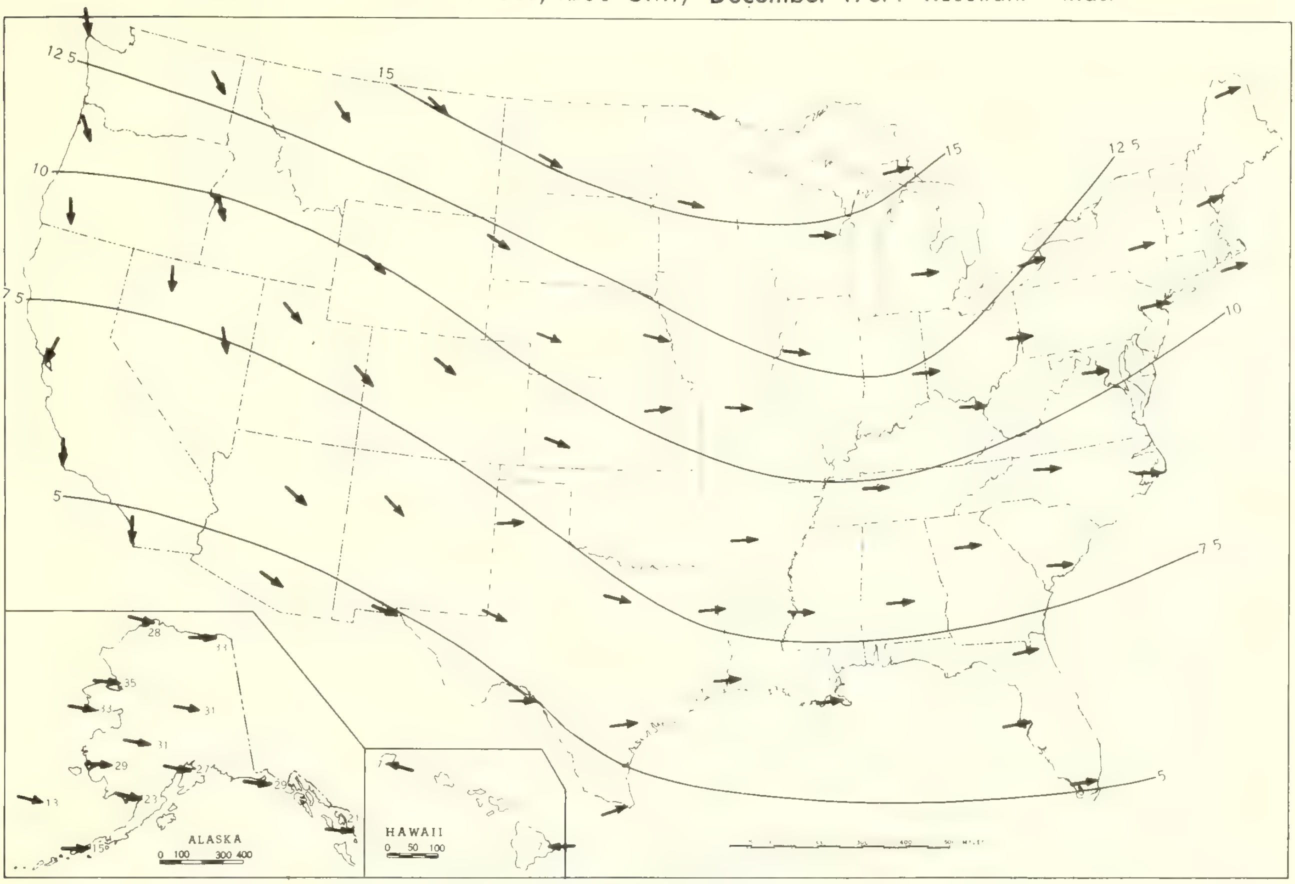
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVI. 100-mb. Surface, 1200 GMT, December 1967. Average Height and Temperature, and Resultant Winds.

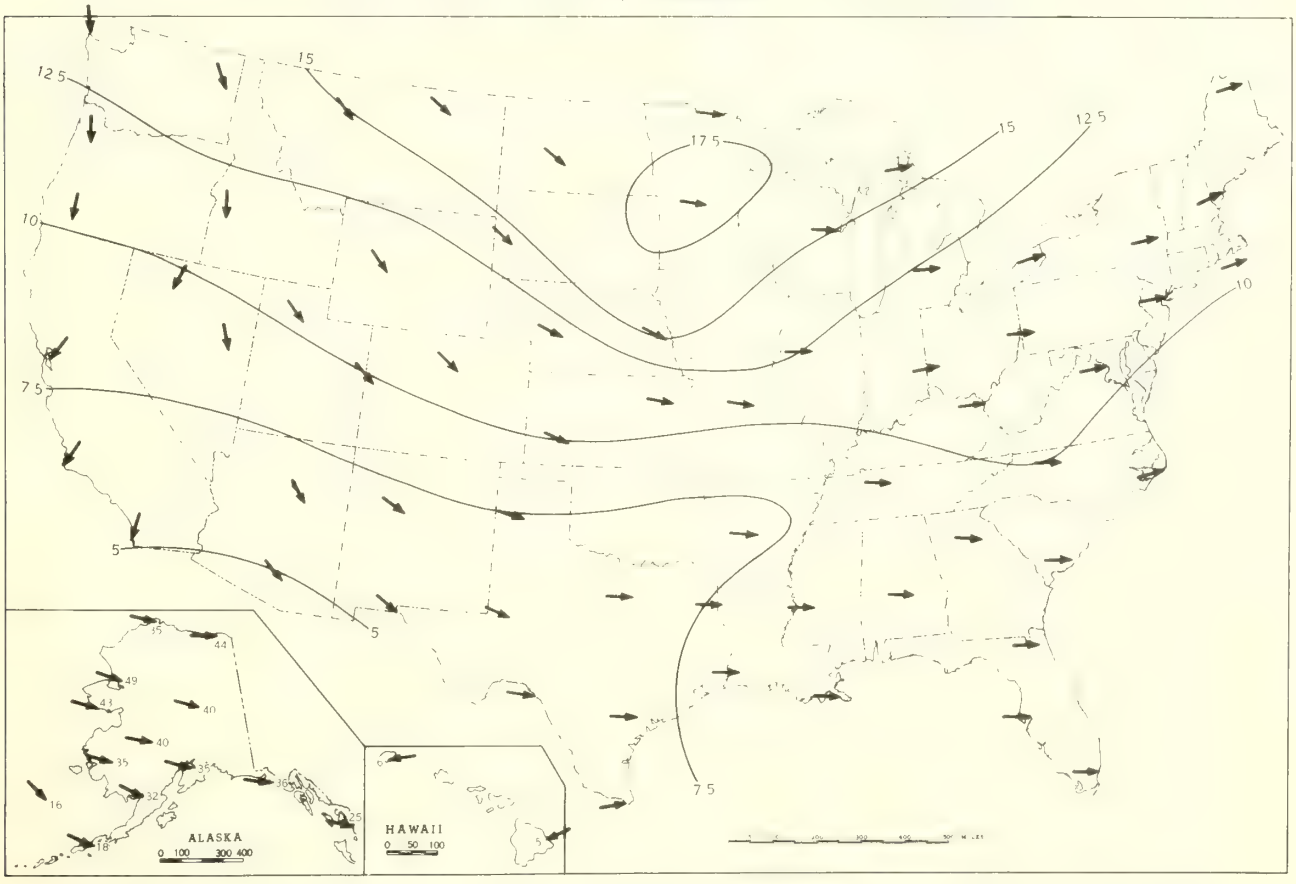


Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in meters per second; flag represents 25 mps, full feather 5 mps, and half feather 2.5 mps. All wind data are based on rawin observations.

Chart XVII. A. 50-mb. Surface, 1200 GMT, December 1967. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, December 1967. Resultant Winds.



Wind speed (isotachs) in meters per second. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

ANNUAL 1967
Volume 18 No. 13

ASHEVILLE: 1968

C O N T E N T S

RAWINSONDE DATA (Average Annual Values) - tabulation discontinued. The tabulation RAWINSONDE DATA (Average Monthly Values) is carried in the monthly issue of the publication CLIMATOLOGICAL DATA NATIONAL SUMMARY.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 18 No. 13 YEAR 1967

GENERAL SUMMARY OF WEATHER CONDITIONS

Lucius W. Dye and Esther K. Grabill
Environmental Data Service, ESSA
Washington, D. C.

HIGHLIGHTS:
1. A year with generally ample precipitation.
2. Unusually heavy snowpack in western mountains.
3. Cool summer and autumn east of the Rockies.
4. Hot, dry summer in Pacific Northwest.
5. Numerous winter-type storms.
6. Record flood in Fairbanks, Alaska.
7. Tornado frequency highest ever.

GENERAL.--Heavy spring snowfall in most of the West left one of the best mountain snowpacks of recent years. Due to cool weather, the snowmelt began about a month later than usual and then took place at a rather steady rate so that no serious floods occurred. Deficient snowfall was mainly limited to the southern Rocky Mountain region, and in Arizona the deficiency was offset by heavy summer rainfall. Only in New Mexico did the water shortage of recent years continue. In the other Western States irrigation water supplies were good to excellent--even in the Pacific Northwest where the summer was unusually hot and dry.

East of the Rockies the weather was highlighted by a cool summer and autumn. Some southeastern sections reported the coolest summer on record. Precipitation was generally adequate for good crop production. Record harvests of wheat, soybeans, corn, sorghum grains, peanuts, and hay were reported. However, cotton production was the lowest since 1895, due primarily to cool, wet weather in the South.

TEMPERATURE.--The outstanding temperature highlight of 1967 in the conterminous United States was the persistence of above normal temperatures in the Far West and below normal temperatures in central and eastern areas from July through November and to a somewhat lesser extent in June.

This was one of the coolest summers on record in central and southeastern areas. It was the coolest summer in 95 years at Athens, Ga., and since 1885 at Concordia, Kans.

In the Southeast the 1967 autumn was among the coolest on record. The relatively cool weather in the Southeast was unfavorable for the cotton crop. In September, frost extending as far south as northeastern Arizona on the 14th, Concordia, Kans., on the 28th, and the vicinity of Columbus, Ga., on the 30th, was 3 weeks early in some locations. No serious damage was reported, however.

In some sections of the Far West, August and September were among the warmest on record. While few record high temperatures occurred, the number of days with temperatures of 90° or above and with 100° or above set new records in many locations.

January was relatively mild even though an intense cold spell about midmonth east of the Rockies brought subzero minima as far south as northern Kansas, central Illinois and Indiana. Extreme lows of -48° were reported in Montana and Minnesota.

February was cold in the East and unusually warm in the West. In northern areas east of the Rockies a number of stations reported lows of -40° or lower during cold spells the first week and again about midmonth.

The 1966-67 winter was unusually cold in the Southeast and unusually warm in the Pacific Northwest. Walla Walla, Wash., had its warmest winter during a record that began in 1873.

Spring temperatures averaged above normal in central and southern areas east of the Rockies, and below normal elsewhere. During the third week of March freezing extended far southward and damaged the peach and apple crops in Georgia and the Carolinas. Portions of the Far West reported the coldest April on record; at San Diego, Calif., temperatures were much like the average for February. Fruit losses from freezes were reported in western Colorado where Grand Junction reported 24° on the 21st. Many stations from eastern Texas to the Atlantic had their warmest April.

May was either the coldest on record or the coldest since 1917 at many northeastern stations. It was the coldest May during a record dating back to 1820 at Albany, N. Y.

After 6 months of temperatures above normal in the West and below in the East, this pattern was reversed in December. It was the coldest December in many years in the southern Rocky Mountain region.

PRECIPITATION.--The 1966-67 winter was dry in the central and lower Great Plains, and severe drought developed in much of Texas and in eastern portions of New Mexico and Colorado.

Spring precipitation in the western Great Plains was somewhat below normal. Dry weather continued through the first week in April, but moderate to heavy rains during the second week of April in most of the wheat-producing areas of Kansas, Oklahoma, and Texas were very beneficial. In the rest of the Country precipitation was generally near to above normal.

Summer precipitation was near to well above normal except much below in North Dakota and parts of Montana and Oregon, and some areas in the Ohio Valley and lower Great Plains.

Autumn precipitation was below normal in over half the Nation, but was well above in the Southwestern Desert, the upper Rockies and northwestern Great Plains, along the western slopes of the Appalachians, in most of the Corn Belt, and in the eastern portion of the lower Great Plains.

TORNADOES.--A total of 912 tornadoes were reported in 1967, setting a new annual record. New monthly records were also set for January (40), June (205) which was also the most ever reported in any month, September (139), and December (63). The 1967 death toll was 116, more than 2,250 persons were injured and total property losses were many millions of dollars. Major outbreak of these storms occurred in the Midwest on January 24 and April 21, and in southern Texas during the passage of Hurricane Beulah on September 20. (See article "General Summary of Tornadoes 1967" in this publication.)

WINTER-TYPE STORMS.--Heavy snowstorms crossed the Great Plains and Great Lakes region January 8-9,

16, and 26. High winds during each storm drifted snow which seriously hampered or halted traffic, and local blizzard conditions developed during the first two storms. The storm of the 26th left a belt of snow up to 2 feet deep from northeastern Illinois across northern Indiana into central Lower Michigan. Winds up to 50 m.p.h. left 12- to 15-foot drifts. In Chicago this storm set snowfall records of 19.8 inches in 24 hours and 23.0 inches for a single storm. A monthly total of 35.3 inches also set a new record January snowfall total for Minneapolis, Minn., well above the former record of 28.8 inches in 1917.

A coastal storm dumped heavy snow (16 to 18 inches) from eastern Maryland to southern New England on February 7. Blizzard conditions occurred from New Jersey northward.

Three heavy snowstorms hit the Northeast in March--on the 6-7th, 15-16th, and 22d. These storms boosted March totals to record amounts at several stations in southern New England. Boston, Mass., had 22.9 inches, a March record. At Hartford, Conn., 33.2 inches was the second greatest March total and boosted the seasonal total to 81.4 inches, the most in 62 years.

In North Dakota on April 16-17, a blizzard and ice storm with up to 12 inches of snowfall that drifted 8 feet high in places caused considerable damage.

The Dakotas were again hit by an ice storm and blizzard on April 29-May 1. This was one of the worst winter-type storms on record for so late in the season. Winds up to 70 m.p.h. and as much as 15 inches of snow, with 12-foot drifts, caused utility and other damage estimated at more than a half-million dollars. Severe electrical displays accompanied the storm in many areas. In South Dakota this storm became known as the May Day blizzard, and was the latest on record for the State.

Another winter-type storm, notable for so late in the year, was a "northeaster" which occurred in Massachusetts on May 25-26. Winds reached hurricane force in gusts. High winds during this storm were of longer duration than during most hurricanes and caused devastation equal to that of the 1938 hurricane in some coastal areas. Some snow (1 to 3 inches in the Connecticut Valley) and thunder accompanied the storm. Keene, N. H., reported 2.5 inches, the latest snowstorm there in 76 years and a new record May total. Heavy snow in some northern sections of New England broke tree limbs, and heavy rains and tides caused heavy losses along the coast. This storm caused losses estimated in the millions of dollars.

One of the heaviest falls in the Far West occurred at Squaw Valley, Calif., where 8 feet of snow fell in 60 hours during the third week of March. Mount Shasta, Calif., measured 50.2 inches during April, a record for any month since records began in 1888.

One of the most outstanding snowstorms of the year occurred in southern Texas and northern Mexico on January 9. Falls of 5 to 7 inches were the second heaviest on record in southern Texas from Catulla and Three Rivers south to Hebbronville. (Monterey, Mexico, reported a record fall of 20 inches for that station and even heavier amounts were reported from nearby localities.)

On November 30, 7 to 12 inches of snow fell in the Washington, D. C., area and 8.4 inches, a November record, at Baltimore, Md. A 37-inch fall at Boonville, N. Y., brought the November total to 84 inches, the greatest snowfall there for any month in the past 19 years. Other stations in New York measured 15 to over 30 inches.

A series of storms brought heavy snowfall to many sections of the Far West during the second and third weeks of December. Near-record amounts of 3 to 7 feet fell in northern and central Arizona, southern Utah, and northwestern New Mexico, accompanied by very cold, windy weather. Indian Reservations were hard hit. The heavy snow and drifts closed roads and hundreds of persons were stranded. Helicopters were used to drop feed to livestock and supplies to isolated homes.

GLAZE.--A severe ice storm occurred on January 26-27. It extended across northern Illinois in a 50-mile wide area and on across Indiana from about Lafayette to Fort Wayne, and on through northwestern Ohio and the southeast corner of Michigan. Losses totaled several million dollars. Ice up to an inch thick was reported in Indiana.

Another ice storm occurred in Minnesota on January 24. Hardest hit was the Minneapolis-St. Paul area, where electricity was cut off from 10,000 homes.

On February 17-18 heavy glaze in the northern Piedmont region of North Carolina caused considerable property damage, mostly as a result of tree limbs falling on power and communication lines, houses, and cars.

HURRICANES.--Great Hurricane Beulah moved inland on a northwesterly course east of Brownsville, Tex., near the mouth of the Rio Grande on September 20. A maximum wind of 136 m.p.h. was reported at Brownsville. More damaging than wind or tides was the record flooding produced by torrential rains. Rio Grande City, Edoy, Falfurrias, and Skidmore all reported 30 inches or more. Beulah spawned a record number of 115 tornadoes. Fifteen persons died in Texas; 5 from tornadoes; 10 from flooding. Damage was estimated at $200 million.

Hurricane Doria passed close off the Maryland coast on September 16 and made landfall near the Virginia-North Carolina border late on that day as a tropical storm. Winds along the coast gusted from 55 to 60 m.p.h., and tides ran 2 to 3 feet above normal. Three lives were lost in a boating accident. Only minor damage was reported. (See the article "North Atlantic Tropical Cyclones" in this publication.)

FLOODS.--The Office of Hydrology reported four noteworthy floods during the year. Severe flooding occurred in March in the upper Ohio Basin. Nearly all streams in West Virginia left their banks with several reaching record to near-record heights. That State was declared a disaster area; 3,800 families received Red Cross assistance. The flooding caused many millions of dollars damage. Damage on the main stem of the Ohio alone was tentatively put at $25 million.

The heaviest flooding since early in the 1950's occurred in the lower Missouri Basin in June. Some tributaries in Nebraska and Kansas reached near-record heights. Preliminary estimates put damage at $50 million in Nebraska and at about $30 million in Kansas and Missouri. Two lives were lost.

Disastrous flooding hit Fairbanks, Alaska, and the nearby town of Nenana in August. Fairbanks was almost completely inundated. Ten to eleven thousand persons were cared for in Red Cross shelters. Preliminary estimates of damage ranged from $150 to $200 million.

Severe and extensive flooding followed in the wake of Hurricane Beulah in south Texas during September. All streams from the Guadalupe to the Rio Grande were in flood. Over one million persons were immobilized by the high water. Damage was in the tens of millions of dollars. (See the articles "General Summary of River and Flood Conditions" in this and previous issues of this publication.)

EXCESSIVE PRECIPITATION

(Excessive Short Duration Rainfall)

YEAR 1967

This table contains statistics of maximum amounts of rainfall during the calendar year 1967. Data presented in this table are generally from stations equipped with recording gages. Stations are at Airport locations unless otherwise shown.

Excessive precipitation data for the years 1896-1935 inclusive, generally present the accumulated amounts of precipitation for each 5, 10, or 20 minute intervals during storms in which the rate of fall equaled or exceeded .25 inch in any 5 minute period, or .30 in any 10 minute period, or .35 in any 15 minute period, etc., the tabulation beginning with the 5 minute period where the rate of .05 inch in 5 minutes began and continuing by 10 or 20 minute intervals up to 120 minutes. A detailed explanation of the method used may be found in the publications listed in the last paragraph of this explanation.

The present method, adopted with data for the calendar year 1936, gives the maximum fall of precipitation for the periods 5 to 180 minutes, the maximum amounts being taken for the periods in which the fall is greatest for the given time, and is tabulated to show maximum amounts for 5, 10, 15, 20, 30, 45, 60, 80, 100, 120, 150 and 180 minutes, even if the fall does not equal the excessive rate for some of the periods. (The 15 minute amount was not computed for 1936-43 and the 150 minute amount was not computed for 1944 through 1948).

The following Table A shows limits at which precipitation was considered excessive in this publication:

TABLE A

Duration (minutes)	Depth of precipitation (inches)	Duration (minutes)	Depth of precipitation (inches)
5	.25	60	.80
10	.30	80	1.00
15	.35	100	1.20
20	.40	120	1.40
30	.50	150	1.70
45	.65	180	2.00

This table is made up from the formula, $A = t + 20$ where A is the accumulated depth in hundredths of inches and t is the time in minutes.

For the years 1936 through 1948 stations in North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Arkansas, Louisiana, Texas, Oklahoma, and San Juan, P. R., used the limits shown in the following Table B:

TABLE B

Duration (minutes)	Depth of precipitation (inches)	Duration (minutes)	Depth of precipitation (inches)
5	.40	60	1.50
10	.50	80	1.90
15	.60	100	2.30
20	.70	120	2.70
30	.90	150	3.30
45	1.20	180	3.90

This table is made up from the formula $A = 2t + 30$. Its use, however, was discontinued at the end of 1948 and Table A is used by all sections for 1949 and the following years.

Publication of Data. A summary of maximum precipitation data for the years prior to 1896 is published in the annual report of the Chief of the Weather Bureau for 1895-1896. Excessive precipitation data for the period 1881-1896 are published in the annual report of the Chief of the Weather Bureau 1896-1897. Data for the years 1897 through 1934 have been published in the appropriate annual reports of the Chief of the Weather Bureau. For the years 1935 through 1949 these data are published in the appropriate issue of the United States Meteorological Yearbook. For 1950 and succeeding years excessive precipitation are presented in the annual issues of the Climatological Data National Summary.

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1967

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
ALABAMA												
BIRMINGHAM												
MAR 6	.31	.43	.50	.53	.55	.58	.62	.63	.68	.68	.68	.68
APR 23	.23	.37	.41	.44	.56	.62	.63	.65	.65	.65	.70	.73
MAY 6	.47	.93	1.20	1.63	2.38	2.73	3.18	3.62	3.63	3.64	3.83	3.84
MAY 21	.28	.40	.45	.47	.51	.57	.64	.75	.78	.81	.87	.90
JUN 21	.41	.78	.89	1.10	1.48	1.55	1.57	1.58	1.58	1.58	1.58	1.58
JUN 30	.30	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
JUL 7	.49	.57	.64	.71	.92	.97	.97	.97	.97	.97	.97	.97
JUL 13	.18	.33	.34	.43	.60	.66	.67	.67	.67	.85	1.18	1.18
JUL 25	.30	.48	.50	.57	.61	.66	.66	.66	.67	.67	.67	.67
JUL 29	.23	.34	.38	.51	.67	.93	.97	.99	1.02	1.06	1.06	1.06
AUG 1	.53	.75	1.00	1.41	1.83	1.91	1.94	1.96	1.96	1.98	1.98	1.98
AUG 8	.25	.41	.45	.54	.64	.83	.98	1.16	1.53	1.63	1.75	1.82
AUG 23	.28	.42	.45	.51	.54	.54	.54	.54	.54	.54	.54	.55
AUG 26	.31	.57	.62	.67	.75	1.18	1.40	1.66	1.84	1.91	2.13	2.53
SEP 8	.25	.47	.50	.53	.72	.77	.83	.90	.90	.90	.90	.90
OCT 24	.30	.48	.49	.54	.56	.57	.60	.66	.71	.73	.74	.74
DEC 14	.29	.58	.72	1.01	1.42	1.49	1.71	2.18	2.46	2.65	2.94	3.04
DEC 19	.32	.60	.65	.78	.95	1.03	1.10	1.16	1.17	1.17	1.17	1.17
HUNTSVILLE												
APR 23	.36	.47	.54	.57	.65	.69	.69	.76	.78	.78	.78	.78
APR 26	.32	.42	.47	.56	.62	.62	.62	.62	.63	.65	.65	.65
MAY 7	* .54*	.95	1.00	1.04	1.06	1.06	1.06	1.06	1.10	1.10	1.16	1.51
MAY 20	.29	.43	.51	.53	.53	.59	.63	.65	.66	.68	.75	.76
JUN 22	.31	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
JUN 24	.27	.29	.31	.32	.32	.34	.34	.34	.48	.48	.48	.48
JUL 5	.40	.65	.70	.72	.78	.78	.78	.78	.78	.78	.78	.78
JUL 11	* .57*	1.06*	1.48	1.81*	2.45	2.65*	2.71	2.73	2.83*	2.84	2.84*	3.23
JUL 12	.34	.66	.88	.95	1.30	1.60	2.00	2.41	2.50*	2.95	3.15	3.20
JUL 22	.27	.40	.58	.68	.78	.93	1.23	1.36	1.40	1.65	1.68	1.66
JUL 22	.32	.58	.60	.63	.65	.66	.67	.69	.70	.70	.71	.72
AUG 8	.18	.32	.45	.45	.45	.45	.45	.45	.65	.81	.81	.81
AUG 9	.28	.35	.35	.36	.38	.42	.44	.50	.64	.66	.79	.80
AUG 12	.32	.40	.45	.48	.54	.55	.56	.56	.56	.56	.56	.56
AUG 16	.26	.35	.39	.43	.43	.43	.48	.51	.74	.92	.95	.95
AUG 26	.30	.47	.53	.55	.65	.75	.82	.85	.88	.91	.96	.98
SEP 8	.23	.33	.37	.45	.57	.66	.79	.83	.84	.84	.86	.86
OCT 8	.36	.56	.61	.62	.62	.65	.65	.66	.66	.66	.66	.66
OCT 24	.25	.40	.43	.46	.51	.55	.55	.55	.55	.55	.55	.55
NOV 24	.32	.39	.41	.41	.42	.48	.50	.52	.57	.57	.58	.60
DEC 16	* .97*	1.23	1.26	1.27	1.28	1.31	1.41	1.99	2.03	2.15	2.20	2.23
DEC 16	.37	.56	.59	.66	.79	.86	.95	1.01	1.10	1.13	1.21	1.76
DEC 21	.50	.57	.58	.59	.65	.70	.73	.77	.90	.92	1.05	1.05
MOBILE												
JUL 6	* .25*	.41*	.43	.43*	.44	.61*	.76	.87	.89*	.89	.89*	.89
JUL 7	* .34*	.45*	.55	.58*	.59	.59	.59	.59	.59	.59	.59	.59
JUL 10	* .35*	.48	.52	.60*	1.03	1.40*	1.59	1.71	2.01*	2.26	2.33*	2.33
JUL 14	.28	.37	.52	.55	.58	.77	.80	.85	.93	.99	1.00	1.01
JUL 22	.25	.40	.46	.48	.50	.51	.51	.51	.51	.52	.52	.83
AUG 3	* .65*	1.15*	1.57	1.80*	2.03	2.17*	2.17	2.17	2.17	2.17	2.17	2.17
AUG 21	.35	.62	.75	.82	1.02	1.35	1.50	1.53	1.53	1.53	1.53	1.53
SEP 4	.34	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
SEP 6	.27	.52	.74	.91	1.13	1.44	1.68	1.80	1.97	2.07	2.17	2.30
OCT 16	.19	.35	.50	.60	.89	1.22	1.37	1.55	1.65	1.67	1.68	1.68
OCT 30	.27	.53	.61	.70	.80	.83	.84	.87	.89	.90	.93	1.04
DEC 10	.27	.50	.65	.69	.75	.84	1.07	1.21	1.63	1.83	2.04	2.09
DEC 11	.38	.66	.89	1.18	1.62	1.76	2.09	2.27	2.38*	2.42	2.46*	2.47
MONTGOMERY												
MAR 6	.23	.32	.34	.34	.36	.39	.39	.39	.41	.45	.46	.46
APR 22	.41	.59	.59	.59	.61	.62	.62	.62	.62	.62	.62	.62
JUN 23	.20	.30	.35	.39	.46	.59	.63	.64	.65	.65	.65	.65
JUN 29	.33	.53	.65	.70	.78	.84	.85	.85	.86	.86	.86	.86
JUL 3	.24	.35	.36	.36	.40	.42	.42	.42	.42	.49	.53	.53
JUL 6	.43	.70	1.13	1.18	1.46	1.80	2.10	2.40	2.43	2.45	2.47	2.47
JUL 9	.29	.40	.50	.51	.53	.55	.61	.62	.66	.74	.82	.92
JUL 22	.28	.54	.60	.60	.61	.61	.61	.61	.61	.61	.61	.61
JUL 24	.22	.34	.43	.45	.57	.80	.81	.83	.83	.83	.83	.83
AUG 26	.17	.32	.43	.49	.54	.55	.56	.61	.65	.66	.66	.66
SEP 8	.18	.26	.37	.43	.66	.76	.84	.85	.85	.85	.85	.85
NOV 14	.32	.54	.61	.65	.66	.66	.66	.68	.69	.77	.77	.77
DEC 11	.23	.35	.40	.51	.70	.86	1.13	1.30	1.52	1.60	1.70	1.84
DEC 18	.21	.38	.43	.47	.58	.76	.86	.86	.89	1.26	1.45	1.52
ALASKA												
ANCHORAGE						NONE						
ANNETTE						NONE						
COLD BAY						NONE						
FAIRBANKS						NONE						
JUNEAU						NONE						
KING SALMON						NONE						
KOTZEBUE						NONE						
ST. PAUL ISLAND						NONE						
YAKUTAT						NONE						
ARIZONA												
FLAGSTAFF												
JUL [illegible]	.17	.30	.35	.45	.55	.70	.92	1.06	1.06	1.06	1.06	1.06
JUL 14	.26	.30	.35	.40	.50	.65	.65	.65	.65	.65	.65	.65
AUG 5	.16	.24	.29	.35	.51	.52	.54	.55	.55	.55	.55	.55
SEP [illegible]	.30	.4	.44	.45	.48	.48	.49	.49	.49	.49	.49	.49
[illegible] S												
JUL 1[illegible]	.13	.23	.34	.40	.45	.51	.53	.53	.53	.53	.53	.53

S RECORD BEGAN JULY 1967

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
ARIZONA												
TUCSON												
JUL 29	.21	.29	.32	.39	.51	.54	.54	.55	.59	.62	.63	.64
WINSLOW												
JUN 19	.27	.38	.41	.44	.44	.44	.44	.44	.44	.44	.44	.44
JUL 26	.20	.29	.37	.43	.50	.55	.56	.56	.57	.57	.58	.58
YUMA												
NOV 26	.28	.31	.32	.33	.38	.49	.64	.65	.66	.75	.78	.81
ARKANSAS												
FORT SMITH												
JAN 26	.28	.53	.55	.60	.69	.72	.75	.83	.90	.95	.95	.95
MAY 5	.20	.37	.45	.60	.75	.84	.92	.97	.97	.97	.97	1.00
JUN 20	.35	.42	.43	.47	.47	.47	.47	.47	.47	.47	.47	.47
JUN 21	.35	.61	.78	.89	1.00	1.00	1.01	1.04	1.06	1.08	1.08	1.08
JUL 5	.19	.26	.34	.40	.45	.49	.64	.80	.80	.83	.98	1.24
AUG 18	.30	.50	.52	.57	.58	.59	.60	.61	.63	.64	.65	.65
OCT 29	.19	.27	.38	.46	.52	.53	.55	.60	.70	.77	.84	.87
LITTLE ROCK												
JAN 26	.30	.37	.47	.60	.67	.78	.82	.91	1.01	1.04	1.07	1.10
FEB 2	.20	.33	.42	.45	.48	.50	.53	.56	.61	.63	.63	.63
APR 25	.30	.39	.43	.45	.60	.71	.84	1.11	1.38	1.45	1.50	1.51
APR 30	.35	.65	.77	.83	.96	1.15	1.40	1.60	1.80	1.90	2.05	2.08
MAY 1	.23	.31	.42	.44	.50	.54	.60	.60	.60	.60	.60	.60
MAY 1	.25	.42	.50	.54	.55	.55	.55	.55	.55	.55	.55	.55
MAY 6	.20	.30	.40	.46	.54	.61	.70	.76	.85	.88	1.06	1.22
MAY 14	.31	.39	.45	.50	.53	.66	.91	.94	.94	.94	.94	.94
MAY 31	.50	.52	.54	.58	.67	.70	.81	.91	1.00	1.13	1.25	1.39
JUN 18	.29	.33	.39	.49	.55	.55	.55	.55	.55	.55	.55	.55
JUL 12	.30	.43	.48	.49	.50	.92	.93	.94	.96	.99	1.07	1.08
JUL 29	.15	.23	.32	.44	.62	.64	.67	.68	.74	.74	.74	.75
SEP 21	.22	.33	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
TEXARKANA												
JAN 26	.15	.24	.39	.44	.53	.62	.67	.68	.68	.68	.68	.68
APR 12	.30	.42	.51	.53	.60	.65	.67	.67	.67	.67	.67	.67
MAY 14	.27	.40	.50	.53	.58	.74	.77	.84	1.21	1.30	1.44	1.55
MAY 31	.14	.24	.30	.37	.52	.65	.83	.93	.94	.97	1.03	1.07
JUN 22	.25	.50	.65	.90	1.20	1.39	1.73	1.85	2.02	2.30	2.41	2.48
JUL 2	.22	.32	.38	.40	.41	.41	.41	.42	.43	.43	.43	.43
JUL 3	.30	.55	.70	.83	1.14	1.25	1.28	1.31	1.33	1.33	1.35	1.35
AUG 17	.24	.41	.44	.46	.47	.47	.47	.47	.47	.47	.47	.47
AUG 31	.17	.34	.44	.52	.65	.70	.72	.74	.75	.75	.75	.75
SEP 19	.20	.28	.30	.45	.57	.60	.62	.64	.65	.67	.67	.67
OCT 29	.13	.23	.31	.37	.50	.66	.85	1.17	1.25	1.31	1.31	1.31
OCT 30	.20	.36	.45	.54	.69	.94	1.11	1.17	1.23	1.29	1.30	1.32
DEC 9	.36	.59	.95	1.17	1.54	1.69	2.12	2.37	2.49	2.59	2.64	2.66
CALIFORNIA												
BAKERSFIELD						NONE						
BISHOP						NONE						
BLUE CANYON												
JAN 26	* .35*	.50*	.57	.62*	.77	.85*	.95	1.04	1.18	1.27	1.50	1.70
EUREKA C						NONE						
FRESNO												
APR 16	.20	.38	.48	.59	.71	.76	.84	.88	.91	.94	.94	.95
LOS ANGELES												
NOV 21	.19	.32	.39	.46	.78	.94	1.13	1.29	1.45	1.49	1.52	1.57
NOV 21	.36	.64*	.85	.97	1.01	1.10	1.17	1.20	1.43	1.47	1.49	1.49
NOV 21	.40*	.78*	.91	.96	.97	.97	.97	.97	.97	.97	.97	.97
MT SHASTA R						NONE						
OAKLAND						NONE						
RED BLUFF						NONE						
SACRAMENTO						NONE						
SANDBERG R						NONE						
SAN DIEGO												
NOV 21	.32*	.51	.62	.69	.81	.89	.95	1.00	1.06	1.11	1.12	1.14
SAN FRANCISCO U												
DEC 17	.29	.31	.32	.34	.37	.39	.42	.43	.44	.45	.46	.47
SANTA MARIA						NONE						
COLORADO												
ALAMOSA												
AUG 26	.25	.42	.44	.53	.53	.61*	.76	.83	.83*	.83	.83	.83
DENVER												
MAY 30	.44	.68	1.06	1.16	1.29	1.34	1.48	1.49	1.51	1.51	1.51	1.51
JUN 20	.23	.45	.68	.87	1.27	1.56	1.74	1.80	1.88	1.94	1.95	1.95
JUL 18	.37	.56	.69	.73	.76	.77	.78	.79	.79	.79	.80	.80

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
COLORADO												
GRAND JUNCTION						NONE						
PUEBLO												
APR 13	.14	.22	.28	.33	.51	.66	.84	.98	1.16	1.39	1.59	1.68
CONNECTICUT												
BRIDGEPORT												
JUL 3	.20	.39	.48	.55	.60	.72	.79	.97	1.03	1.06	1.19	1.35
JUL 25	.18	.32	.35	.38	.41	.44	.46	.48	.52	.54	.54	.54
SEP 21	.22	.30	.32	.33	.34	.34	.34	.35	.35	.35	.35	.36
OCT 18	.27	.45	.47	.50	.68	.88	1.00	1.12	1.27	1.30	1.34	1.41
HARTFORD												
JUN 25	.36	.56	.57	.60	.60	.60	.60	.60	.60	.60	.60	.60
JUL 28	.16	.30	.32	.40	.46	.53	.55	.58	.61	.61	.62	.62
AUG 9	.22	.38	.46	.60	.90	1.00	1.10	1.18	1.30	1.31	1.32	1.32
AUG 27	.27	.37	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40
NEW HAVEN												
JUL 3	.20	.28	.36	.41	.46	.50	.63	.83	1.01	1.10	1.27	1.32
JUL 25	.28	.50	.57	.60	.62	.64	.66	.75	.79	.81	.82	.82
JUL 28	.24	.41	.49	.55	.60	.64	.67	.74	.80	.82	.84	.85
AUG 31	.20	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
OCT 18	.26	.38	.52	.62	.81	.92	1.06	1.15	1.18	1.21	1.23	1.26
DELAWARE												
WILMINGTON												
JUL 10	.30	.32	.35	.37	.38	.38	.38	.38	.38	.38	.38	.38
JUL 25	.23	.28	.46	.49	.57	.68	.77	.93	.94	.94	.94	.94
AUG 3	.46*	.74	.96	1.12	1.24	1.27	1.29	1.30	1.32	1.42	1.63	1.71
AUG 4	.19	.30	.34	.38	.42	.42	.42	.42	.43	.43	.47	.52
AUG 10	.28	.52	.56	.60	.80	1.05	1.46	1.61	1.76	1.81	2.12	2.27
AUG 19	.34	.37	.40	.42	.47	.50	.52	.52	.52	.52	.52	.52
AUG 22	.13	.24	.30	.40	.50	.51	.52	.52	.52	.52	.52	.52
AUG 26	.32	.46	.74	.74	.74	.76	.77	.77	.78	.78	.78	.78
OCT 18	.28	.36	.40	.41	.44	.45	.45	.45	.45	.45	.45	.45
FLORIDA												
APALACHICOLA U												
JUN 21	.31	.45	.56	.79	1.05	1.26	1.29	1.37	1.37	1.37	1.37	1.37
JUN 25	.27	.37	.45	.54	.60	.81	.98	1.10	1.28	1.61	1.74	1.83
JUN 26	.43	.57	.65	.69	.87	.98	1.04	1.14	1.25	1.34	1.39	1.43
JUL 6	.18	.29	.37	.42	.48	.56	.60	.60	.60	.60	.60	.60
JUL 10	.16	.27	.38	.43	.50	.53	.53	.53	.54	.57	.61	.62
JUL 23	.34	.60	.85	1.01	1.19	1.20	1.20	1.20	1.21	1.21	1.22	1.22
JUL 26	.29	.48	.59	.70	.78	.79	.79	.79	.79	.79	.79	1.10
JUL 31	.36	.50	.56	.58	.60	.60	.60	.61	.62	.62	.62	.94
AUG 1	.25	.37	.41	.43	.46	.47	.48	.49	.51	.53	.55	.56
AUG 9	.22	.31	.40	.52	.70	.93	1.14	1.18	1.18	1.18	1.18	1.18
AUG 11	.20	.30	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
AUG 20	.20	.33	.43	.51	.60	.69	.72	.85	.95	.99	1.02	1.06
AUG 21	.24	.36	.56	.64	.69	.73	.76	.79	.84	1.03	1.17	1.21
AUG 22	.19	.36	.40	.40	.40	.40	.59	.63	.64	.64	.64	.64
SEP 2	.48	.71	1.06	1.36	1.70	2.26	2.44	2.46	2.46	2.46	2.46	2.46
SEP 3	.58	.80	1.02	1.24	1.42	1.93	2.33	2.70	2.86	2.87	2.88	2.92
DEC 10	.24	.37	.54	.68	.93	1.07	1.61	2.05	2.27	2.34	2.45	2.53
DEC 11	.31	.47	.57	.59	.60	.65	.66	.67	.67	.67	.67	.67
DAYTONA BEACH												
FEB 7	.25	.35	.40	.44	.48	.48	.48	.48	.48	.48	.48	.48
JUN 2	.15	.30	.37	.45	.72	.88	.97	1.05	1.23	1.35	1.48	1.59
JUN 24	.35	.53	.70	.87	1.05	1.10	1.11	1.13	1.13	1.13	1.13	1.13
JUN 25	.29	.47	.58	.65	.76	.87	.88	.88	.88	.89	.89	.90
JUL 3	.18	.21	.36	.41	.45	.47	.50	.53	.55	.55	.55	.55
JUL 17	.46	.81	1.23	1.30	1.36	1.40	1.40	1.40	1.40	1.41	1.42	1.42
JUL 18	.46	.88	1.26	1.37	1.47	1.56	1.58	1.59	2.27	2.47	2.49	2.50
JUL 25	.23	.45	.65	.75	.87	1.10	1.17	1.22	1.28	1.33	1.37	1.37
JUL 28	.34	.65	.65	.66	.77	.85	.88	.89	.94	.98	1.06	1.15
AUG 7	.20	.32	.38	.47	.54	.57	.58	.60	.63	.65	.67	.68
AUG 26	.28	.44	.53	.61	.66	.69	.70	.70	.70	.70	.70	.70
SEP 13	.28	.53	.78	.95	1.10	1.35	1.50	1.83	1.95	2.00	2.08	2.16
SEP 28	.16	.30	.34	.35	.35	.35	.35	.36	.36	.36	.36	.36
DEC 10	.18	.35	.49	.58	.71	.75	.77	.78	.79	.85	.89	.89
FORT MYERS												
MAY 17	.25	.31	.38	.40	.42	.50	.55	.57	.57	.57	.57	.57
JUN 15	.35	.62	.87	1.00	1.03	1.04	1.06	1.06	1.06	1.06	1.06	1.06
JUN 18	.60	.37	.50	.57	.78	.90	.94	.95	1.00	1.03	1.05	1.05
JUL 4	.30	.45	.46	.46	.46	.46	.49	.49	.75	.75	.75	.75
JUL 5	.24	.30	.34	.39	.42	.42	.42	.42	.42	.42	.42	.42
JUL 6	.20	.37	.45	.52	.64	.71	.77	.93	.96	.96	.96	.96
JUL 9	.36	.44	.52	.56	.56	.56	.56	.56	.56	.56	.56	.56
JUL 10	.29	.35	.38	.41	.41	.79	.81	.82	.82	.82	.82	.82
JUL 21	.26	.36	.43	.52	.56	.64	.69	.70	.71	.71	.71	.72
JUL 27	.31	.43	.44	.45	.45	.47	.49	.49	.49	.49	.49	.49
AUG 9	.50	.84	.95	1.00	1.02	1.03	1.06	1.06	1.06	1.06	1.06	1.06
AUG 10	.56	1.02	1.34	1.65	2.00	2.45	2.80	2.84	2.85	2.85	2.85	2.85
AUG 11	.35	.46	.71	.77	.82	.84	1.15	1.47	1.65	1.85	2.36	2.70
AUG 12	.33	.42	.42	.42	.42	.42	.42	.42	.46	.60	.66	.66
AUG 18	.29	.55	.58	.64	.65	.65	.65	.65	.65	.65	.65	.65
AUG 20	.60	.80	.84	1.10	1.36	1.36	1.57	1.61	1.64	1.65	1.65	1.65
AUG 22	.53	.56	.57	.65	.68	.70	.70	.70	.70	.70	.70	.70
AUG 28	.42	.51	.58	.72	.81	.84	.85	.85	.85	.85	.85	.85
AUG 29	.29	.35	.45	.57	.65	.71	.74	.75	.75	.89	.95	.95
AUG 30	.29	.39	.42	.45	.46	.46	.46	.49	.49	.49	.49	.49
SEP 18	.25	.27	.27	.27	.28	.50	.54	.55	.55	.55	.55	.55
SEP 26	.33	.60	.76	.81	.86	.92	.98	1.03	1.07	1.13	1.16	1.17
OCT 1	.19	.24	.31	.45	.51	.53	.54	.64	.73	.81	.96	1.08
OCT 9	.45	.61	.64	.64	.66	.68	.70	.70	.70	.70	.70	.70
DEC 11	.30	.50	.70	.80	1.05	1.33	1.43	1.44	1.47	1.48	1.53	1.57
DEC 28	.38	.65	.68	.71	.82	.89	.99	1.05	1.10	1.10	1.10	1.10

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
FLORIDA												
JACKSONVILLE												
MAR 7	.22	.29	.35	.45	.53	.55	.67	.70	.75	[illegible]	.78	.78
APR 12	.25	.36	.48	.58	.71	.80	.83	.86	.91	.94	.95	.95
APR 24	.63	.80	.87	.88	.89	.89	.89	.89	.90	.94	.95	.95
JUN 2	.36	.53	.60	.63	.88	.96	.97	.97	.97	.97	1.06	1.06
JUN 6	.41	.58	.76	.65	.86	1.44	1.57	1.66	1.72	[illegible]	2.09	2.29
JUN 11	.18	.34	.48	.58	.73	.83	.88	1.02	1.14	1.15	1.16	1.16
JUN 14	.24	.33	.36	.40	.48	.49	.52	.56	.64	.65	.71	.78
JUN 15	.18	.29	.36	.38	.40	.44	.44	.44	.44	.44	.44	.44
JUN 26	.40	.79	.98	1.16	1.30	1.43	1.46	1.46	1.46	1.49	1.52	1.53
JUN 30	.21	.42	.58	.72	.86	.88	.90	.91	.93	.96	1.01	1.03
JUL 14	.21	.30	.43	.53	.66	.68	.69	.69	.69	.69	.69	.69
JUL 17	.26	.43	.55	.58	.61	.64	.64	.64	.64	.64	.64	.65
JUL 19	.34	.68	.79	.79	.79	.79	.79	.79	.79	.79	.79	.79
JUL 26	.26	.43	.64	.69	.69	.69	.70	1.05	1.06	1.07	1.07	1.07
AUG 5	.19	.38	.57	.76	1.14	1.66	1.67	1.69	1.69	1.69	1.69	1.69
AUG 7	.31	.60	.82	.93	1.00	1.07	1.08	1.08	1.08	1.08	1.08	1.08
AUG 12	.27	.43	.63	.69	.77	1.09	1.20	1.50	1.75	2.06	2.32	2.42
AUG 21	.43	.78	1.08	1.28	1.78	2.05	2.63	2.89	2.90	2.90	2.90	2.90
AUG 22	.24	.44	.61	.76	.77	.77	.77	.77	.77	.77	.77	.77
AUG 26	.17	.29	.39	.49	.66	.87	.97	.97	.98	1.02	1.06	1.06
SEP 3	.25	.42	.50	.57	.60	.64	.65	.68	.69	.69	.69	.69
OCT 23	.30	.59	.68	.73	.78	.81	.82	.82	.83	.83	.83	.83
DEC 10	.23	.38	.55	.60	.62	.64	.73	.86	.99	1.04	1.06	1.09
KEY WEST												
FEB 22	.21	.31	.33	.37	.37	.38	.40	.42	.42	.42	.42	.46
JUN 2	.25	.37	.47	.57	.62	.63	.63	.63	.75	.78	.78	.78
JUN 13	.35	.64	.80	.90	1.10	1.27	1.43	1.63	1.76	1.83	1.85	1.85
JUN 14	.43	.50	.71	.73	.74	.74	.74	.74	.74	.76	.76	.80
JUN 15	.28	.56	.81	.95	1.08	1.11	1.15	1.32	1.48	1.58	1.66	1.74
JUL 3	.25	.46	.53	.56	.57	.57	.57	.57	.57	.57	.57	.57
JUL 17	.38	.56	.61	.62	.63	.64	.64	.64	.64	.64	.64	.64
AUG 8	.30	.44	.49	.50	.55	.57	.60	.61	.65	.70	.74	.75
AUG 14	.20	.35	.42	.47	.50	.52	.55	.57	.58	.63	.69	.70
AUG 18	.31	.47	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60
AUG 24	.20	.30	.33	.36	.36	.36	.36	.36	.36	.36	.36	.36
SEP 25	.62	1.00	1.28	1.38	1.40	1.40	1.41	1.45	1.45	1.46	1.46	1.46
OCT 1	.30	.54	.69	.77	.83	.86	.87	.87	.88	.88	.88	.88
OCT 5	.24	.37	.40	.42	.44	.47	.47	.52	.53	.53	.53	.53
OCT 6	.25	.48	.56	.63	.76	.84	.85	.86	.86	.86	.86	.86
OCT 9	.35	.65	.85	.87	.87	.87	.87	.87	.87	.87	.87	.87
DEC 12	.23	.45	.65	.80	.84	1.10	1.25	1.45	1.50	1.57	1.66	1.68
MIAMI BEACH U												
JAN 23	.25	.40	.45	.53	.65	.71	.93	1.15	1.40	1.49	1.60	1.67
FEB 8	.25	.31	.36	.37	.38	.39	.46	.50	.60	.74	.83	.84
JUN 11	.18	.30	.35	.41	.60	.80	.86	.90	.90	.90	.90	.90
JUN 12	.25	.46	.51	.67	.95	1.40	1.56	1.67	1.77	1.82	1.95	1.96
JUN 13	.20	.37	.40	.42	.43	.47	.55	.60	.64	.66	.75	.77
JUN 20	.27	.34	.35	.37	.49	.50	.50	.51	.51	.52	.53	.53
JUL 1	.45	.80	1.05	1.35*	1.95	2.02	2.07	2.09	2.09	2.09	2.09	2.09
JUL 1	.30	.55	.65	.75	.87	.87	.87	.89	.89	.89	.89	.89
JUL 2	.23	.35	.40	.46	.70	.82	.88	.89	.90	.90	.90	.90
JUL 5	.55*	1.05*	1.10	1.15	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
JUL 15	.27	.36	.40	.42	.49	.51	.53	.54	.55	.57	.61	.62
AUG 8	.35	.55	.72	.80	.93	.96	.97	.97	.97	.97	.97	.97
SEP 12	.25	.38	.39	.52	.65	.70	.70	.70	.70	.70	.70	.70
OCT 9	.30	.50	.55	.56	.60	.71	.75	.82	.85	.85	.85	.85
OCT 13	.50	.87	.98	1.07	1.21	1.30	1.50	1.67	1.72	1.73	1.77	1.77
OCT 18	.55	.90	1.00	1.25	1.37	1.39	1.39	1.39	1.39	1.39	1.39	1.39
OCT 24	.50	.79	1.02	1.19	1.66	1.92	2.08	2.34	2.42	2.65	2.83	2.86
NOV 3	.33	.61	.85	1.00	1.35	1.65	1.79	1.89	1.91	1.97	1.97	1.97
MIAMI												
MAR 5	.16	.25	.40	.42	.44	.44	.44	.44	.44	.44	.44	.44
JUN 3	.25	.36	.37	.42	.50	.51	.58	.58	.58	.58	.58	.58
JUN 11	.45	.47	.48	.48	.48	.48	.48	.60	.62	.64	.74	.74
JUN 12	.45	.80	.95	1.20	1.55	2.08	2.40	2.65	3.00	3.25	3.53	3.78
JUN 13	.37	.53	.56	.61	.70	.75	.81	.88	.96	1.02	1.11	1.17
JUN 13	.43	.85	.95	1.16	1.25	1.45	1.49	1.53	1.58	1.63	1.75	1.78
JUN 14	.31	.36	.37	.41	.43	.43	.43	.43	.43	.43	.43	.43
JUN 22	.16	.25	.38	.50	.57	.63	.64	.64	.64	.64	.65	.65
JUN 23	.50	1.00	1.30	1.43	1.77	1.93	1.96	2.00	2.00	2.00	2.00	2.00
JUL 15	.40	.80	.97	1.15	1.55	1.90	2.13	2.25	2.28	2.30	2.30	2.30
AUG 4	.15	.25	.31	.35	.58	.66	.80	.82	.83	.84	.84	.84
AUG 7	.34	.51	.62	.66	.68	.80	.82	.83	.83	.83	.83	.83
AUG 8	.40	.67	.73	.78	.81	.82	.90	1.10	1.19	1.19	1.20	1.20
AUG 11	.30	.40	.45	.45	.50	.50	.50	.50	.51	.51	.51	.51
AUG 13	.35	.47	.52	.57	.65	.67	.67	.67	.67	.67	.67	.67
AUG 31	.20	.35	.40	.50	.70	.90	.93	.95	.95	.95	.95	.95
SEP 13	.50	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
SEP 16	.45	.90	1.05	1.33	1.46	1.49	1.50	1.50	1.50	1.50	1.50	1.50
SEP 26	.45	.73	.79	1.01	1.17	1.22	1.59	1.68	1.70	1.71	1.72	1.73
SEP 27	.29	.31	.32	.33	.34	.35	.37	.38	.38	.38	.38	.38
SEP 29	.35	.60	.65	.65	.65	.65	.69	.75	.75	.75	1.00	1.09
OCT 2	.23	.32	.40	.42	.70	.73	.73	.73	.75	[illegible]	.90	.99
OCT 4	.49	.98	1.05	1.47	1.82	1.90	1.94	1.95	2.02	2.2	2.63	2.70
OCT 13	.32	.50	.52	.53	.55	.56	.59	.73	.78	.79	.85	.85
OCT 23	.25	.32	.35	.40	.50	.53	.58	.58	.58	.58	.58	.58
OCT 24	.25	.48	.52	.59	.80	1.05	1.15	1.35	1.51	1.62	1.92	2.32
NOV 11	.15	.23	.27	.37	.48	.52	.61	1.05	1.07	1.07	1.09	1.09
NOV 18	.15	.30	.30	.38	.47	.47	.47	.49	.49	.49	.49	.49
MIAMI U												
FEB 22	.32	.57	.78	.88	.91	.92	.92	.92	.93	.93	.93	.93
MAR 30	.41	.56	.65	.69	.71	.71	.71	.71	.91	.91	.92	.92
MAY 22	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
JUN 3	.33	.54	.80	1.03	1.18	1.22	1.22	1.22	1.22	1.22	1.22	1.22
JUN 7	.21	.31	.39	.42	.42	.42	.42	.42	.42	.42	.42	.42
JUN 12	.29	.33	.50	.63	.88	1.14	1.39	1.69	1.76	1.97	2.18	2.30
JUN 13	.32	.46	.49	.50	.54	.60	.65	.69	.77	.81	.84	.84
JUN 14	.60	.94	1.18	1.31	1.46	1.49	1.74	1.99	2.15	2.15	2.15	2.16
JUN 19	.26	.38	.51	.55	.58	.64	.65	.75	.80	.94	1.05	1.15
JUN 22	.28	.47	.62	.75	1.04	1.19	1.22	1.23	1.23	1.23	1.23	1.23
JUN 25	.23	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
JUL 1	.23	.40	.55	.75	.99	1.02	1.03	1.03	1.03	1.03	1.03	1.03
JUL 2	.23	.36	.45	.57	.73	.93	1.31	1.55	1.59	1.6	1.61	1.65
JUL 4	.34	.47	.59	.65	.69	.72	.73	.74	.75	.75	.75	.75
JUL 15	.34	.54	.63	.90	1.04	1.10	1.33	1.37	1.42	1.46	1.48	1.48
AUG 3	.27	.42	.50	.52	.52	.52	.52	.52	.52	.52	.52	.52

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
FLORIDA												
MIAMI												
AUG 11	.24	.34	.38	.39	.41	.41	.41	.41	.41	.41	.41	.41
AUG 13	.20	.35	.49	.57	.59	.59	.59	.59	.59	.59	.59	.59
SEP 2	.26	.39	.46	.48	.58	.69	.77	.78	.78	.78	.78	.79
SEP 13	.25	.45	.51	.52	.56	.61	.61	.61	.61	.61	.61	.61
SEP 26	.25	.39	.45	.47	.51	.54	.55	.59	.60	.61	.63	.63
SEP 27	.28	.39	.51	.56	.56	.58	.58	.58	.58	.58	.58	.58
SEP 29	.25	.39	.41	.50	.53	.54	.56	.56	.56	.97	.99	1.15
OCT 1	.18	.28	.37	.39	.40	.40	.40	.40	.40	.40	.40	.40
OCT 4	.33	.61	.84	.97	1.48	1.85	2.31	2.50	2.65	2.65	2.66	2.68
OCT 6	.30	.45	.51	.54	.59	.67	.76	.88	.96	1.13	1.41	1.62
OCT 10	.23	.38	.45	.47	.51	.58	.62	.67	.68	.68	.69	.70
OCT 24	.50	.79	1.02	1.19	1.66	1.92	2.08	2.34	2.42	2.65	2.83	2.88
NOV 3	*.31	*.55	*.59	.63	*.65	.69	*.70	.87	.98	*1.01	1.06	*1.30
NOV 11	*.41	*.74	*.98	1.17	*1.40	1.54	*1.55	1.55	1.55	*1.55	1.55	*1.68
ORLANDO												
FEB 12	.26	.35	.37	.40	.53	.62	.67	.76	.81	.85	.93	1.03
MAY 5	.17	.30	.35	.47	.57	.60	.82	.85	.85	.86	.86	.91
JUN 3	.55	.95	1.05	1.25	1.42	1.44	1.45	1.45	1.45	1.45	1.45	1.45
JUN 5	.71	.74	.75	.76	.80	.85	.86	.86	.86	.86	.86	.87
JUN 9	.27	.43	.48	.61	.75	.81	.82	.83	.84	.84	.84	.84
JUN 16	.50	.92	1.10	1.43	1.67	1.74	1.75	1.75	1.75	1.75	1.75	1.75
JUN 17	.31	.44	.49	.60	.71	.87	.95	.97	.97	.97	.97	.97
JUN 18	.26	.38	.40	.42	.45	.47	.58	.85	.89	.93	.93	.93
JUN 25	.28	.46	.57	.81	.90	.92	.93	.95	.97	1.40	1.56	1.58
JUN 28	.21	.33	.36	.39	.42	.46	.48	.48	.48	.48	.48	.48
JUL 31	.27	.51	.60	.71	.92	.92	.92	.92	.93	.94	.95	.95
AUG 6	.22	.38	.47	.54	.58	.60	.61	.61	.61	.61	.61	.61
AUG 8	.20	.33	.42	.53	.61	.65	.66	.67	.70	.71	.71	.72
AUG 13	.41	.74	.87	.91	1.09	1.16	1.20	1.23	1.29	1.34	1.44	1.51
AUG 14	.22	.37	.46	.58	.72	.77	.80	.83	.84	.84	.85	.85
AUG 21	.25	.46	.53	.58	.70	.73	.74	.74	.74	.74	.74	.74
AUG 30	.25	.41	.45	.51	.56	.58	.61	.63	.63	.63	.66	.66
SEP 2	.30	.37	.41	.45	.50	.51	.51	.51	.51	.51	.51	.51
SEP 8	.24	.44	.45	.45	.45	.45	.54	.55	.55	.55	.56	.70
SEP 12	.25	.47	.56	.73	1.07	1.23	1.32	1.39	1.43	1.48	1.53	1.57
DEC 11	.28	.40	.45	.50	.61	.65	.72	.78	.80	.82	.88	1.00
PENSACOLA												
FEB 6	.16	.25	.33	.40	.44	.50	.54	.56	.59	.63	.64	.65
MAR 27	.19	.29	.38	.46	.46	.47	.50	.51	.52	.54	.54	.54
MAY 4	.25	.47	.61	.69	.78	.94	1.01	1.03	1.04	1.04	1.05	1.07
MAY 22	.62	.96	1.28	1.60	2.06	2.18	2.44	2.57	2.68	2.75	2.79	2.79
JUN 2	.38	.63	.83	1.03	1.37	1.47	1.50	1.67	1.73	1.80	1.84	1.87
JUN 5	.24	.36	.41	.41	.43	.48	.50	.50	.50	.50	.50	.50
JUN 26	.24	.38	.47	.49	.52	.56	.56	.56	.57	.57	.57	.57
JUL 6	.38	.49	.50	.50	.53	.61	.61	.65	.92	.92	.92	.92
JUL 7	.27	.44	.63	.70	.70	.70	.70	.70	.70	.70	.70	.70
JUL 13	.27	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
JUL 31	.19	.32	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
AUG 1	.44	.82	1.14	1.36	1.84	2.30	2.53	2.56	2.57	2.57	2.57	2.58
AUG 3	.17	.30	.39	.44	.48	.50	.50	.52	.52	.52	.52	.55
AUG 9	.21	.31	.36	.37	.38	.38	.38	.38	.38	.38	.38	.38
AUG 16	.26	.47	.61	.68	.82	.95	1.00	1.09	1.20	1.23	1.24	1.24
AUG 24	.39	.65	.73	.74	.74	.74	.74	.77	.77	.77	.77	.82
AUG 25	.43	.61	.63	.63	.64	.64	.64	.91	.91	.94	1.03	1.05
AUG 27	.40	.56	.63	.63	.63	.63	.63	.73	.80	.90	1.12	1.36
SEP 6	.31	.47	.58	.71	1.00	1.52	1.85	2.14	2.39	2.56	2.84	3.20
SEP 7	.25	.47	.63	.77	1.08	1.37	1.63	1.91	2.15	2.29	2.38	2.68
OCT 30	.50	.84	1.18	1.41	1.77	1.98	2.32	2.70	2.88	2.93	2.98	3.10
DEC 2	.28	.45	.54	.58	.62	.63	.63	.64	.64	.64	.64	.64
DEC 10	.16	.30	.39	.45	.52	.64	.77	.92	1.03	1.25	1.37	1.45
TALLAHASSEE												
JAN 14	.35	.61	.70	.81	1.02	1.10	1.19	1.21	1.22	1.24	1.24	1.24
JAN 26	.18	.35	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
FEB 6	.22	.32	.35	.38	.57	.70	.80	.86	.88	.92	.95	1.01
MAR 7	.22	.34	.34	.35	.35	.35	.36	.36	.36	.36	.36	.36
APR 15	.42	.80	1.00	1.05	1.07	1.11	1.14	1.19	1.23	1.25	1.29	1.30
MAY 5	.40	.75	.95	1.21	1.45	1.69	1.70	1.73	1.73	1.73	1.73	1.73
MAY 22	.25	.35	.38	.42	.48	.51	.53	.54	.54	.54	.54	.54
MAY 22	.25	.35	.40	.46	.54	.56	.60	.63	.75	.87	.94	.95
JUN 21	.35	.50	.60	.68	.72	.77	.77	.77	.77	.77	.77	.77
JUN 23	.22	.30	.34	.35	.36	.38	.39	.50	.75	.77	.79	.81
JUN 28	.43	.68	.71	.76	.79	.79	.79	.79	.79	.79	.79	.79
JUL 1	.40	.80	.90	1.08	1.40	1.53	1.58	1.59	1.59	1.62	1.65	1.70
JUL 2	.20	.33	.40	.45	.58	.66	.68	.69	.70	.70	.72	.73
JUL 25	.34	.67	.70	.88	.99	1.06	1.08	1.09	1.10	1.11	1.11	1.11
JUL 26	.30	.50	.55	.65	.90	.97	.98	.99	1.00	1.00	1.02	1.03
AUG 9	.21	.34	.43	.51	.82	.94	1.00	1.01	1.06	1.09	1.13	1.20
AUG 22	.28	.55	.73	.85	.96	1.11	1.22	1.26	1.28	1.29	1.30	1.30
AUG 27	.28	.56	.72	.76	1.05	1.08	1.11	1.11	1.11	1.30	1.92	1.92
SEP 10	.45	.82	.85	.93	1.12	1.17	1.17	1.17	1.17	1.17	1.17	1.17
OCT 9	.24	.45	.58	.66	.93	.99	1.17	1.23	1.66	1.92	1.96	1.97
DEC 3	.22	.33	.37	.39	.42	.43	.43	.60	.65	.65	.65	.66
DEC 22	.25	.35	.38	.46	.51	.54	.57	.61	.66	.67	.67	.67
TAMPA												
FEB 7	.35	.46	.46	.49	.50	.50	.52	.52	.52	.52	.52	.52
FEB 12	.25	.47	.51	.53	.60	1.00	1.17	1.22	1.23	1.30	1.31	1.31
JUN 2	.30	.43	.47	.53	.68	.73	.74	.74	.74	.74	.74	.74
JUN 20	.18	.32	.35	.48	.65	.68	.69	.72	.75	.79	.84	.87
JUN 15	.35	.47	.68	.85	1.15	1.21	1.25	1.25	1.25	1.27	1.28	1.28
JUL 1	.19	.26	.35	.45	.55	.60	.60	.61	.61	.84	1.00	1.00
JUL 3	.30	.58	.60	.60	.60	.60	.60	.72	.73	.73	.73	.73
JUL 4	.25	.45	.52	.65	.85	.89	.89	.89	.89	.89	.92	.92
JUL 14	.20	.35	.38	.44	.47	.48	.52	.70	.77	.79	.86	.87
JUL 15	.26	.33	.36	.48	.49	.49	.49	.50	.50	.50	.50	.50
JUL 15	.15	.25	.30	.35	.56	.65	.65	.65	.65	.65	.65	.65
JUL 16	.28	.50	.58	.65	1.00	1.24	1.67	1.97	2.10	2.10	2.10	2.10
JUL 17	.20	.39	.42	.44	.44	.44	.44	.45	.46	.46	.46	.46
JUL 31	.20	.40	.51	.60	.65	.65	.66	.66	.66	.66	.68	.69
AUG 12	.30	.55	.60	.75	1.00	1.05	1.20	1.47	1.80	1.95	2.10	2.12
AUG 13	.39	.70	.80	1.03	1.31	1.55	2.03	2.13	2.17	2.19	2.20	2.25
AUG 20	.60	.75	.80	.96	1.30	1.34	1.35	1.36	1.36	1.37	1.38	1.40
AUG 23	.22	.36	.48	.54	.56	.56	.56	.56	.56	.56	.56	.56
AUG 28	.25	.39	.43	.50	.68	.70	.70	.70	.70	.70	.70	.70
SEP 28	.25	.32	.33	.34	.36	.36	.36	.36	.36	.36	.36	.36
OCT 6	.30	.60	.69	.86	.98	1.18	1.21	1.27	1.30	1.33	1.38	1.40

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
FLORIDA												
WEST PALM BEACH												
JAN 15	.50	.78	.80	.81	.82	.84	.84	.85	.87	.87	.87	.96
FEB 9	.15	.24	.30	.40	.44	.45	.45	.45	.45	.45	.45	.45
JUN 3	.20	.35	.45	.53	.58	.65	.75	.75	.83	.85	.85	.85
JUN 5	.20	.34	.41	.50	.65	.76	.78	.81	.81	.81	.81	.81
JUN 11	.25	.42	.48	.55	.65	.67	.68	.78	.81	.81	1.12	1.27
JUN 15	.22	.35	.41	.42	.46	.49	.50	.52	.53	.53	.53	.53
JUN 18	.37	.70	.81	.92	.95	1.05	1.11	1.15	1.25	1.30	1.32	1.37
JUN 23	.28	.50	.57	.57	.75	.93	.95	.95	.95	.95	.95	.95
JUN 29	.20	.35	.45	.65	.80	.84	.87	.89	.91	.95	1.00	1.03
JUL 3	.47	.60	.83	.86	.87	.88	.89	.91	.91	.91	1.00	1.01
AUG 1	.30	.47	.55	.73	.79	.81	.82	.82	.82	.82	.82	.82
AUG 4	.29	.45	.51	.53	.54	.57	.57	.57	.66	.67	.69	.69
AUG 12	.30	.50	.70	.81	1.09	1.22	1.24	1.27	1.28	1.28	1.28	1.28
AUG 13	.25	.45	.59	.84	1.13	1.56	2.09	2.14	2.16	2.16	2.16	2.16
AUG 21	.20	.25	.38	.39	.42	.43	.43	.43	.43	.43	.43	.43
SEP 17	.56	.85	1.15	1.36	1.88	2.10	2.13	2.14	2.16	2.21	2.22	2.40
OCT 4	.25	.40	.50	.54	.60	.61	.74	.74	.79	.79	.79	.79
OCT 5 T	M	M	M	M	M	M	M	M	M	M	M	M
OCT 21	.23	.36	.43	.45	.54	.57	.58	.59	.60	.64	.64	.64
OCT 24	.18	.33	.47	.57	.65	.90	1.03	1.18	1.23	1.25	1.28	1.38
NOV 17	.20	.32	.39	.43	.59	.61	.62	.63	.63	.63	.63	.63
GEORGIA												
ATHENS												
JAN 26	.22	.40	.40	.41	.43	.47	.47	.47	.47	.47	.47	.47
APR 22	.25	.40	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
APR 26	.26	.45	.53	.63	.73	1.00	1.12	1.16	1.27	1.42	1.60	1.67
JUN 4	*.75	*1.40	*1.45	1.82	*2.18	2.59	*2.64	2.81	3.48	*3.59	4.38	*5.17
JUN 4	.23	.45	.55	.63	.75	.88	.97	1.04	1.12	1.19	1.60	1.92
JUN 26	.44	.71	.82	.89	.90	.90	.90	.90	.90	.90	.90	.90
JUN 29	.35	.69	.84	.97	1.04	1.10	1.11	1.17	1.21	1.22	1.23	1.23
JUL 7	.24	.38	.39	.41	.51	.55	.62	.63	.63	.63	.63	.74
JUL 7	.30	.45	.52	.63	.92	1.07	1.37	1.43	1.44	1.45	1.45	1.45
JUL 20	*.80	*1.55	*1.75	1.85	1.90	1.98	2.00	2.35	2.43	2.45	2.49	2.51
JUL 23	.21	.40	.47	.58	.59	.60	.60	.60	.60	.60	.60	.60
AUG 8	.45	.82	1.05	1.43	1.74	1.80	1.82	1.83	1.83	1.83	1.83	1.83
AUG 23	.26	.41	.47	.57	.85	.94	1.08	1.14	1.14	1.29	1.30	1.44
OCT 25	.33	.53	.56	.66	.83	.85	.88	1.01	1.14	1.18	1.23	1.24
NOV 22	.19	.35	.37	.41	.50	.52	.53	.57	.75	.81	.83	.85
ATLANTA												
JAN 26	.34	.44	.45	.45	.45	.47	.48	.49	.65	.72	.74	.75
MAR 6	.17	.26	.43	.49	.55	.62	.62	.63	.65	.69	.69	.69
MAR 10	.25	.28	.38	.42	.55	.88	1.02	1.22	1.30	1.32	1.35	1.35
APR 22	.40	.46	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47
MAY 21	.15	.30	.36	.45	.50	.55	.60	.69	.72	.73	.74	.78
JUN 1	.21	.30	.46	.55	.82	.92	.97	1.00	1.03	1.03	1.04	1.04
JUN 23	.17	.28	.40	.48	.56	.57	.57	.57	.57	.57	.57	.57
JUL 7	.27	.45	.57	.60	.61	.61	.61	.61	.61	.61	.61	.61
JUL 8	.18	.31	.40	.58	.69	.70	.70	.70	.70	.70	.70	.70
JUL 8	.26	.35	.36	.36	.36	.38	.38	.38	.38	.38	.38	.38
JUL 22	.34	.42	.45	.48	.49	.49	.54	.55	.55	.70	.78	.86
AUG 19	.33	.63	.81	.96	1.13	1.18	1.25	1.31	1.33	1.34	1.35	1.35
AUG 19	.30	.47	.50	.51	.52	.53	.53	.53	.53	.53	.53	.53
AUG 23	.22	.35	.40	.45	.59	.69	.73	.80	1.05	1.20	1.34	1.56
AUG 24	.21	.35	.41	.41	.41	.41	.41	.41	.45	.50	.56	.57
AUG 26	.27	.33	.34	.34	.35	.35	.35	.35	.35	.35	.35	.35
NOV 24	.20	.35	.47	.60	.76	.95	1.17	1.32	1.39	1.46	1.58	1.65
DEC 19	.25	.42	.56	.66	.70	.71	1.25	1.37	1.40	1.43	1.47	1.52
AUGUSTA												
MAR 7	.27	.54	.58	.60	.61	.61	.61	.61	.61	.61	.61	.61
MAR 10	.18	.31	.37	.41	.63	.76	1.03	1.12	1.29	1.64	1.92	2.40
MAR 10	.22	.33	.34	.45	.66	.88	.95	1.20	1.38	1.56	1.86	1.97
MAY 21	.29	.54	.72	.82	1.05	1.14	1.16	1.16	1.17	1.19	1.20	1.20
MAY 22	.25	.43	.62	.75	.87	.94	1.00	1.13	1.37	1.55	2.04	2.30
JUN 1	.19	.33	.33	.38	.42	.43	.50	.53	.53	.53	.53	.53
JUN 5	.20	.31	.32	.34	.35	.37	.41	.44	.47	.49	.49	.49
JUN 20	.41	.72	.78	1.08	1.23	1.30	1.30	1.30	1.30	1.30	1.30	1.30
JUL 1	.22	.36	.38	.43	.68	.92	1.10	1.40	1.42	1.46	1.54	1.94
JUL 8	.45	.78	.98	1.08	1.13	1.16	1.18	1.19	1.19	1.20	1.20	1.20
JUL 9	.28	.42	.48	.52	.53	.53	.53	.53	.53	.53	.55	.57
JUL 12	.45	.60	.63	.67	.88	1.25	1.50	1.70	1.74	1.77	2.02	2.04
JUL 13	.34	.49	.50	.54	.57	.59	.59	.59	.59	.59	.59	.74
JUL 22	.17	.33	.40	.47	.59	.73	.97	1.10	1.17	1.21	1.21	1.27
JUL 23	.21	.40	.40	.41	.42	.42	.42	.42	.42	.42	.42	.42
AUG 2	.25	.40	.46	.51	.56	.59	.61	.62	.62	.62	.62	.62
AUG 4	.26	.42	.48	.62	.64	.68	.69	.70	.70	.70	.70	.70
AUG 18	.31	.53	.56	.58	.61	.74	.75	.75	.75	.75	.79	.80
AUG 22	.23	.34	.39	.43	.45	.46	.46	.46	.46	.46	.46	.46
AUG 24	.40	.72	.88	.98	1.44	1.52	1.58	1.65	2.04	2.14	2.21	2.32
COLUMBUS												
MAR 6	.33	.36	.40	.40	.41	.41	.41	.41	.41	.41	.41	.41
APR 24	.28	.38	.39	.39	.39	.39	.39	.40	.45	.60	.60	.60
MAY 29	.35	.49	.50	.51	.55	.56	.58	.60	.60	.60	.60	.60
MAY 29	.38	.67	.68	.73	.95	1.06	1.06	1.06	1.06	1.06	1.06	1.06
JUN 20	.40	.48	.55	.68	.87	.92	.93	.93	.93	.93	.93	.93
JUN 22	.42	.58	.61	.62	.63	.63	.63	.63	.63	.63	.63	.63
JUN 23	.36	.40	.40	.40	.42	.70	.70	.70	.70	.70	.70	.70
JUN 25	.30	.32	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34
JUN 27	.30	.50	.65	.94	.99	.99	.99	.99	.99	.99	.99	1.55
JUN 27	.17	.30	.40	.48	.58	.77	.92	.95	.97	.99	1.00	1.55
JUN 29	.55	.86	1.11	1.22	1.26	1.40	1.43	1.44	1.45	1.47	1.51	1.56
JUN 30	.45	.80	1.10	1.24	1.37	1.45	1.52	1.71	1.72	1.72	1.73	1.73
JUL 2	.55	1.00	1.24	1.42	1.55	1.74	1.80	1.83	1.82	1.89	1.91	1.95
AUG 19	.28	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
AUG 21	.30	.48	.55	.73	1.03	1.05	1.06	1.06	1.30	1.64	1.68	1.71
AUG 23	.28	.35	.37	.38	.41	.50	.52	.53	.54	.55	.55	.55
SEP 3	.17	.32	.34	.40	.45	.48	.55	.59	.91	.99	1.09	1.09
OCT 25	.25	.44	.47	.48	.53	.55	.59	.65	.72	.76	.76	.78
NOV 24	.42	.50	.55	.55	.56	.57	.57	.59	.64	.65	.67	.67
MACON												
MAR 28	.15	.28	.41	.49	.57	.59	.59	.59	.59	.59	.60	.60
APR 23	.42	.51	.55	.57	.59	.64	.65	.65	.66	.66	.68	.68
APR 23	.41	.50	.52	.53	.53	.53	.53	.53	.53	.53	.53	.53

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
GEORGIA												
MACON												
JUN 27	.21	.41	.61	.74	.78	.78	.78	.78	.78	.78	.78	.78
JUL 9	.14	.22	.32	.43	.58	.68	.73	.80	.80	.80	.80	.80
JUL 23	.20	.29	.35	.42	.45	.47	.48	.49	.50	.52	.54	.54
JUL 25	.28	.38	.48	.61	.76	.81	.82	.84	.86	.86	.87	.87
JUL 29	.26	.35	.41	.41	.41	.41	.41	.41	.41	.41	.45	.73
AUG 20	.24	.36	.51	.61	.77	.97	1.07	1.11	1.12	1.12	1.12	1.13
SEP 28	.21	.39	.51	.56	.62	.68	.72	.74	.77	.78	.78	.78
ROME												
APR 26	.17	.30	.38	.40	.59	.64	.65	.70	.72	.75	.82	1.13
MAY 31	.33	.45	.57	.58	.58	.74	.76	.76	.77	.79	.80	.80
JUN 23	.38	.40	.43	.45	.46	.56	.56	.57	.57	.57	.57	.57
JUN 25	.44	.52	.53	.54	.55	.55	.55	.55	.55	.91	.93	.94
JUL 6	.26	.37	.39	.41	.43	.71	.74	.78	.92	.92	.92	.92
AUG 10	.25	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45
AUG 24	.25	.46	.53	.55	.58	.60	.62	.70	.79	.82	.84	.92
AUG 25	.30	.48	.74	.85	1.20	1.75	2.15	2.28	2.55	*3.00	3.11	*3.20
SEP 9	.30	.50	.60	.85	1.01	1.06	1.07	1.09	1.12	1.12	1.12	1.12
SEP 27	.30	.32	.48	.48	.64	.66	.67	.67	.69	.69	.69	.70
OCT 12	.32	.43	.62	.65	.83	.88	.95	.98	1.01	1.11	1.19	1.20
NOV 22	.32	.53	.54	.55	.55	.75	.75	.75	.75	.75	1.03	1.11
DEC 19	.19	.34	.48	.51	.64	.64	.65	.66	.66	.71	.73	.73
DEC 22	.22	.30	.31	.40	.62	.81	.88	.97	1.02	1.18	1.25	1.36
SAVANNAH												
JAN 1	.18	.33	.48	.57	.74	.92	1.04	1.12	1.19	1.29	1.35	1.40
APR 23	.39	.60	.73	.73	.73	.74	.74	.81	.82	.83	.83	.83
MAY 22	.22	.39	.48	.52	.68	.77	.93	1.08	1.13	1.25	1.32	1.49
JUN 25	.27	.48	.62	.74	.94	1.22	1.42	1.68	1.79	1.86	1.89	1.92
JUL 1	.21	.31	.38	.42	.44	.46	.46	.47	.48	.49	.49	.49
JUL 7	.23	.36	.42	.48	.67	.80	.86	.91	.96	1.01	1.08	1.12
JUL 8	.44	.59	.64	.65	.66	.67	.69	.73	.76	.78	.84	.88
JUL 8	.44	.59	.64	.65	.66	.67	.69	.73	.76	.78	.84	.88
JUL 10	.17	.29	.35	.45	.55	.58	.60	.60	.60	.61	.61	.61
JUL 10	.17	.29	.35	.45	.55	.58	.60	.60	.60	.61	.61	.61
AUG 4	.22	.34	.40	.47	.60	.81	1.10	1.13	1.16	1.18	1.19	1.19
AUG 5	.14	.24	.33	.42	.60	.75	.83	.84	.84	.84	.84	.84
AUG 9	.22	.43	.59	.67	.76	.80	.81	.82	.86	.94	.97	.97
AUG 11	.22	.35	.45	.58	.83	.95	.96	1.00	1.06	1.09	1.13	1.16
AUG 19	.30	.53	.66	.84	.95	1.18	1.24	1.24	1.24	1.25	1.25	1.25
SEP 27	.26	.39	.42	.53	.63	.66	.74	.79	.89	.91	.91	.93
SEP 28	.28	.46	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47
HAWAII												
HILO												
JAN 11	.33	.35	.36	.37	.38	.50	.53	.56	.66	.67	.74	1.03
JAN 27	.21	.35	.45	.54	.58	.67	.72	.75	.76	.77	.78	.78
FEB 11	.25	.37	.42	.50	.68	.79	.85	.86	1.03	1.26	1.41	1.62
MAR 30	.14	.26	.32	.42	.62	.78	.92	.98	1.06	1.09	1.14	1.17
APR 3	.21	.35	.37	.40	.50	.55	.57	.65	.90	.98	1.05	1.08
APR 5	.27	.43	.50	.56	.67	.74	.83	.94	1.03	1.08	1.15	1.24
APR 16	.25	.41	.47	.62	.75	.89	1.04	1.16	1.18	1.19	1.25	1.43
APR 17	.20	.26	.35	.45	.51	.57	.60	.63	.74	.80	.89	.89
APR 22	.35	.49	.79	.92	1.22	1.35	1.39	1.45	1.49	1.49	1.49	1.54
APR 24	.20	.36	.40	.57	.66	.71	.77	.85	1.12	1.21	1.33	1.45
APR 29	.18	.25	.38	.48	.58	.73	.89	.95	1.02	1.07	1.21	1.25
MAY 12	.20	.32	.37	.40	.43	.45	.47	.48	.54	.55	.61	.67
MAY 12	.18	.28	.34	.40	.53	.65	.75	.82	.86	.90	.96	1.00
MAY 14	.27	.50	.51	.53	.55	.64	.68	.95	1.20	1.25	1.53	1.83
JUL 7	.20	.33	.38	.43	.46	.46	.47	.57	.58	.62	.90	1.08
JUL 21	.21	.36	.50	.59	.84	.99	1.03	1.09	1.10	1.16	1.26	1.47
AUG 3	.23	.42	.55	.61	.69	.87	1.02	1.26	1.47	1.66	1.82	2.00
AUG 8	.30	.49	.60	.63	.63	.63	.63	.89	.98	.98	.98	.98
AUG 8	.19	.33	.50	.60	.78	1.08	1.31	1.50	1.74	1.82	1.98	2.26
AUG 8	.29	.46	.70	.85	1.13	1.49	1.67	1.92	2.29	2.38	2.68	2.88
AUG 8	.27	.49	.68	.81	1.13	1.27	1.33	1.42	1.61	1.69	1.82	1.90
OCT 20	.21	.28	.36	.43	.48	.49	.49	.49	.51	.52	.52	.54
NOV 22	.22	.36	.39	.39	.39	.40	.41	.59	.61	.61	.61	.61
NOV 25	.29	.56	.77	.94	1.22	1.52	1.92	2.27	2.65	2.70	2.95	3.04
NOV 25	.25	.32	.38	.39	.50	.60	.63	.64	.67	.80	1.17	1.20
NOV 25	.17	.27	.34	.47	.66	.73	.82	1.04	1.08	1.11	1.15	1.19
NOV 26	.32	.43	.55	.61	.66	.72	.83	.88	.90	.92	1.41	1.58
DEC 1	.17	.26	.35	.45	.56	.70	.81	.92	.93	.98	1.27	1.45
DEC 1	.25	.35	.41	.48	.64	.78	.96	1.14	1.29	1.41	1.44	1.71
DEC 2	.23	.33	.33	.33	.35	.43	.43	.44	.44	.44	.51	.52
DEC 7	.22	.41	.59	.72	.85	.90	.92	.94	.96	1.05	1.10	1.20
DEC 30	.19	.32	.42	.50	.50	.50	.55	.80	.81	.83	.84	.85
HONOLULU												
FEB 12	.17	.31	.43	.49	.59	.70	.71	.71	.72	.73	.84	.85
MAR 11	.27	.44	.56	.62	.78	.96	1.08	1.21	1.24	1.25	1.26	1.28
MAR 20 T	.26	.27	.27	.27	.27	.27	M	M	M	M	M	M
MAR 22	.16	.24	.35	.44	.52	.60	.66	.71	.80	.84	.91	.95
MAY 18	.37	.51	.60	.63	.67	.69	.70	.70	.72	.82	.96	.96
AUG 6	.16	.25	.35	.40	.46	.49	.66	.77	.79	.81	.83	.84
NOV 23	.26	.38	.50	.52	.52	.54	.55	.56	.56	.56	.64	.68
NOV 24	.26	.44	.57	.63	.70	.72	.72	.72	.72	.74	.83	.83
DEC 9	.15	.22	.33	.41	.52	.71	.89	1.11	1.18	1.18	1.18	1.19
DEC 18	.27	.46	.63	.78	1.02	1.16	1.23	1.68	1.80	2.09	2.57	2.79
DEC 29	.40	.67	.77	.81	.83	.83	.83	.83	.83	.83	.83	.83
KAHULUI												
JAN 11	.15	.27	.39	.43	.43	.44	.44	.51	.57	.60	.73	.73
MAR 17	.32	.63	.89	1.11	1.52	2.17	*2.24	2.40	2.49	2.50	2.52	2.54
MAR 23	.15	.30	.37	.40	.42	.42	.42	.50	.57	.62	.71	.71
MAR 24	.21	.29	.41	.45	.60	.97	1.16	1.51	1.79	2.11	2.43	*2.97
APR 10	.28	.32	.32	.32	.32	.32	.33	.33	.33	.34	.34	.34
JUN 29	.29	.56	.76	.88	.93	.94	.94	1.00	1.04	1.12	1.30	1.44
DEC 11	.23	.31	.34	.35	.38	.41	.41	.42	.42	.42	.42	.42
LIHUE												
FEB 10	.28	.40	.48	.54	.70	.96	1.18	1.24	1.26	1.27	1.28	1.28
FEB 26	.23	.39	.58	.74	.86	.96	1.01	1.10	1.16	1.16	1.16	1.16
MAR 8	.26	.34	.39	.48	.65	.72	.88	1.02	1.06	1.06	1.36	1.42
JUN 5	.18	.30	.40	.46	.59	.71	.79	.86	.86	.86	.86	.86
OCT 6 T	M	M	M	M	.58	.58	.61	.61	.61	.61	.61	.62

T CLOCK MALFUNCTION
M NO RECORD

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
HAWAII												
LIHUE												
NOV 24	.26	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.44
DEC 8	.31	.40	.51	.61	.71	.77	.79	1.11	1.24	1.28	1.47	1.54
DEC 8	.18	.30	.42	.54	.61	.68	.72	.73	.74	.77	.83	.89
DEC 8	.34	.55	.74	.95	1.10	1.18	1.23	1.25	1.29	1.30	1.31	1.31
DEC 17	.22	.28	.32	.37	.58	.61	.61	.61	.62	.64	.90	1.03
DEC 23	.22	.28	.33	.48	.60	.76	1.05	1.21	1.31	1.35	1.42	1.43
DEC 31	.26	.29	.32	.35	.42	.59	.62	.63	.65	.69	.71	.80
IDAHO												
BOISE						NONE						
LEWISTON						NONE						
POCATELLO												
JUN 15	.21	.33	.38	.38	.38	.38	.39	.39	.39	.39	.39	.39
ILLINOIS												
CAIRO U												
MAY 1	.29	.42	.54	.72	.84	.85	.99	1.19	1.61	1.69	1.70	1.78
MAY 11	.26	.41	.57	.65	.76	.79	.79	.80	.80	.80	.80	.80
MAY 14	.28	.51	.62	.83	1.09	1.43	1.76	2.09	2.48	2.98	3.42	3.89
JUN 21	.26	.37	.55	.65	.70	.71	.96	.96	.96	.96	1.07	1.11
JUN 29	.24	.43	.47	.48	.50	.53	.53	.53	.53	.53	.53	.53
JUL 9	.22	.38	.42	.43	.44	.45	.46	.46	.46	.46	.46	.46
JUL 10	.50	.89	1.22	1.55	2.03	2.59	2.61	2.67	2.67	2.67	2.67	2.67
AUG 3	.18	.33	.44	.51	.56	.57	.59	.61	.62	.64	.71	.76
AUG 8	.27	.49	.59	.69	.81	.92	1.03	1.08	1.09	1.09	1.09	1.09
AUG 26	.26	.48	.55	.57	.57	.57	.57	.57	.57	.57	.57	.57
SEP 8	.23	.38	.56	.75	.85	.97	1.03	1.19	1.28	1.28	1.29	1.29
OCT 24	.29	.43	.51	.57	.59	.60	.60	.62	.62	.62	.66	.66
CHICAGO O HARE												
JUN 7	.15	.28	.41	.46	.53	.59	.59	.59	.59	.59	.59	.59
JUN 10	.30	.58	.78	.97	1.31	1.70	*1.97	2.24	2.34	*2.36	2.51	*2.97
JUN 12	.22	.32	.40	.42	.44	.44	.48	.48	.48	.48	.52	.52
JUN 24	.22	.44	.54	.60	.77	.81	1.07	1.10	1.10	1.10	1.10	1.10
JUL 23	.17	.30	.37	.42	.48	.50	.50	.50	.50	.50	.50	.50
AUG 18	.25	.45	.55	.63	.71	.80	.84	.86	.91	.97	1.02	1.03
CHICAGO MIDWAY												
APR 21	.22	.43	.52	.60	.65	.72	.80	.87	.91	.93	.95	.95
JUN 7	.28	.30	.36	.37	.38	.41	.43	.48	.50	.50	.53	.53
JUN 10	.30	.45	.57	.82	1.04	1.44	1.84	2.06	2.10	2.12	2.32	2.32
JUN 13	.32	.57	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60
JUN 16	.54	.74	.81	1.08	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
JUL 23	.31	.48	.60	.61	.62	.62	.62	.62	.63	.63	.63	.63
JUL 26	.23	.44	.53	.56	.58	.58	.58	.58	.58	.58	.58	.58
AUG 18	.58	.66	.70	.74	.89	.89	.90	.90	.92	.93	.94	1.02
SEP 20	.21	.31	.34	.37	.48	.63	.80	1.00	1.08	1.09	1.10	1.10
DEC 21	.18	.32	.44	.47	.54	.84	.97	1.03	1.06	1.10	1.18	1.26
MOLINE												
APR 21	.22	.30	.34	.35	.35	.35	.37	.41	.41	.41	.41	.41
JUN 7	.44	.76	.88	1.09	1.40	1.55	2.24	2.46	2.74	3.57	3.90	4.04
JUN 16	.29	.33	.33	.34	.34	.36	.37	.37	.37	.37	.37	.37
JUL 1	.25	.49	.60	.71	.89	.90	.92	.92	.92	.92	.92	.92
JUL 21	.35	.55	.66	.78	1.10	1.24	1.31	1.36	1.38	1.39	1.40	1.41
JUL 26	.31	.55	.59	.67	.76	.80	.83	.90	.92	.92	.93	.94
AUG 6	.41	.61	.77	.82	1.06	1.11	1.18	1.20	1.20	1.20	1.20	1.20
SEP 14	.27	.49	.69	.75	.94	1.12	1.26	1.34	1.37	1.41	1.42	1.42
SEP 18	.19	.31	.42	.54	.59	.65	.99	1.05	1.08	1.08	1.08	1.08
SEP 20	.32	.54	.65	.72	.78	.81	.88	1.03	1.13	1.19	1.31	1.35
PEORIA												
JUN 10	.44	.62	.72	.74	.86	.95	.96	1.01	1.09	1.15	1.24	1.28
JUL 1	.18	.34	.44	.52	.58	.59	.60	.60	.60	.60	.60	.60
JUL 18	.24	.43	.61	.70	.94	1.08	1.32	1.40	1.41	1.42	1.42	1.42
JUL 23	.18	.25	.28	.31	.52	.65	.69	.77	.79	.85	.87	.87
JUL 26	.40	.60	.82	.97	1.12	1.30	1.45	1.56	1.62	1.66	1.68	1.68
AUG 3	.35	.60	.67	.68	.71	.72	.72	.73	.75	.76	.76	.76
AUG 6	.21	.35	.42	.49	.53	.58	.61	.62	.62	.63	.63	.63
AUG 18	.23	.32	.33	.35	.36	.37	.37	.37	.37	.37	.37	.37
SEP 20	.18	.28	.39	.50	.61	.94	1.01	1.03	1.05	1.06	1.06	1.07
OCT 5	.22	.36	.40	.46	.48	.55	.68	.73	.86	.91	.98	1.07
ROCKFORD												
JAN 24	.39	.55	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64
APR 21 T	M	M	M	M	M	M	M	M	M	1.62	1.62	1.62
APR 29	.18	.25	.39	.41	.46	.52	.56	.61	.63	.65	.69	.73
JUN 7 T	M	M	M	M	M	M	M	M	M	1.56	1.56	1.56
JUN 7	.27	.32	.33	.37	.39	.45	.46	.49	.51	.51	.51	.54
JUN 10	.26	.32	.34	.37	.41	.43	.45	.49	.50	.50	.51	.52
JUN 10	.60	.86	1.11	1.40	1.60	1.72	1.78	1.83	1.88	1.88	1.88	1.91
JUN 11	.35	.59	.66	.69	.69	.70	.70	.70	.70	.70	.70	.70
JUN 12	.50	.90	1.10	1.18	1.28	1.30	1.31	1.34	1.51	1.51	1.51	1.51
JUN 24	.20	.40	.43	.45	.50	.53	.59	.60	.60	.60	.60	.60
JUN 28	.14	.21	.25	.35	.50	.69	.74	.83	.91	.96	1.00	1.00
JUL 26	.16	.29	.41	.42	.42	.42	.43	.43	.43	.43	.46	.50
AUG 18	.15	.25	.34	.41	.47	.75	.86	.90	.92	.93	.93	.93
AUG 22	.26	.37	.41	.42	.43	.48	.55	.60	.63	.64	.65	.66
OCT 24	.25	.37	.46	.51	.64	.73	.75	.78	.81	.82	.82	.82
SPRINGFIELD												
JAN 24	.31	.46	.54	.54	.56	.56	.56	.56	.56	.56	.56	.56
JUN 12	.22	.28	.34	.46	.57	.60	.60	.60	.61	.64	.64	.64
JUL 23	.29	.48	.66	.68	.84	1.15	1.26	1.32	1.34	1.56	1.58	1.64
AUG 8	.21	.38	.47	.62	.94	1.27	1.39	1.48	1.57	1.61	1.64	1.64
SEP 19	.29	.58	.80	.87	.90	.93	.96	.99	1.00	1.01	1.01	1.01
SEP 26	.22	.32	.37	.40	.46	.54	.61	.68	.72	.75	.77	.82
DEC 21	.37	.46	.51	.56	.72	1.02	1.27	1.57	1.75	1.91	1.99	2.06

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1967

Station and date	Maximum precipitation in inches (5 to 180 minutes) 5	10	15	20	30	45	60	80	100	120	150	180
INDIANA												
EVANSVILLE												
MAR 12	.24	.33	.35	.38	.44	.64	.65	.65	.68	.68	.68	.68
MAR 14	.30	.36	.36	.37	.38	.40	.42	.42	.42	.42	.44	.75
APR 26	.20	.30	.33	.37	.42	.55	.61	.65	.69	.70	.70	.71
MAY 14	.43	.57	.61	.65	.72	.76	.80	.85	.87	.89	.91	.92
JUN 21	.25	.40	.44	.44	.54	.66	.67	.67	.68	.77	.77	.77
JUL 9	.26	.41	.46	.47	.47	.47	.60	.66	.66	.66	.69	.75
JUL 10	.25	.46	.51	.52	.62	.67	.67	.67	.91	.96	.96	1.17
JUL 28	.38	.58	.72	.76	.76	.77	.81	.81	.81	.81	.81	.81
AUG 8	.23	.35	.50	.60	.64	.72	.72	.72	.73	.75	.76	.77
AUG 26	.36	.60	.76	.83	.92	.93	.93	.93	1.10	1.72	1.76	1.77
SEP 21	.17	.29	.35	.43	.47	.55	.57	.61	.67	.74	.81	.85
OCT 5	.28	.38	.52	.62	.86	1.10	1.35	1.42	1.44	1.48	1.50	1.52
OCT 5	.40	.48	.48	.49	.56	.56	.56	.56	.56	.56	.56	.56
OCT 6	.34	.42	.51	.53	.55	.61	.61	.61	.62	.64	.73	.80
OCT 24	.22	.34	.38	.41	.47	.52	.55	.59	.62	.63	.63	.63
FORT WAYNE												
JUN 9	.34	.44	.47	.48	.56	.56	.56	.56	.73	.83	.83	.86
JUL 25	.34	.66	.72	.74	.76	.78	.78	.78	.78	.78	.78	.78
JUL 31	.30	.42	.46	.46	.47	.49	.50	.50	.50	.50	.50	.50
INDIANAPOLIS												
MAY 28	.30	.42	.46	.52	.58	.64	.68	.73	.76	.77	.77	.77
JUL 19	.42	.73	.74	.75	.75	.77	.77	.78	.78	.78	.78	1.19
AUG 2	.18	.27	.35	.40	.45	.45	.45	.45	.45	.45	.46	.46
AUG 19	.42	.68	.74	.77	.91	.93	.93	.93	.93	.93	.93	.93
SOUTH BEND												
JUN 10	.38	.62	.88	1.02	1.26	1.57	1.71	1.78	1.79	1.84	1.84	1.84
JUN 24	.28	.38	.43	.55	.60	.60	.60	.60	.65	.66	.66	.66
JUL 22	.34	.47	.50	.53	.54	.59	.61	.61	.61	.61	.61	.61
SEP 21	.21	.30	.34	.43	.47	.47	.50	.50	.50	.50	.59	.60
IOWA												
DES MOINES												
JUN 9	.38	.54	.56	.60	.94	1.10	1.31	1.34	1.35	1.35	1.35	1.45
JUN 12	.30	.32	.34	.35	.38	.50	.74	.79	.86	.92	1.01	1.10
SEP 13	.26	.30	.34	.39	.50	.57	.66	.70	.71	.71	.71	.71
DUBUQUE												
MAY 10	.23	.45	.47	.55	.64	.72	.85	.95	1.00	1.01	1.01	1.01
JUN 9	.20	.32	.39	.44	.52	.52	.54	.55	.61	.63	.74	.79
JUN 10	.31	.40	.42	.46	.53	.60	.77	.87	.95	.97	1.05	1.16
JUN 11	.31	.45	.47	.51	.51	.51	.51	.51	.51	.51	.51	.51
JUN 16	.19	.28	.35	.46	.60	.77	.87	.92	.92	.92	.92	.92
AUG 2	.25	.38	.39	.41	.54	.63	.65	.65	.67	.67	.67	.67
SEP 14	.50	.84	.91	1.01	1.40	1.77	2.47	3.10	4.00	*4.30	4.74	*4.97
SEP 14	.22	.43	.50	.63	.86	.93	1.00	1.17	1.47	1.67	1.70	1.70
OCT 24	.17	.33	.38	.43	.50	.62	.65	.69	.74	.83	.88	.90
DEC 20	.34	.54	.62	.75	.79	.80	.80	.80	.80	.80	.80	.80
SIOUX CITY												
JUN 4	.41	.63	.75	.86	.94	1.04	1.05	1.06	1.08	1.10	1.12	1.12
JUN 7	.18	.32	.36	.40	.47	.63	.88	.95	.98	1.01	1.05	1.08
JUN 19	.26	.36	.38	.39	.40	.41	.41	.41	.47	.49	.50	.50
JUN 13	.32	.42	.44	.44	.46	.47	.72	.74	.75	.76	.78	.78
JUL 9	.52	.73	1.04	1.27	1.49	1.51	1.51	1.51	1.51	1.51	1.51	1.51
WATERLOO												
APR 30	.42	.48	.56	.63	.67	.67	.67	.67	.67	.67	.67	.67
MAY 10	.14	.24	.30	.34	.50	.60	.72	.82	.90	.94	.98	1.00
JUN 7	.40	.74	.90	.96	1.11	1.17	1.21	1.26	1.33	1.39	1.45	1.49
JUN 7	.40	.47	.50	.52	.53	.54	.55	.57	.57	.57	.57	.57
JUL 30	.28	.40	.45	.46	.47	.47	.48	.61	.65	.67	.67	.67
AUG 1	.27	.31	.31	.31	.31	.31	.36	.36	.36	.36	.36	.36
AUG 8	.34	.44	.51	.58	.64	.80	.83	.90	.98	1.05	1.15	1.23
SEP 13	.26	.40	.44	.57	.62	.63	.69	.71	.74	.75	.76	.76
KANSAS												
CONCORDIA												
APR 13	.44	.53	.73	.80	.92	.95	.98	.98	.99	.99	.99	.99
JUN 9 T	M	M	M	M	M	M	M	3.10	4.05	*4.70	4.88	*4.90
JUN 10	.55	.79	.92	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
JUN 15	.30	.43	.58	.72	1.15	1.29	1.55	1.95	2.18	2.30	2.47	2.59
JUL 8	.27	.47	.53	.55	.61	.62	.68	.72	.73	.74	.74	.74
JUL 27	.36	.62	.75	.84	.98	1.11	1.16	1.20	1.27	1.32	1.43	1.47
JUL 27	.35	.64	.80	.90	1.07	1.22	1.24	1.29	1.30	1.30	1.31	1.33
AUG 6	.27	.47	.62	.69	.82	.91	.92	.93	.93	.93	.93	.93
SEP 19	.23	.38	.53	.68	.79	.80	.80	.80	.80	.80	.80	.80
OCT 23	.17	.31	.38	.40	.41	.43	.43	.43	.43	.43	.43	.43
DODGE CITY												
APR 11	.18	.24	.36	.41	.45	.46	.50	.58	.61	.77	.81	.90
MAY 29	.20	.28	.36	.42	.58	.64	.65	.66	.69	.72	.73	.74
JUN 18	.19	.30	.36	.50	.57	.62	.64	.77	.83	.91	.99	1.00
JUN 22	.26	.30	.38	.58	.66	1.00	1.18	1.22	1.22	1.22	1.22	1.22
JUL 31	.26	.51	.70	.87	1.14	1.50	1.82	2.02	2.04	2.05	2.06	2.06
AUG 6	.24	.39	.50	.60	.72	.93	1.09	1.18	1.24	1.26	1.26	1.26
GOODLAND												
JUL 28	.20	.30	.38	.45	.53	.55	.55	.55	.55	.56	.71	.92
AUG 5	.18	.28	.35	.37	.37	.37	.37	.37	.37	.37	.37	.37
AUG 20	.30	.35	.39	.47	.53	.53	.53	.53	.53	.53	.53	.53
SEP 11	.27	.52	.62	.65	.71	.71	.71	.71	.71	.71	.71	.71
SEP 18	*.64	*1.14	*1.32	1.46	*1.76	1.89	1.92	1.97	1.99	2.00	2.01	2.01

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes) 5	10	15	20	30	45	60	80	100	120	150	180
KANSAS												
TOPEKA												
APR 1	.30	.36	.45	.56	.68	.84	1.00	1.20	1.34	1.70	1.93	2.24
APR 3	.23	.39	.41	.45	.59	.79	.94	1.04	1.05	1.06	1.16	1.24
JUN 10	.40	.76	.78	.96	1.06	1.28	1.40	1.46	1.48	1.56	1.64	1.66
JUN 11	.35	.50	.60	.79	1.15	1.33	1.62	1.80	1.90	2.03	2.24	2.26
JUN 16	.15	.30	.42	.54	.56	.58	.63	.73	.76	.76	.78	.81
JUN 19	.20	.36	.50	.62	.66	.69	.69	.78	.78	.78	.78	.78
JUN 20	.40	.70	.91	1.02	1.17	1.33	1.43	2.12	2.29	2.29	2.29	2.30
JUN 21	.29	.43	.60	.70	1.02	1.11	1.61	1.68	1.76	1.78	1.85	1.92
JUN 24	.29	.46	.64	.84	.98	1.01	1.05	1.12	1.14	1.15	1.26	1.37
JUL 28	.15	.24	.38	.44	.58	.78	.85	.88	.93	1.01	1.09	1.16
OCT 7	.18	.32	.43	.50	.67	.84	1.27	1.49	1.58	1.66	1.76	1.78
OCT 15	.23	.38	.49	.52	.53	.55	.60	.70	.73	.76	.79	.85
WICHITA												
JUN 5	.22	.32	.36	.41	.56	.59	.70	.72	.72	.72	.72	.73
JUN 29	.15	.29	.37	.39	.49	.67	.72	.72	.75	.78	.80	.84
JUL 5	.18	.28	.37	.42	.53	.61	.75	.82	.85	.96	.99	1.06
AUG 3	.22	.26	.34	.40	.58	.62	.62	.62	.62	.62	.62	.62
SEP 3	.22	.26	.34	.40	.58	.62	.62	.62	.62	.62	.62	.62
KENTUCKY												
COVINGTON												
MAY 25	.26	.48	.53	.53	.57	.60	.60	.60	.60	.60	.60	.60
JUL 27	*.45	*.80	*.95	1.20	*1.31	1.33	1.37	1.40	1.43	1.45	1.50	1.50
JUL 30	.45	*.85	*1.07	1.20	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34
LEXINGTON												
MAR 14	.24	.33	.38	.39	.40	.47	.49	.52	.54	.55	.55	.55
MAR 15	.25	.35	.42	.44	.44	.47	.57	.65	.65	.65	.66	.66
MAY 7	.30	.55	.75	.93	1.10	1.31	1.39	1.48	1.54	1.60	1.68	1.68
MAY 14	.35	.50	.55	.60	.77	.90	1.00	1.08	1.20	1.24	1.28	1.35
JUN 21	.25	.43	.45	.49	.50	.53	.55	.55	.55	.55	.55	.57
JUL 2	.25	.42	.52	.54	.55	.55	.56	.57	.58	.58	.56	.56
JUL 20	.50	.77	.94	.98	.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JUL 31	.25	.40	.61	.68	.75	.78	.79	.80	.80	.80	.80	.85
AUG 19	.30	.46	.68	.87	.92	1.00	1.03	1.05	1.07	1.09	1.09	1.09
AUG 20	.24	.27	.37	.42	.45	.49	.49	.49	.49	.49	.49	.49
SEP 27	.23	.34	.37	.40	.41	.43	.48	.53	.62	.64	.65	.65
LOUISVILLE												
MAR 14	.33	.34	.34	.34	.34	.34	.35	.38	.38	.38	.38	.40
MAY 14	.62	.66	.90	1.02	1.10	1.16	1.19	1.24	1.28	1.32	1.33	1.35
JUN 18	.40	.78	.86	.90	.91	.91	1.07	1.11	1.17	1.19	1.19	1.19
JUN 28	.30	.52	.60	.64	.76	.80	.80	.80	.80	.80	.80	.80
JUN 29	.26	.45	.65	.66	.67	.67	.68	.68	.68	.68	.68	.68
JUL 1	.20	.36	.40	.53	.65	.72	.74	.74	.74	.74	.74	.74
JUL 2	.42	.79	.88	.90	.90	.90	.90	.90	.90	.90	.90	.90
JUL 7	.27	.52	.62	.68	.90	.92	.92	.92	.92	.92	.93	.93
JUL 10	.28	.54	.60	.64	.84	1.06	1.19	1.22	1.22	1.23	1.23	1.23
JUL 20	.34	.58	.68	.76	.79	.80	.80	.80	.80	.80	.80	.80
JUL 27	.19	.38	.42	.46	.47	.49	.49	.49	.49	.49	.49	.62
AUG 9	.30	.54	.80	1.02	1.34	1.60	2.00	2.28	2.33	2.36	2.38	2.40
AUG 19	.24	.28	.32	.40	.44	.46	.46	.47	.47	.47	.47	.47
OCT 8	.21	.31	.32	.33	.34	.35	.35	.35	.35	.36	.38	.38
OCT 24	.20	.29	.36	.44	.48	.56	.62	.70	.72	.72	.72	.72
DEC 21	.30	.46	.48	.51	.53	.58	.61	.66	.69	.71	.75	.76
LOUISIANA												
ALEXANDRIA												
JAN 26 C	.25	.37	.42	.43	.44	.45	.46	.46	.46	.46	.46	.46
FEB 20	.45	.79	.95	1.02	1.05	1.09	1.12	1.16	1.19	1.20	1.21	1.23
MAR 20	.25	.38	.43	.47	.61	.67	.69	.74	.75	.76	.80	.80
APR 10	.25	.35	.55	.63	.70	.79	.84	.89	.93	.96	.98	1.00
APR 13	.18	.30	.45	.50	.58	.74	.81	.91	.99	1.08	1.27	1.42
APR 14	.35	.55	.71	.86	1.06	1.31	1.79	2.19	2.26	2.26	2.27	2.28
MAY 1	.35	.57	.88	1.04	1.20	1.27	1.36	1.39	1.40	1.40	1.45	1.57
MAY 4	.18	.30	.38	.45	.63	.75	1.09	1.23	1.24	1.28	1.34	1.42
MAY 30	.33	.65	.71	.78	.90	.91	.91	.93	.94	1.00	1.01	1.05
JUL 4	.31	.55	.76	.92	1.30	1.80	1.91	1.92	1.93	1.95	1.98	2.01
JUL 6	.18	.32	.40	.52	.63	.78	.82	.82	1.31	1.36	1.40	1.42
JUL 20	.26	.51	.67	.69	.71	.73	.73	.74	.74	.74	.74	.75
AUG 18	.16	.31	.43	.46	.48	.48	.48	.48	.48	.48	.48	.48
BATON ROUGE												
JAN 26	.35	.46	.52	.54	.54	.55	.55	.56	.56	.56	.56	.56
FEB 11	.33	.34	.35	.36	.37	.37	.37	.38	.38	.38	.38	.38
APR 14	.30	.56	.66	.87	.96	1.13	1.51	1.92	2.22	2.38	2.94	3.65
APR 14	.25	.50	.65	.80	1.25	1.30	1.41	1.46	2.10	[illegible]	3.15	3.55
APR 14	.58	.90	1.27	1.47	1.67	1.79	2.43	2.44	2.60	2.66	2.85	3.92
MAY 1	.45	.69	.99	1.18	1.27	1.33	1.39	1.48	1.59	1.65	1.78	1.95
MAY 4	.24	.36	.45	.53	.57	.80	.91	.95	1.05	1.17	1.34	1.45
MAY 31	.37	.56	.77	.94	1.13	1.26	1.30	1.31	1.33	1.34	1.35	1.35
JUL 4	.32	.49	.63	.67	.81	.85	.87	.89	.90	.90	.90	.90
JUL 7	.25	.39	.46	.54	.56	.57	.57	.58	.58	.58	.58	.56
JUL 11	.57	1.13	1.55	1.86	*2.07	2.35	2.35	2.39	2.40	2.40	2.40	2.40
JUL 12	.41	.50	.51	.51	.51	.51	.51	.51	.51	.51	.51	.51
JUL 13	.38	.65	.87	.97	1.07	1.16	1.25	1.38	1.56	1.77	1.86	1.88
JUL 22	.30	.50	.62	.73	.77	.78	.80	.81	.81	.82	.82	.82
SEP 12	.20	.31	.45	.57	.71	.99	1.21	1.25	1.50	1.57	1.59	1.59
DEC 10	.25	.46	.49	.50	.55	.57	.60	.66	.68	.69	.70	.71
DEC 14	.17	.32	.35	.37	.38	.43	.43	.44	.45	.45	.46	.46
LAKE CHARLES												
APR 13	.25	.40	.50	.60	.98	1.18	1.47	1.54	1.79	2.05	2.19	2.25
APR 15	.30	.41	.46	.61	.86	1.16	1.41	1.43	1.44	1.46	1.49	1.56
MAY 1	.25	.45	.50	.65	.67	.67	.70	.70	.70	.71	.71	.71
MAY 4	.21	.30	.40	.52	.60	.65	.71	.76	.79	.79	.79	.79
MAY 21	.44	.80	.95	1.15	1.35	1.53	1.73	2.05	2.55	[illegible]	3.52	4.00
MAY 29	.35	.60	.80	.85	.92	.92	.92	.92	.95	.98	1.04	1.07
JUN 14	.36	.43	.46	.49	.50	.52	.54	.55	.55	.56	.56	.58
JUL 13	.20	.28	.30	.42	.50	.65	.77	.80	.85	.86	.85	.90
JUL 19	.34	.58	.60	.69	.77	.85	.91	.94	.98	1.02	1.09	1.10
JUL 20	.30	.60	.68	.72	.75	1.02	1.23	1.25	1.26	1.28	1.32	1.36

C RECORD ENDED OCTOBER 1967

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
LOUISIANA												
LAKE CHARLES												
AUG 10	.25	.50	.55	.57	.58	.58	.58	.58	.58	.58	.58	.58
AUG 24	.20	.32	.35	.40	.60	.70	.80	.92	.96	.96	.96	.96
AUG 26	.20	.35	.40	.52	.65	.68	.71	.75	.76	.79	.82	.89
AUG 27	.31	.60	.66	.80	.92	.94	.94	1.14	1.25	1.25	1.25	1.25
SEP 15	.40	.75	.80	1.00	1.20	1.65	1.75	1.77	1.78	1.78	1.78	1.78
SEP 27	.37	.51	.53	.54	.55	.56	.57	.57	.57	.59	.59	.59
OCT 24	.30	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
OCT 29	.45	.56	.58	.70	.77	.80	1.05	1.20	1.28	1.32	1.48	1.60
DEC 2	.35	.55	.72	.77	1.32	1.57	1.57	1.57	1.57	1.57	1.57	1.57
DEC 9	.50	.90	1.05	1.20	1.55	2.40	2.95	3.75	3.93	4.20	4.30	4.40
DEC 14	.20	.31	.33	.38	.43	.55	.77	.79	.79	.79	.80	.90
DEC 19	.25	.37	.41	.43	.62	.63	.64	.65	1.04	1.14	1.28	1.29
NEW ORLEANS												
JAN 13	.25	.46	.50	.54	.57	.69	.78	.85	.98	.98	.98	.98
FEB 5	.13	.23	.25	.30	.50	.56	.67	.71	.72	.77	.78	.79
FEB 6	.35	.47	.58	.65	.95	1.16	1.44	1.75	2.18	2.58	3.01	3.35
MAR 25	.18	.36	.43	.47	.48	.50	.80	.82	.85	.85	.85	.85
APR 14	.52	.85	.90	1.08	1.17	1.38	1.44	1.54	1.78	2.03	2.15	2.22
MAY 2	.25	.29	.31	.33	.40	.47	.51	.55	.65	.73	.82	.89
MAY 31	.27	.28	.28	.29	.30	.31	.31	.31	.31	.31	.31	.31
JUN 1	.25	.50	.63	.76	1.14	1.44	1.56	1.66	1.66	1.83	2.22	2.38
JUN 7	.25	.44	.45	.47	.50	.63	.88	.89	.89	.90	.92	.94
JUN 14	.22	.27	.42	.53	.58	.67	.73	.78	.79	.80	.99	.99
JUN 15	.32	.47	.49	.61	.97	.97	.97	.97	.98	.98	.99	.99
JUL 6	.48	.71	.81	1.03	1.11	1.12	1.13	1.14	1.14	1.14	1.14	1.15
JUL 13	.23	.37	.40	.49	.53	.67	.73	.79	.82	.83	.83	.85
JUL 18	.52	.72	.88	1.12	1.52	2.01	2.24	2.24	2.24	2.24	2.24	2.24
JUL 19	.24	.34	.35	.37	.48	.52	.54	.56	.57	.57	.57	.66
JUL 24	.26	.43	.55	.65	.91	.96	1.06	1.07	1.08	1.08	1.08	1.08
AUG 19	.32	.44	.56	.66	1.09	1.25	1.30	1.33	1.33	1.33	1.33	1.33
AUG 22	.31	.53	.58	.67	.89	.97	1.04	1.08	1.12	1.12	1.12	1.12
AUG 27	.52	.75	.77	.83	.89	.95	.98	1.05	1.08	1.10	1.11	1.12
SEP 6	.17	.30	.32	.40	.55	.56	.56	.58	.58	.58	.63	.65
SEP 11	.27	.46	.51	.67	.84	1.01	1.05	1.05	1.05	1.05	1.05	1.05
OCT 8	.23	.40	.44	.54	.54	.54	.54	.54	.54	.54	.54	.54
OCT 16	.27	.47	.50	.64	.75	.97	1.10	1.34	1.52	1.57	1.61	1.62
DEC 2	.25	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
DEC 9	.32	.56	.68	.87	1.04	1.23	1.37	1.43	1.64	1.76	1.89	1.97
SHREVEPORT												
MAY 6	.37	.48	.53	.65	.65	.65	.65	.65	.65	.65	.65	.65
MAY 29	.40	.62	.67	.90	1.17	1.30	1.33	1.37	1.40	1.44	1.54	1.60
MAY 31	.40	.68	.80	1.00	1.30	1.60	2.25	2.65	2.90	3.05	3.10	3.22
JUL 2	.17	.33	.47	.61	.78	.97	1.02	1.04	1.05	1.08	1.10	1.10
JUL 4	.25	.42	.62	.75	.78	.80	.82	1.18	1.20	1.29	1.64	1.65
JUL 6	.50	.75	1.14	1.40	1.62	1.75	1.77	1.80	1.88	1.91	1.93	1.96
AUG 17	.35	.65	.70	.73	.77	.79	.79	.79	.79	.79	.79	.79
AUG 21	.28	.55	.67	.69	.69	.70	.70	.70	.70	.70	.70	.70
AUG 21	.17	.31	.38	.41	.47	.71	.76	.80	.81	.81	.81	.81
AUG 22	.31	.56	.77	.89	1.10	1.47	1.74	1.83	1.84	1.86	1.89	1.90
MAINE												
CARIBOU												
JUL 13	.26	.52	.60	.66	.86	.89	1.05	1.29	1.34	1.34	1.34	1.34
JUL 24	.29	.36	.49	.61	.63	.63	.63	.63	.63	.63	.63	.63
AUG 29	.22	.30	.40	.44	.45	.64	.70	.73	.74	.77	.86	.98
PORTLAND												
JUL 21	.22	.30	.44	.50	.53	.72	.76	.80	.81	.85	.96	1.08
JUL 30	.21	.42	.62	.73	.84	.91	.94	.94	.94	.94	.94	.94
AUG 1	.25	.38	.40	.41	.41	.43	.43	.43	.46	.50	.53	.53
MARYLAND												
BALTIMORE												
JUN 22	.40	.60	.75	.83	.88	.93	.97	.98	1.01	1.03	1.08	1.15
JUL 2	.30	.44	.48	.69	.93	1.10	1.20	1.56	1.68	1.72	1.93	2.02
AUG 4	.35	.67	.71	.82	1.20	1.34	1.60	1.66	1.67	1.70	1.72	1.72
AUG 4	.29	.44	.46	.47	.56	.62	.64	.64	.69	.69	.69	.69
AUG 19	.20	.31	.39	.47	.52	.55	.58	.58	.58	.58	.58	.58
AUG 25	.30	.44	.53	.65	.73	.95	1.27	1.30	1.35	1.40	1.41	1.45
AUG 27	.35	.65	.68	.70	.80	.80	.81	.82	.82	.82	.85	.87
OCT 25	.25	.36	.38	.40	.55	.58	.59	.63	.66	.70	.74	.76
BALTIMORE U												
JUL 2	.29	.44	.55	.66	1.05	1.22	1.54	1.90	2.08	2.17	2.34	2.40
AUG 3	.27	.45	.48	.48	.51	.51	.51	.53	.56	.56	.56	.58
AUG 4	.30	.55	.63	.84	1.13	1.29	1.47	1.79	1.91	1.93	2.00	2.01
AUG 25	.34	.45	.53	.55	.74	.82	1.08	1.15	1.20	1.23	1.25	1.28
AUG 26	.32	.50	.55	.67	.74	1.01	1.03	1.03	1.04	1.04	1.04	1.07
AUG 27	.40	.55	.57	.65	.85	.89	.89	.90	.90	.90	.90	.90
MASSACHUSETTS												
BLUE HILL						NONE						
BOSTON												
JUN 25	.25	.28	.30	.35	.37	.38	.38	.38	.38	.38	.38	.38
AUG 1	.40	.42	.43	.43	.46	.50	.54	.55	.55	.55	.55	.55
AUG 6	.24	.44	.59	.67	.98	1.42	1.78	1.98	2.19	2.34	2.44	2.50
NANTUCKET												
JAN 27	.26	.42	.47	.48	.54	.70	.73	.76	.76	.77	.78	.78
MAY 25	.20	.31	.37	.45	.58	.75	.95	1.23	1.46	1.63	1.82	2.10
JUN 21	.16	.24	.29	.39	.50	.70	.93	1.19	1.46	1.61	1.72	1.86
JUL 5	.16	.28	.35	.38	.44	.56	.72	.82	.85	.86	.86	.86
JUL 16	.23	.30	.34	.35	.36	.36	.47	.56	.65	.71	.81	.81
JUL 28	.38	.64	.96	1.13	1.24	1.35	1.42	1.49	1.73	1.81	1.82	1.82
AUG 22	.19	.30	.33	.35	.38	.43	.44	.44	.44	.50	.52	.53
MASSACHUSETTS												
PITTSFIELD												
JUN 12	.17	.32	.33	.34	.37	.37	.37	.37	.37	.37	.37	.37
JUN 17	.16	.30	.31	.32	.33	.34	.37	.38	.38	.43	.54	.57
JUN 22	.17	.32	.38	.40	.43	.63	.74	1.01	1.05	1.08	1.11	1.14
JUN 25	.26	.49	.52	.53	.55	.56	.58	.58	.58	.58	.58	.58
JUL 12	.20	.38	.45	.60	.82	1.07	1.18	1.31	1.32	1.32	1.32	1.32
MICHIGAN												
ALPENA												
JUN 5	.17	.29	.33	.44	.53	.53	.54	.56	.56	.56	.56	.63
JUN 13	.60	*1.10	*1.45	1.60	*1.64	1.65	1.65	1.65	1.66	1.67	1.67	1.67
JUN 14	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
JUN 15	.17	.30	.38	.47	.52	.52	.53	.73	.74	.75	.82	.82
JUL 9	.42	.72	.91	.92	1.04	1.17	1.17	1.17	1.17	1.17	1.17	1.17
AUG 17	.28	.48	.57	.60	.62	.62	.66	.66	.66	.66	.66	.66
DETROIT												
JUN 7	.15	.30	.36	.51	.66	.77	.92	.98	1.18	1.32	1.34	1.39
JUN 9	.15	.30	.31	.31	.33	.33	.33	.33	.33	.33	.33	.33
DETROIT M WAYNE CO												
JUN 16	.35	.57	.66	.69	.86	1.05	1.06	1.12	1.19	1.20	1.20	1.28
JUN 21	.25	.48	.56	.57	.65	.68	.68	.68	.68	.69	.69	.70
JUL 9	.20	.36	.44	.57	.76	.83	.87	.92	1.05	1.07	1.07	1.07
JUL 19	.17	.32	.39	.50	.76	.89	.96	.97	.98	.98	.98	.98
AUG 3	.20	.34	.37	.40	.41	.41	.41	.41	.41	.41	.41	.41
OCT 8	.26	.39	.43	.46	.52	.57	.63	.80	.89	.94	.99	.99
DETROIT WILLOW RUN												
JUN 7	.23	.32	.36	.37	.38	.43	.48	.55	.58	.58	.68	.68
AUG 3	.35	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
SEP 21	.19	.30	.32	.37	.56	.60	.61	.71	.82	.87	.98	1.01
FLINT												
APR 14	.26	.33	.33	.34	.42	.43	.44	.45	.45	.45	.45	.45
APR 17	.21	.30	.33	.38	.44	.48	.70	.85	.91	1.00	1.08	1.38
JUN 10	.28	.44	.54	.55	.58	.58	.58	.58	.58	.58	.58	.58
JUN 24	.28	.31	.38	.40	.50	.58	.61	.80	.96	1.08	1.20	1.21
AUG 26	.22	.33	.38	.50	.57	.63	.70	.73	.85	.96	1.06	1.10
GRAND RAPIDS												
APR 21	.40	.45	.50	.53	.62	.82	.91	1.01	1.13	1.15	1.23	1.24
JUN 8	.35	.48	.52	.54	.56	.57	.60	.62	.65	.68	.71	.71
JUN 11	.47	.60	.75	.85	.86	.86	.86	.86	.86	.86	.86	.86
JUN 13	.30	.51	.63	.71	.75	.77	.77	.77	.77	.77	.77	.77
JUN 24	.35	.38	.41	.43	.48	.57	.63	.65	.66	.66	.66	.66
JUN 30	.27	.43	.44	.44	.46	.48	.48	.48	.48	.48	.48	.48
JUL 26	.27	.50	.67	.76	.83	.89	.91	.91	.91	.91	.91	.91
JUL 30	.28	.36	.47	.51	.58	.60	.61	.62	.63	.66	.68	.68
AUG 18	.35	.61	.71	.72	.73	.74	.74	.74	.74	1.07	1.12	1.12
AUG 26	.30	.40	.46	.46	.47	.47	.47	.47	.47	.47	.55	.56
HOUGHTON LAKE												
JUN 5	.21	.35	.40	.44	.45	.46	.46	.46	.46	.46	.46	.46
JUL 7	.25	.37	.43	.46	.50	.53	.60	.66	.69	.70	.72	.72
LANSING												
JUN 13	.28	.52	.57	.68	.83	.84	.85	.93	.97	.97	.97	.97
JUN 16	.39	.45	.46	.50	.56	.56	.56	.56	.56	.56	.56	.56
JUL 24	.22	.36	.37	.39	.46	.60	.70	.80	1.13	1.32	1.41	1.46
AUG 26	.66	.68	.69	.75	1.00	1.13	1.20	1.82	1.92	1.97	2.03	2.03
MARQUETTE U												
JUN 15	.26	.30	.31	.32	.35	.47	.49	.50	.50	.50	.50	.50
MUSKEGON												
APR 5	.21	.30	.36	.41	.59	.64	.69	.74	.93	1.02	1.04	1.10
APR 16	.22	.30	.43	.55	.80	.97	1.01	1.02	1.18	1.19	1.25	1.32
APR 21	.25	.36	.42	.44	.58	.79	.94	1.18	1.36	1.41	1.46	1.48
JUN 7	.25	.36	.45	.57	.64	.78	.86	.93	1.01	1.07	1.11	1.11
JUL 7	.22	.33	.47	.50	.53	.58	.62	.64	.64	.64	.64	.64
AUG 7	.24	.35	.42	.44	.44	.44	.44	.44	.44	.44	.44	.44
AUG 30	.27	.35	.38	.38	.40	.40	.41	.62	.66	.67	.67	.68
SEP 20	.19	.30	.41	.43	.50	.50	.50	.50	.50	.50	.50	.50
SAULT STE MARIE												
AUG 17	.35	.38	.38	.39	.39	.40	.40	.41	.42	.43	.44	.46
SEP 20	.24	.43	.48	.54	.59	.62	.66	.69	.74	.78	.83	.83
MINNESOTA												
DULUTH												
JUN 14 T	M	M	M	M	M	M	M	M	M	M	M	1.82
JUL 22	.23	.46	.51	.64	.91	1.14	1.24	1.26	1.26	1.32	1.36	1.38
INTERNATIONAL FALLS												
JUL 21	.18	.30	.30	.33	.35	.48	.55	.55	.60	.60	.60	.60
JUL 22	.40	.69	.70	.74	.76	.78	.79	.79	.79	.79	.79	.79
AUG 1	.29	.53	.55	.60	.63	.64	.68	.70	.86	.88	.95	.95
MINNEAPOLIS												
JAN 24 T	M	M	M	M	M	M	M	M	M	M	M	M
APR 30	.37	.41	.41	.42	.42	.42	.45	.50	.50	.50	.50	.50
APR 30	.25	.29	.45	.50	.55	.61	.66	.71	.71	.71	.71	.71
JUN 15	.20	.35	.42	.44	.48	.49	.50	.51	.51	.51	.51	.51
JUN 30	.53	.85	1.07	1.14	1.25	1.25	1.34	1.36	1.37	1.37	1.37	1.37
JUL 22	.25	.40	.58	.68	.80	.80	.80	.80	.80	.80	.80	.80
AUG 6	.52	.63	.66	.68	.76	.81	.82	.83	.83	.83	.83	.83

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1967

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
MINNESOTA												
ROCHESTER												
JAN 24	.21	.35	.43	.48	.54	.55	.56	.56	.56	.57	.59	.61
APR 1	.19	.29	.32	.42	.55	.62	.67	.73	.80	1.12	1.13	1.18
APR 30	.30	.42	.52	.60	.65	.73	.76	.76	.76	.76	.76	.76
JUN 8	.30	.48	.64	.72	.81	1.10	1.19	1.19	1.19	1.19	1.19	1.19
JUN 11	.36	.65	.72	.80	.84	.86	.86	.86	.86	.87	.92	.92
JUN 15	.41	.46	.48	.48	.48	.48	.48	.48	.48	.49	.51	.54
JUN 15	.42	.55	.78	.85	.92	1.09	1.10	1.25	1.41	1.78	1.79	1.82
JUL 20	.17	.31	.32	.41	.42	.42	.42	.42	.42	.42	.42	.42
AUG 6	.34	.36	.48	.56	.77	.88	.99	1.01	1.16	1.22	1.42	1.64
ST CLOUD												
JUN 14	.35	.64	.68	.85	.97	1.07	1.19	1.19	1.19	1.19	1.55	1.60
JUN 30	.34	.51	.55	.60	.65	.67	.69	.71	.71	.71	.71	.71
AUG 1	.26	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28
AUG 25	.48	.60	.62	.65	.65	.68	.85	.98	1.00	1.03	1.06	1.07
AUG 25	.17	.30	.36	.46	.71	.95	1.26	1.39	1.46	1.49	1.50	1.52
MISSISSIPPI												
JACKSON												
MAR 26	.22	.33	.42	.47	.52	.56	.59	.69	.71	.73	.74	.76
APR 14	.20	.35	.50	.67	.83	.85	.89	.94	.98	1.02	1.07	1.13
MAY 1	.42	.75	1.05	1.34	1.75	1.85	1.92	1.97	2.02	2.08	2.11	2.16
MAY 7	.25	.44	.47	.58	.66	.66	.66	.66	.66	.66	.66	.66
MAY 21	.15	.22	.28	.37	.52	.67	.84	1.00	1.08	1.19	1.32	1.50
JUN 1	.20	.35	.40	.50	.61	.70	.90	1.00	1.09	1.12	1.22	1.36
JUN 27	.38	.75	.90	1.02	1.30	1.32	1.80	1.83	1.84	1.84	1.84	1.84
JUL 5	.25	.50	.51	.52	.55	.60	.64	.66	.67	.68	.70	.70
JUL 6	.24	.40	.45	.47	.54	.60	.63	.64	.64	.69	.72	.73
JUL 19	.25	.30	.32	.33	.35	.45	.55	.61	.64	.70	.72	.75
JUL 21	.13	.25	.33	.40	.47	.47	.47	.48	.48	.76	.77	.77
AUG 18	.20	.35	.37	.37	.37	.39	.40	.60	.70	.70	.70	.75
AUG 25	.22	.30	.35	.40	.47	.62	.65	.70	.70	.70	.72	1.00
OCT 30	.13	.25	.30	.40	.53	.65	.73	.76	.79	.80	.81	.83
DEC 2	.26	.39	.49	.60	.87	.95	.99	.99	.99	.99	.99	.99
DEC 14	.13	.25	.35	.40	.47	.51	.59	.60	.60	.60	.60	.60
DEC 21	.30	.42	.45	.46	.53	.60	.74	.98	1.04	1.09	1.13	1.13
MERIDIAN												
MAR 6	.25	.32	.34	.37	.43	.44	.44	.44	.49	.63	.64	.64
MAR 26	.12	.23	.32	.37	.54	.63	.72	.76	.82	.87	.89	.94
APR 21	.28	.53	.75	.95	1.10	1.25	1.30	1.30	1.32	1.40	1.40	1.40
JUN 1	.28	.34	.40	.43	.52	.58	.70	.73	.75	.77	.80	.85
JUN 26	.22	.35	.39	.47	.60	.70	.75	.80	.82	.82	.83	1.05
JUL 13	.25	.31	.35	.45	.47	.50	.72	.88	.90	1.09	1.11	1.16
JUL 19	.20	.30	.35	.36	.40	.44	.47	.50	.53	.55	.55	.56
AUG 4	.30	.36	.40	.43	.44	.44	.44	.44	.44	.44	.44	.44
AUG 9	.47	.92	1.12	1.32	1.97	2.27	2.65	2.77	2.84	2.97	3.07	3.18
AUG 24	.27	.50	.56	.70	1.00	1.20	1.25	1.26	1.27	1.29	1.38	1.43
SEP 7	.35	.45	.60	.65	.75	.76	.78	.78	.78	.78	.78	.78
SEP 27	.41	.82	.92	.94	.95	.95	.95	1.00	1.00	1.00	1.00	1.00
OCT 24	.23	.37	.43	.45	.47	.48	.48	.50	.54	.54	.54	.54
DEC 2	.28	.49	.51	.53	.55	.60	.69	.71	.77	.79	.79	.81
DEC 10	.17	.33	.36	.44	.62	.77	.87	.95	1.08	1.12	1.22	1.28
DEC 10	.40	.57	.62	.65	.78	.83	1.05	1.07	1.20	1.21	1.24	1.26
DEC 14	.28	.42	.48	.66	.82	.90	.94	.96	1.00	1.08	1.35	1.75
MISSOURI												
COLUMBIA												
JAN 24	.25	.35	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
MAY 7	.18	.36	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
MAY 30	.22	.40	.49	.60	.74	1.02	1.40	1.50	1.51	1.51	1.51	1.51
JUN 10	.32	.49	.60	.65	.70	.91	.93	.97	.97	.99	1.00	1.00
JUN 27	.42	.60	.74	.93	1.06	1.14	1.15	1.16	1.19	1.21	1.24	1.24
JUL 27	.42	.48	.52	.55	.57	.59	.60	.64	.65	.65	.67	.68
AUG 3	.20	.35	.52	.58	.59	.68	.69	.69	.69	.69	.69	.69
OCT 5	.16	.29	.34	.44	.51	.56	.81	.90	1.02	1.08	1.12	1.19
KANSAS CITY												
APR 16	.20	.28	.38	.52	.70	.76	.76	.76	.76	.76	.76	.76
JUN 11	.14	.25	.33	.42	.56	.67	.75	.80	.90	1.01	1.09	1.19
JUN 12	.16	.24	.37	.42	.51	.70	.93	.98	1.03	1.28	1.32	1.37
JUN 19	.14	.26	.37	.44	.52	.53	.53	.53	.55	.55	.55	.55
SEP 14	.25	.41	.52	.58	.65	.77	.83	1.01	1.27	1.35	1.43	1.47
SEP 18	.25	.37	.41	.45	.46	.49	.50	.50	.50	.50	.50	.50
SEP 20	.22	.32	.35	.36	.36	.36	.36	.36	.36	.36	.36	.40
SEP 20	.16	.24	.28	.36	.52	.66	.67	.93	.98	1.00	1.00	1.04
OCT 5	.27	.41	.47	.57	.68	.73	.88	.93	1.18	1.18	1.51	1.89
OCT 15	.25	.42	.48	.53	.63	.66	.68	.72	.77	.81	.90	.94
OCT 24	.12	.24	.35	.38	.54	.69	.72	.73	.75	.75	.76	.76
ST LOUIS												
JAN 24	.14	.26	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
JUN 12	.26	.44	.62	.76	.85	.87	.88	.90	1.00	1.04	1.32	1.32
JUN 21	.17	.30	.34	.42	.46	.68	.77	.81	.85	.87	.94	.97
JUN 27	.24	.33	.40	.45	.49	.50	.52	.62	.63	.63	.63	.63
JUL 9	.29	.35	.38	.39	.40	.46	.54	.58	.70	.76	.83	.88
JUL 24	.24	.40	.42	.43	.44	.46	.48	.54	.62	.68	.75	.80
SEP 16	.13	.25	.37	.49	.67	.78	.95	1.09	1.14	1.15	1.16	1.18
SEP 20	.21	.33	.41	.45	.46	.46	.46	.46	.46	.46	.46	.46
SPRINGFIELD												
APR 13	.18	.27	.41	.42	.43	.47	.47	.56	.62	.64	.67	.68
APR 29	.24	.31	.38	.50	.58	.66	.68	.71	.73	.80	.90	.94
MAY 13	.40	.58	.66	.80	.82	.86	.87	.87	.87	.87	.90	.91
JUN 11	.21	.41	.60	.69	.76	.83	.86	.89	.93	.98	1.09	1.21
JUN 24	.18	.35	.39	.49	.68	.81	.88	.90	.95	1.15	1.16	1.17
JUN 28	.22	.34	.36	.39	.42	.43	.44	.46	.48	.54	.61	.67
JUN 29	.20	.35	.50	.66	.73	.75	.79	.84	.86	.88	.89	.92
AUG 29	.14	.25	.36	.42	.51	.55	.58	.59	.59	.59	.59	.59
OCT 6	.22	.34	.36	.38	.39	.44	.48	.53	.58	.58	.65	.67

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
MONTANA												
BILLINGS												
JUN 6	.14	.26	.34	.41	.66	.79	.80	.82	.82	.82	.82	.82
GLASGOW						NONE						
GREAT FALLS						NONE						
HAVRE						NONE						
HELENA						NONE						
KALISPELL												
JUN 18	.38	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47
MISSOULA						NONE						
NEBRASKA												
GRAND ISLAND												
JUN 9	.30	.50	.68	.77	.98	1.33	1.41	1.62	1.81	1.88	1.96	2.00
JUN 11	.27	.45	.52	.76	.83	.94	1.00	1.05	1.07	1.08	1.14	1.22
JUN 13	.40	.52	.70	.82	1.33	1.59	1.85	1.95	1.99	2.01	2.11	2.44
JUN 14	.22	.37	.45	.57	.70	.78	.78	.78	.80	1.05	1.26	1.26
JUN 22	.30	.49	.65	.75	.85	.88	.89	.89	.89	.89	.89	.89
JUN 24	.17	.31	.36	.40	.47	.60	.68	.72	.73	.76	.80	.80
JUN 28	.36	.47	.52	.74	.93	1.02	1.03	1.03	1.03	1.03	1.03	1.03
OCT 6	.19	.34	.38	.47	.50	.50	.50	.50	.50	.50	.50	.50
LINCOLN U												
JUN 5	.20	.32	.46	.54	.66	.82	1.00	1.21	1.41	1.49	1.62	1.83
JUN 7	.63	1.04	1.19	1.22	1.28	1.30	1.66	1.71	2.07	2.09	2.74	2.95
JUN 11	.30	.43	.45	.46	.54	.54	.55	.55	.55	.55	.56	.56
JUN 20	.38	.54	.75	.90	1.16	1.24	1.25	1.26	1.40	1.44	1.44	1.48
JUL 11	.20	.29	.42	.51	.54	.55	.57	.57	.57	.57	.73	.74
JUL 26	.44	.77	.92	1.06	1.27	1.66	1.90	2.44	2.66	2.68	2.69	2.69
NORFOLK												
JUN 4	.32	.44	.50	.62	.71	.74	.90	1.34	1.38	1.39	1.41	1.44
JUN 7	.27	.44	.48	.60	.70	.78	.99	1.30	1.39	1.42	1.47	1.50
JUN 13	.39	.43	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44
JUN 13	.60*	.95	1.03	1.23	1.78	1.81	1.95	2.05	2.08	2.08	2.08	2.08
JUN 14	.25	.43	.45	.45	.46	.47	.48	.49	.50	.53	.54	.59
JUN 15	.38	.41	.46	.48	.48	.48	.48	.48	.48	.48	.48	.48
SEP 12	.25	.32	.35	.36	.37	.37	.37	.37	.37	.37	.37	.37
NORTH PLATTE												
JUN 4	.32	.34	.36	.38	.48	.50	.56	.62	.67	.83	.93	1.00
JUN 6	.32	.50	.62	.90	1.02	1.04	1.12	1.14	1.22	1.25	1.35	1.36
JUN 11	.27	.48	.64	.65	.82	.86	.86	.86	.86	.86	.86	.86
JUN 20	.20	.33	.42	.45	.46	.47	.47	.47	.47	.47	.47	.47
JUL 7	.43	.63	.70	.96	1.37	1.68	1.86	1.93	1.96	1.99	2.01	2.04
OMAHA												
JAN 24	.51	.82	.96	.99	1.06	1.10	1.18	1.27	1.31	1.33	1.35	1.38
JUN 4 T	M	M	M	M	M	M	M	M	M	M	M	M
JUN 7	.26	.39	.42	.47	.64	.75	.80	.82	.85	.86	.88	.90
JUN 9	.24	.39	.48	.53	.57	.59	.62	.64	.64	.66	.70	.74
JUN 11	.24	.39	.44	.48	.55	.58	.63	.66	.68	.69	.69	.77
JUN 14	.23	.32	.41	.48	.61	.63	.65	.66	.68	.74	.74	.74
JUN 15	.25	.42	.50	.65	.87	.96	1.29	1.35	1.37	1.42	1.43	1.44
JUL 9	.34	.66	.77	.92	.94	.96	1.01	1.01	1.01	1.01	1.01	1.01
JUL 26	.24	.35	.39	.42	.51	.53	.53	.53	.53	.53	.53	.53
JUL 26 T	M	M	M	M	M	M	M	M	M	.86	.86	.86
JUL 26	.15	.30	.35	.40	.42	.42	.42	.42	.42	.42	.42	.42
JUL 26	.33	.54	.59	.80	.90	.91	.91	.91	.91	.91	.91	.91
SEP 20	.20	.31	.36	.41	.44	.46	.49	.50	.50	.50	.50	.50
SCOTTSBLUFF												
JUN 20	.26	.52	.66	.67	.67	.68	.68	.68	.68	.68	.68	.68
JUL 4	.36	.42	.44	.46	.47	.48	.63	.66	.67	.67	.67	.67
JUL 14	.17	.26	.36	.42	.54	.62	.69	.72	.78	.80	.80	.80
VALENTINE												
JUN 9	.35	.62	.67	.70	.73	.75	.78	.79	.79	.79	.79	.79
JUN 14	.30	.60	.78	1.02	1.23	1.30	1.35	1.42	1.45	1.45	1.45	1.45
JUL 15	.35	.60	.75	.95	1.06	1.06	1.09	1.09	1.09	1.09	1.09	1.09
AUG 4	.30	.34	.35	.49	.51	.51	.51	.51	.51	.51	.51	.51
AUG 5	.37	.42	.46	.51	.52	.52	.52	.52	.52	.52	.52	.52
NEVADA												
ELKO						NONE						
ELY						NONE						
LAS VEGAS						NONE						
RENO						NONE						
WINNEMUCCA						NONE						
NEW HAMPSHIRE												
CONCORD												
JUN 12	.30	.37	.40	.40	.41	.41	.56	.56	.56	.56	.56	.87
JUL 5	.16	.29	.39	.49	.65	.79	.89	.98	1.02	1.06	1.07	1.11

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
NEW JERSEY												
ATLANTIC CITY												
JUL 11	.26	.36	.37	.37	.38	.39	.39	.39	.60	.60	.60	.60
JUL 21	.30	.50	.53	.53	.54	.54	.54	.54	.54	.54	.54	.54
JUL 28	.20	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
AUG 3	.32	.63	.88	1.16	1.56	1.88	2.12	2.30	2.51	2.53	3.05	3.96
AUG 31	.22	.43	.45	.46	.48	.48	.48	.48	.49	.50	.51	.52
OCT 18	.20	.32	.43	.50	.62	.79	.95	1.02	1.26	1.44	1.51	1.57
NEWARK												
JUN 18	.20	.32	.38	.42	.53	.56	.66	.80	.83	.96	.98	1.06
JUN 25	.27	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
JUL 3	.27	.52	.69	.87	1.01	1.13	1.20	1.32	1.34	1.53	1.57	1.65
JUL 10	.25	.45	.70	.87	1.08	1.21	1.34	1.34	1.34	1.36	1.41	1.45
JUL 25	.20	.32	.39	.48	.50	.56	.56	.56	.56	.56	.56	.56
AUG 5	.30	.47	.62	.72	.88	.93	.94	.94	.94	.94	.95	.95
TRENTON J												
JUL 3	.19	.30	.37	.42	.53	.65	.83	.98	1.01	1.08	1.12	1.14
JUL 10	.27	.34	.38	.40	.70	.92	.94	.96	.96	.99	1.07	1.09
JUL 11	.25	.43	.65	.78	.82	.85	.85	.85	.85	.85	.85	.86
JUL 14	.16	.26	.34	.41	.43	.44	.44	.45	.51	.54	.54	.54
JUL 21	.36	.56	.67	.82	1.00	1.47	1.72	1.74	1.76	1.76	1.90	2.11
AUG 3	.49	.82	.93	1.10	1.41	1.45	1.45	1.45	1.45	1.45	1.45	1.45
AUG 27	.31	.35	.35	.39	.48	.56	.59	.61	.62	.67	.70	.71
NEW MEXICO												
ALBUQUERQUE												
JUN 22	.24	.34	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
CLAYTON						NONE						
RATON												
JUN 22	.27	.36	.44	.49	.53	.53	.56	.56	.56	.56	.56	.56
JUL 9	.43	.79	.93	1.14	1.40	1.50	1.53	1.55	1.56	1.56	1.56	1.56
JUL 10	.18	.31	.37	.48	.59	.71	.75	.75	.75	.75	.75	.75
AUG 2	.25	.40	.50	.55	.63	.78	.87	.90	.90	.90	.90	.90
SEP 10	.32	.49	.49	.49	.50	.50	.51	.51	.51	.51	.51	.51
ROSWELL												
JUN 1	.20	.31	.33	.42	.66	.67	.67	.67	.67	.67	.67	.67
JUN 3	.21	.36	.46	.47	.48	.50	.50	.50	.50	.50	.50	.50
JUN 4	.26	.34	.40	.41	.41	.41	.41	.41	.41	.41	.41	.41
SILVER CITY						NONE						
NEW YORK												
ALBANY												
JUN 17	.26	.38	.54	.58	.59	.61	.62	.69	.70	.70	.70	.70
JUL 1	.26	.38	.40	.41	.43	.44	.44	.44	.44	.44	.44	.44
JUL 31	.20	.32	.41	.43	.44	.44	.44	.44	.44	.44	.44	.44
AUG 4	.26	.36	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44
OCT 25	.12	.22	.30	.39	.54	.70	.82	.92	1.04	1.14	1.28	1.37
BINGHAMTON												
MAY 2	.26	.39	.48	.55	.59	.63	.67	.74	.77	.85	.86	.89
JUN 15	.20	.38	.44	.45	.46	.46	.47	.47	.47	.47	.47	.47
JUL 11	.26	.42	.43	.43	.43	.54	.55	.55	.55	.55	.55	.55
JUL 24	.22	.34	.38	.50	.59	.67	.68	.69	.70	.70	.70	.71
AUG 3	.21	.26	.33	.40	.44	.47	.48	.48	.49	.49	.49	.50
AUG 3	.28	.50	.64	.76	.80	.80	.80	.80	.80	.80	.80	.80
AUG 18	.24	.40	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
SEP 9	.14	.27	.36	.45	.69	.81	.87	.93	1.00	1.02	1.06	1.29
BUFFALO												
AUG 19	.26	.30	.40	.44	.45	.45	.45	.45	.45	.45	.45	.45
SEP 9	.23	.32	.34	.38	.42	.42	.43	.45	.45	.45	.45	.45
SEP 26	.15	.26	.40	.48	.70	.92	1.08	1.26	1.39	1.50	1.63	1.73
NEW YORK CENT PK												
JUN 18	.25	.45	.50	.70	.88	.96	1.31	1.73	1.87	1.92	1.98	2.05
JUL 3	.42	.82	1.01	1.15	1.42	1.80	1.82	1.93	1.96	2.01	2.08	2.08
JUL 4	.45	.73	.76	.80	.90	.90	.90	.90	.90	.91	.91	.91
JUL 10	.20	.30	.36	.41	.54	.60	.64	.67	.67	.67	.69	.70
JUL 23	.25	.47	.48	.61	.61	.61	.61	.61	.61	.61	.61	.61
JUL 25	.27	.40	.45	.48	.50	.50	.50	.50	.50	.50	.50	.50
AUG 27	.26	.45	.62	.67	.92	1.18	1.23	1.25	1.48	1.62	1.74	1.80
OCT 25	.22	.35	.45	.63	.85	.96	1.05	1.15	1.25	1.30	1.40	1.41
NEW YORK LA GUARDIA												
JUN 23	.26	.40	.41	.43	.46	.50	.53	.54	.54	.54	.63	.71
JUL 3	.26	.43	.58	.71	1.14	1.40	1.49	1.63	1.67	1.71	1.73	1.73
JUL 23	.20	.34	.35	.38	.40	.40	.40	.40	.40	.40	.40	.40
AUG 5	.35	.62	.77	1.01	1.37	1.45	1.60	1.83	1.86	1.87	1.95	1.99
AUG 27	.25	.36	.45	.53	.61	.72	.90	.90	.96	1.37	1.64	1.65
ROCHESTER												
JUL 11	.20	.30	.40	.46	.61	.66	.71	.75	.79	.84	.92	.98
AUG 8	.41	.68	.80	.86	.90	.92	.92	.92	.92	.92	.92	.92
AUG 9	.37	.46	.47	.47	.47	.47	.47	.47	.47	.47	.56	.67
AUG 9	.28	.31	.33	.33	.34	.35	.36	.36	.36	.36	.36	.36
SYRACUSE												
JUN 9	.30	.31	.32	.36	.36	.38	.38	.38	.38	.38	.38	.36
JUN 17	.20	.39	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
JUL 1	.32	.62	.74	.79	.87	.87	.87	.87	.87	.87	.87	.87
JUL 2	.16	.22	.27	.32	.52	.58	.60	.62	.64	.66	.66	.66
JUL 11	.13	.26	.35	.41	.51	.53	.53	.54	.60	.62	.64	.69
JUL 13	.15	.27	.36	.43	.46	.48	.48	.48	.48	.48	.48	.48
JUL 23	.27	.50	.70	.75	.78	.80	.80	.80	.80	.80	.80	.80
NEW YORK												
SYRACUSE												
JUL 25	.40	.43	.44	.45	.46	.46	.46	.46	.46	.46	.46	.46
AUG 3	.27	.31	.35	.39	.47	.49	.51	.52	.52	.52	.56	.56
AUG 9	.21	.35	.50	.67	.84	1.00	1.12	1.21	1.28	1.31	1.31	1.31
AUG 19	.17	.32	.41	.46	.52	.62	.66	.68	.68	.68	.74	.75
SEP 21	.27	.36	.39	.41	.46	.48	.50	.50	.50	.50	.51	.56
NORTH CAROLINA												
ASHEVILLE												
MAY 30	* .58	.85	.92	1.13	1.22	1.23	1.32	1.42	1.43	1.45	1.46	1.63
JUN 13	.20	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
JUL 1	.25	.33	.35	.38	.42	.43	.43	.43	.43	.43	.43	.43
JUL 7	.19	.35	.40	.50	.80	1.02	1.18	1.37	1.45	1.53	1.62	1.64
JUL 8	.16	.31	.33	.33	.38	.44	.44	.44	.44	.44	.44	.44
JUL 17	.18	.30	.33	.43	.57	.72	.72	.73	.73	.73	.73	.73
JUL 27	.28	.45	.50	.65	.77	.80	.80	.80	.80	.80	.80	.80
AUG 3	.23	.37	.43	.52	.53	.55	.55	.55	.55	.55	.55	.55
AUG 21	.25	.48	.52	.63	.80	.86	1.12	1.37	1.50	1.56	1.60	1.72
AUG 22	.18	.31	.42	.48	.54	.58	.61	.67	.72	.76	.86	.90
AUG 26	.32	.47	.60	.66	.73	.75	.80	.83	.92	.98	1.00	1.03
CAPE HATTERAS R												
JUL 7	.25	.41	.55	.70	.80	1.00	1.25	1.55	1.78	1.96	2.11	2.41
JUL 7	.26	.35	.58	.68	.98	1.11	1.17	1.21	1.26	1.31	1.39	1.51
AUG 6	.27	.40	.47	.60	.92	1.03	1.33	1.43	1.43	1.43	1.43	1.43
AUG 11	.16	.28	.37	.45	.52	.61	.67	.75	.81	.85	.89	.91
AUG 23	.25	.45	.65	.75	1.18	1.25	1.29	1.32	1.35	1.38	1.44	1.54
SEP 10	.25	.47	.65	.69	.85	.90	1.00	1.04	1.05	1.06	1.06	1.08
SEP 29	.37	.50	.52	.53	.54	.87	.90	.91	.92	.94	1.09	1.13
OCT 18	.20	.35	.42	.52	.55	.56	.59	.60	.64	.65	.74	.82
NOV 24	.30	.56	.60	.62	.66	.70	.72	.73	.78	.81	.81	.82
DEC 3	.43	.59	.61	.63	.68	.78	.87	.93	1.04	1.12	1.18	1.18
CHARLOTTE												
JAN 27	.35	.48	.56	.60	.62	.62	.79	.80	.80	.80	.81	.81
MAR 12	.23	.35	.39	.42	.52	.57	.57	.57	.57	.58	.60	.62
MAY 20	.36	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
JUN 13	.38	.52	.58	.61	.63	.63	.63	.63	.63	.63	.63	.63
JUN 25	.16	.24	.29	.41	.58	.66	.70	.73	.74	.75	.75	.75
JUL 7	.20	.38	.47	.58	.66	.76	.96	1.10	1.38	1.46	1.48	1.61
JUL 20	.19	.35	.39	.44	.44	.44	.45	.46	.46	.46	.46	.46
AUG 1	.16	.30	.40	.48	.53	.54	.54	.63	.64	.64	.64	.64
AUG 9	.16	.31	.38	.53	.59	.60	.60	.60	.60	.60	.60	.60
AUG 10	.31	.52	.62	.70	.74	.74	.77	.79	.79	.80	.80	.80
GREENSBORO												
APR 22	.21	.33	.47	.53	.60	.64	.65	.65	.65	.65	.65	.65
MAY 14	.26	.35	.38	.42	.45	.46	.47	.48	.48	.48	.48	.48
MAY 29	.30	.36	.40	.42	.42	.42	.42	.42	.42	.42	.42	.42
JUN 25	.20	.36	.42	.44	.45	.47	.52	.53	.54	.54	.55	.55
JUN 30	.25	.32	.38	.39	.39	.40	.40	.41	.63	.68	.69	.69
JUL 20	.20	.36	.39	.42	.48	.49	.49	.49	.49	.49	.49	.49
JUL 30	.22	.38	.52	.70	.84	.85	.85	.87	.87	.87	.87	.87
AUG 4	.19	.35	.40	.50	.51	.52	.53	.56	.58	.63	.66	.67
AUG 7	.40	.78	.98	1.10	1.48	1.53	1.54	1.57	1.93	1.96	1.96	1.96
RALEIGH												
APR 17	.20	.35	.45	.55	.60	.65	.67	.70	.70	.70	.80	1.00
MAY 12	.35	.40	.45	.48	.50	.50	.50	.50	.50	.50	.50	.52
MAY 14	.30	.40	.52	.65	.76	.80	.81	.81	.81	.81	.81	.81
JUN 18	.45	.90	.95	1.25	1.55	1.88	1.99	2.23	2.34	2.34	2.40	2.50
JUL 2	.25	.40	.44	.44	.44	.44	.44	.47	.50	.60	.66	.85
JUL 25	.28	.41	.42	.44	.44	.45	.46	.47	.47	.47	.47	.47
AUG 27	.26	.40	.60	.75	.95	1.15	1.33	1.44	1.53	1.53	1.55	1.61
DEC 3	.15	.30	.36	.42	.62	.66	.69	.71	.74	.80	.81	.82
WILMINGTON												
JUN 13	.17	.33	.35	.38	.45	.47	.47	.47	.47	.47	.47	.47
JUN 30	.26	.45	.49	.56	.89	1.18	1.21	1.23	1.23	1.23	1.23	1.23
JUN 30	.39	.64	.73	.93	.95	.95	.95	.95	.95	.95	.95	1.00
JUL 15	.22	.36	.49	.58	.80	.87	1.08	1.12	1.21	1.22	1.23	1.25
AUG 11	.25	.48	.65	.90	1.25	1.44	1.57	1.67	1.70	1.80	1.88	2.04
AUG 30	.22	.34	.45	.50	.53	.54	.69	.70	.70	.70	.72	.73
DEC 3	.35	.50	.58	.70	.78	.79	.89	.90	.99	1.00	1.00	1.00
DEC 28	.16	.27	.34	.48	.51	.53	.76	.95	1.10	1.16	1.30	1.38
NORTH DAKOTA												
BISMARCK												
AUG 15	.14	.28	.36	.42	.43	.44	.45	.45	.45	.45	.45	.45
FARGO												
JUL 6	.15	.25	.29	.34	.52	.60	.72	.80	.84	.87	.90	.90
WILLISTON												
JUL 7	.34	.46	.56	.62	.69	.71	.74	.80	.84	.86	.86	.86
AUG 5	.18	.28	.36	.46	.52	.56	.57	.60	.64	.68	.69	.70
OHIO												
AKRON												
JUL 31	.32	.48	.52	.63	.64	.64	.64	.64	.64	.64	.64	.64
AUG 30	.26	.39	.52	.53	.61	.70	.91	1.04	1.08	1.08	1.10	1.11
SEP 27	.21	.36	.39	.40	.42	.42	.42	.42	.47	.65	.79	.85
CINCINNATI OBS												
JUL 30	.24	.31	.42	.45	.46	.47	.55	.57	.57	.57	.57	.57

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes) 5	10	15	20	30	45	60	80	100	120	150	180
OHIO												
CINCINNATI U												
JUL 17	.25	.39	.45	.55	.75	1.04	1.34	1.34	1.34	1.34	1.34	1.34
JUL 27	.25	.45	.52	.62	.83	.88	.92	.97	1.02	1.05	1.08	1.08
CLEVELAND						NONE						
COLUMBUS												
JUN 16	.29	.47	.54	.62	.68	.69	.70	.92	.96	.97	.97	.97
JUN 28	.37	.65	.79	.91	1.04	1.10	1.11	1.11	1.12	1.15	1.16	1.16
JUL 2	.36	.52	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
JUL 20	.42	.72	.83	.90	1.17	1.19	1.22	1.32	1.40	1.41	1.41	1.41
AUG 30	.25	.34	.39	.45	.55	.56	.61	.61	.61	.72	.72	.75
DAYTON												
MAY 26	.15	.25	.34	.40	.49	.50	.55	.74	.74	.74	.74	.74
MAY 28	.18	.27	.33	.40	.50	.55	.56	.58	.58	.58	.58	.58
JUN 28	.50	.83	1.00	1.25	1.57	1.68	1.74	1.76	1.77	1.77	1.89	2.03
JUL 30	.31	.53	.61	.67	.86	1.04	1.06	1.16	1.17	1.17	1.17	1.17
MANSFIELD												
JUN 18	.20	.25	.30	.45	.58	.63	.68	.71	.72	.74	.77	.77
JUL 24	.30	.56	.70	.88	1.11	1.30	1.38	1.43	1.43	1.43	1.43	1.43
SEP 20	.28	.53	.77	.83	.95	1.63	*1.88	1.91	1.92	*1.95	1.98	2.00
TOLEDO												
JUN 16	.25	.40	.50	.65	.90	.92	1.01	1.05	1.08	1.11	1.20	1.21
JUL 19	.19	.34	.37	.43	.55	.55	.55	.55	.55	.55	.55	.57
JUL 30	.25	.47	.57	.81	.97	.97	1.15	1.39	1.56	1.56	1.74	2.03
DEC 21	.22	.40	.42	.55	.61	.63	.65	.68	.68	.68	.68	.68
DEC 21	.25	.37	.41	.56	.60	.76	.79	.82	.83	.83	.84	.84
YOUNGSTOWN												
JUL 2	.34	.46	.49	.65	.76	.77	.78	.78	.78	.78	.78	.78
JUL 2	.47	*.88	*1.06	1.25	*1.45	1.58	*1.94	2.01	2.21	*2.98	3.04	*3.04
JUL 13	.20	.30	.45	.52	.55	.58	.58	.58	.58	.58	.58	.58
AUG 9	.33	.34	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35
AUG 20	.20	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
OCT 5	.35	.49	.52	.53	.55	.55	.55	.55	.55	.55	.55	.55
OKLAHOMA												
OKLAHOMA CITY												
JAN 25	.25	.33	.35	.40	.46	.58	.58	.59	.61	.61	.61	.61
APR 12	.41	.79	.87	1.18	1.61	1.86	2.19	2.41	2.50	2.60	2.80	2.87
APR 19	.21	.29	.32	.42	.51	.54	.58	.73	.75	.76	.90	1.24
MAY 5	.25	.37	.37	.40	.50	.60	.73	.84	1.16	1.20	1.22	1.22
JUN 23	.25	.32	.35	.38	.52	.53	.55	.60	.65	.69	.76	.84
OCT 15	.26	.38	.43	.52	.62	.67	.68	.69	.70	.72	.73	.74
TULSA												
JAN 25	.40	.73	.75	.76	.77	.80	.84	.86	.88	.94	.96	1.07
APR 12	.25	.35	.37	.44	.50	.52	.55	.58	.65	.70	.80	.90
APR 20	.45	.82	.85	.87	.88	.90	.94	.99	1.01	1.02	1.02	1.02
APR 30	.28	.33	.34	.40	.40	.40	.40	.40	.40	.40	.40	.40
MAY 5	.30	.51	.53	.55	.57	.59	.64	.69	.73	.78	.82	.86
MAY 14	.45	.56	.59	.61	.68	.69	.70	.71	.82	.84	.85	.85
MAY 28	.30	.35	.37	.39	.39	.39	.40	.40	.40	.40	.40	.40
JUN 11	.33	.60	.77	.86	.97	1.23	1.48	1.56	1.59	1.62	1.67	1.70
JUN 25	.20	.37	.42	.49	.71	.91	1.21	1.35	1.38	1.41	1.50	1.55
JUL 5	.38	.52	.55	.65	.80	.85	.91	.92	.93	.94	.94	.95
JUL 12	.15	.26	.32	.38	.50	.65	.75	.79	.80	.86	.90	.94
SEP 14	.15	.30	.31	.31	.32	.37	.47	.50	.72	.73	.83	.89
OCT 15	.19	.33	.42	.47	.49	.54	.66	.80	.85	.91	.95	1.09
OCT 29	.25	.46	.48	.53	.57	.61	.63	.68	.71	.77	.86	.98
OREGON												
ASTORIA												
SEP 10	.15	.30	.37	.43	.47	.54	.62	.65	.65	.65	.65	.66
BURNS U						NONE						
EUGENE												
JUN 1	*.33	*.60	*.74	.79	*.80	.83	*.86	.87	.88	*.88	.88	*.88
JUN 21	.24	.35	.37	.39	.39	.42	.43	.62	.65	.70	.70	.71
MEACHAM						NONE						
MEDFORD						NONE						
PENDLETON						NONE						
PORTLAND U						NONE						
SALEM						NONE						
SEXTON SUMMIT R						NONE						
PACIFIC AREA												
CANTON ISLAND												
JUN 10	.26	.48	.62	.66	.81	.84	.84	.84	.84	.84	.84	.84
JUN 22	.35	.42	.42	.42	.43	.43	.43	.43	.43	.44	.45	.45
JUL 20	.30	.44	.48	.49	.51	.51	.51	.51	.51	.53	.53	.53
SEP 7 C	.20	.30	.34	.35	.35	.35	.45	.55	.55	.55	.55	.55
JOHNSTON ISLAND												
FEB 14	.21	.35	.41	.42	.43	.45	.45	.45	.45	.45	.45	.45
FEB 28	.15	.27	.38	.43	.61	.69	.70	.78	.82	.86	.92	.99
MAR 19	*.36	*.59	*.85	.97	*1.29	1.51	*1.64	1.78	1.84	1.85	1.85	1.95
JUN 18	.25	.40	.44	.47	.53	.57	.60	.62	.63	.64	.64	.64

C RECORD ENDED SEPTEMBER 1967

Station and date	Maximum precipitation in inches (5 to 180 minutes) 5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
JOHNSTON ISLAND												
SEP 5	.15	.23	.32	.38	.50	.58	.78	.95	1.07	1.20	1.31	1.34
SEP 24	.20	.35	.44	.48	.62	.75	.90	1.22	1.30	1.30	1.30	1.40
OCT 21	.27	.39	.44	.44	.55	.75	.81	.83	.84	.85	.98	1.31
OCT 22	.15	.20	.32	.39	.50	.55	.59	.62	.65	.67	.70	.79
OCT 22	.19	.30	.34	.43	.43	.61	.63	.64	.64	.66	.64	.73
NOV 23	.26	.38	.43	.45	.47	.48	.50	.52	.60	.67	.78	.92
DEC 4	.31	.48	.65	.82	1.05	1.13	1.20	1.24	1.26	1.28	1.32	1.33
KOROR												
JAN 3	.26	.48	.65	.85	1.04	1.33	1.70	1.81	2.07	2.19	2.36	2.40
JAN 20	.22	.41	.56	.74	.92	1.02	1.07	1.13	1.14	1.14	1.15	1.16
JAN 29	.24	.32	.34	.35	.40	.54	.59	.63	.64	.67	.68	.71
FEB 10	.26	.38	.39	.40	.41	.42	.44	.51	.53	.53	.53	.53
MAR 1	.24	.37	.46	.52	.55	.60	.63	.63	.63	.63	.64	.68
MAY 5	.29	.47	.55	.63	.64	.84	.92	1.04	1.15	1.16	1.20	1.28
MAY 22	.29	.46	.62	.82	.98	1.19	1.22	1.25	1.28	1.31	1.37	1.38
MAY 28	.19	.34	.40	.45	.55	.57	.57	.57	.57	.58	.58	.58
MAY 31	.43	.74	.97	1.05	1.21	1.26	1.28	1.34	1.38	1.38	1.38	1.38
JUN 1	.16	.29	.35	.38	.44	.51	.51	.51	.51	.56	.63	.66
JUN 5	.21	.34	.45	.54	.62	.64	.65	.65	.66	.67	.67	.67
JUN 5	.24	.45	.55	.59	.63	.66	.66	.68	.69	.69	.73	.76
JUN 5	.16	.29	.39	.46	.63	.82	.89	.94	1.00	1.01	1.01	1.01
JUN 20	.21	.36	.47	.56	.76	1.07	1.08	1.08	1.08	1.08	1.08	1.08
JUN 21	.28	.47	.63	.78	.92	1.03	1.10	1.21	1.31	1.36	1.45	1.50
JUN 21	.16	.26	.39	.49	.61	.78	.89	1.03	1.20	1.36	1.58	1.78
JUN 23	.18	.29	.34	.42	.49	.60	.65	.74	.83	.83	.83	.83
JUN 24	.28	.48	.56	.60	.69	.72	1.01	1.25	1.35	1.35	1.41	1.46
JUN 28	.17	.26	.34	.44	.56	.75	1.05	1.22	1.28	1.35	1.44	1.50
JUL 1	.23	.35	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38
JUL 2	.25	.38	.40	.45	.48	.49	.50	.50	.52	.53	.56	.56
JUL 7	.28	.34	.40	.45	.71	.78	.79	.80	.80	.80	.83	.84
JUL 9	.29	.39	.39	.39	.40	.46	.47	.47	.47	.47	.48	.50
JUL 11	.37	.55	.67	.79	1.00	1.20	1.29	1.29	1.30	1.30	1.30	1.32
JUL 23	.16	.30	.38	.45	.48	.48	.48	.48	.54	.54	.56	.62
JUL 24	.25	.36	.40	.43	.43	.44	.50	.50	.50	.50	.50	.50
JUL 27	.36	.55	.70	.77	.92	1.14	1.23	1.23	1.25	1.26	1.26	1.26
JUL 29	.22	.32	.46	.46	.47	.47	.47	.67	.69	.69	.69	.69
AUG 3	.21	.35	.47	.55	.63	.67	.70	.74	.80	.87	.97	1.05
AUG 6	.44	.65	.82	.94	1.12	1.25	1.34	1.50	1.69	1.77	1.89	1.96
AUG 8	.24	.43	.59	.67	.81	1.01	1.09	1.11	1.11	1.11	1.11	1.11
AUG 11	.23	.29	.31	.41	.45	.48	.51	.55	.60	.62	.63	.63
AUG 14	.15	.27	.37	.44	.54	.57	.61	.62	.62	.62	.62	.62
AUG 15	.27	.38	.46	.50	.54	.57	.59	.63	.66	.74	.79	.88
AUG 21	.24	.40	.50	.51	.51	.51	.51	.51	.52	.53	.53	.53
AUG 24	.30	.42	.44	.44	.45	.47	.47	.48	.50	.53	.59	.70
AUG 27	.29	.40	.44	.45	.51	.74	.84	1.02	1.08	1.10	1.12	1.13
SEP 13	.19	.35	.39	.40	.40	.40	.40	.40	.40	.40	.41	.41
SEP 19	.40	.55	.74	.91	1.09	1.42	1.62	1.75	1.76	1.76	1.76	1.76
SEP 24	.29	.39	.48	.53	.60	.72	.73	.73	.73	.73	.73	.73
SEP 30	.30	.42	.45	.47	.65	.70	.72	.79	.92	.95	.96	1.01
OCT 1	.30	.34	.42	.49	.62	.66	.66	.66	.74	.74	.82	.82
OCT 2	.39	.47	.54	.60	.64	.64	.64	.64	.64	.64	.66	.66
OCT 8	.45	.67	.94	1.08	1.28	1.49	1.64	1.73	1.75	1.83	1.87	1.89
OCT 8	.30	.39	.58	.74	.85	.88	.91	.91	.91	.92	.92	1.01
OCT 10	*.55	.78	.84	.95	1.02	1.10	1.10	1.10	1.10	1.15	1.39	1.48
OCT 14	.30	.43	.53	.57	.65	.96	1.09	1.18	1.49	1.63	1.75	1.89
OCT 26	.24	.36	.42	.54	.64	.77	.81	1.06	1.26	1.39	1.43	1.45
NOV 1	*.56	.78	.87	.92	.94	1.04	1.17	1.76	1.77	1.78	2.05	2.08
NOV 1	.26	.32	.40	.45	.61	.95	1.12	1.22	1.33	1.41	1.53	1.71
DEC 10	.30	.49	.69	.85	1.03	1.30	1.47	1.74	1.95	2.09	2.18	2.32
DEC 11	.31	.51	.64	.70	.76	.79	.79	.79	.79	.79	.79	.79
DEC 25	.35	.52	.62	.66	.73	.77	.87	.94	.96	.98	1.00	1.02
DEC 27	.40	.56	.66	.71	.87	1.23	1.26	1.28	1.29	1.29	1.33	1.41
MAJURO												
JAN 23	.22	.37	.46	.57	.64	.70	.72	.72	.72	.72	.72	.74
JAN 23	.31	.41	.44	.53	.73	.79	.86	.90	.91	.94	.95	.95
JAN 24	.36	.53	.61	.68	.78	.82	.87	.94	1.34	1.41	1.48	1.61
JAN 24	.19	.28	.40	.48	.66	.73	.76	.81	.82	.83	.83	.83
JAN 26	.14	.23	.29	.34	.51	.72	.94	1.14	1.17	1.17	1.22	1.24
FEB 15	.25	.40	.58	.70	.84	1.16	1.35	1.64	1.77	1.79	2.13	2.65
FEB 25	.33	.45	.48	.50	.52	.56	.58	.62	.66	.69	.72	.73
FEB 27	.23	.38	.44	.51	.56	.61	.62	.69	.70	.74	.76	.77
MAR 2	.21	.33	.35	.36	.40	.44	.45	.45	.45	.45	.45	.45
MAR 7	.34	.59	.70	.71	.79	.82	.83	.84	.86	.87	.87	.87
MAR 19	.21	.25	.36	.43	.56	.71	.94	1.23	1.47	1.55	1.61	1.64
MAR 28	.25	.27	.31	.32	.32	.33	.52	.57	.57	.58	.60	.60
APR 13	.23	.32	.38	.46	.52	.56	.59	.67	.69	.69	.69	.69
MAY 12	.29	.38	.43	.45	.45	.45	.45	.45	.45	.45	.45	.45
MAY 14	.22	.39	.46	.50	.56	.60	.62	.76	.80	.80	.84	.88
JUN 3	.23	.26	.36	.45	.48	.48	.48	.48	.48	.48	.48	.48
JUN 10	.50	.77	.88	.99	1.17	1.25	1.26	1.33	1.36	1.40	1.40	1.40
JUN 18	.18	.23	.30	.38	.51	.69	.74	.81	.88	.94	1.02	1.04
JUN 22	.26	.39	.39	.39	.39	.39	.39	.42	.42	.44	.45	.45
JUN 28	.37	.53	.63	.66	.70	.84	.88	.88	.88	.93	.94	1.02
JUL 4	.41	.61	.74	.75	.78	.80	.80	.80	.80	.80	.82	1.08
JUL 7	.25	.26	.30	.34	.34	.35	.36	.39	.41	.41	.42	.42
JUL 10	.35	.64	.76	.86	.97	1.04	1.06	1.06	1.08	1.10	1.11	1.13
JUL 11	.26	.37	.42	.45	.45	.45	.45	.45	.45	.45	.45	.45
JUL 13	.40	.62	.87	.95	1.03	1.10	1.16	1.17	1.18	1.18	1.18	1.20
JUL 23	.37	.49	.61	.72	.85	.96	.97	.99	1.18	1.19	1.19	1.19
JUL 25	.31	.55	.69	.85	1.08	1.19	1.24	1.27	1.28	1.28	1.28	1.28
JUL 30	.21	.39	.49	.56	.64	.72	.73	.92	.98	1.15	1.31	1.51
AUG 1	.17	.30	.37	.41	.45	.48	.50	.53	.56	.62	.67	.70
AUG 16	.39	.50	.56	.62	.68	.72	.75	.79	.82	.84	.86	.86
AUG 18	.42	.64	.71	.71	.71	.71	.71	.72	.72	.82	.82	.82
AUG 28	.49	.71	.87	.96	1.06	1.16	1.20	1.28	1.30	1.30	1.30	1.30
SEP 5	.37	.60	.73	.84	1.10	1.47	1.89	2.28	2.48	2.57	2.75	2.90
SEP 13	.20	.29	.46	.54	.69	.76	.82	.90	.98	1.05	1.10	1.13
SEP 14	.22	.30	.30	.30	.30	.30	.30	.30	.31	.31	.31	.31
SEP 20	.28	.41	.45	.46	.47	.48	.48	.48	.48	.48	.48	.48
SEP 22	.21	.31	.35	.43	.45	.45	.45	.48	.50	.50	.50	.50
SEP 24	.45	.70	.88	1.04	1.36	2.07	2.29	2.40	2.65	2.72	2.77	2.87
SEP 27	.25	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28
OCT 3	.28	.39	.46	.50	.56	.83	.48	1.18	1.21	1.24	1.27	1.30
OCT 8	.42	.68	.80	.81	.81	.81	.81	.81	.81	.81	.81	.81
OCT 9	.42	.74	1.03	1.19	1.43	1.69	1.76	1.83	1.84	1.85	2.23	2.27
OCT 13	.37	.47	.49	.48	.48	.49	.49	.49	.49	.50	.50	.50
OCT 13	.20	.32	.42	.46	.50	.68	.73	.76	.77	.84	.93	.93
OCT 23	.44	.76	1.01	1.16	1.38	1.59	2.21	2.41	2.64	2.73	2.85	2.90
OCT 28	.25	.35	.38	.38	.39	.39	.39	.39	.39	.39	.39	.39
OCT 31	.27	.48	.59	.60	.61	.61	.61	.61	.61	.61	.61	.61

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
MAJURO												
NOV 1	.18	.27	.35	.38	.48	.61	.72	.87	.90	.93	.99	1.06
NOV 4	.26	.32	.39	.46	.47	.48	.48	.48	.48	.48	.48	.59
NOV 15	.43	.61	.73	.82	.98	1.13	1.24	1.36	1.42	1.50	1.59	1.62
NOV 18	.31	.40	.46	.61	.88	.91	.92	.92	.92	.92	.92	.92
NOV 30	.30	.40	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
DEC 9	.25	.32	.41	.48	.56	.62	.65	.67	.70	.73	.77	.82
DEC 10	.27	.43	.55	.63	.69	.71	.72	.72	.72	.73	.73	.75
DEC 23	.24	.34	.39	.46	.50	.58	.59	.60	.60	.60	.60	.61
MARCUS ISLAND												
JAN 27	.26	.45	.50	.51	.52	.53	.54	.54	.54	.54	.54	.54
JAN 27	.31	.50	.58	.62	.66	.66	.66	.66	.66	.67	.67	.67
MAR 7	.16	.27	.34	.36	.57	.60	.60	.60	.60	.60	.60	.60
MAR 24	.27	.45	.55	.71	.98	1.48	1.76	1.97	2.07	2.22	2.93	3.04
JUN 1	.24	.36	.49	.56	.58	.60	.61	.61	.61	.61	.62	.62
JUN 14	.20	.36	.45	.55	.67	.70	.71	.72	.73	.73	.73	.74
JUL 10	.18	.35	.44	.55	.77	.86	.91	.92	.92	.92	.92	.92
NOV 2	.17	.29	.41	.48	.54	.59	.62	.62	.64	.70	.73	.73
NOV 25	.43	.79	1.03	1.13	1.50	1.79	2.05	2.22	2.52	2.84	2.96	3.15
DEC 30	.33	.45	.55	.67	.79	.93	1.13	1.17	1.19	1.19	1.26	1.26
PAGO PAGO, A.S.												
JAN 12	.33	.39	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40
JAN 20	.17	.29	.43	.53	.72	.82	.83	.83	.83	.83	.83	.83
JAN 26	.33	.58	.70	.72	.81	.83	.83	.83	.89	.89	.89	.92
FEB 17	.26	.44	.64	.75	.80	.81	.81	.82	.82	.82	.82	.85
FEB 18	.29	.45	.46	.47	.47	.47	.47	.47	.47	.47	.47	.47
MAR 13	.21	.32	.35	.36	.36	.36	.36	.36	.36	.36	.40	.40
MAR 25	.16	.30	.41	.47	.53	.54	.54	.57	.59	.61	.62	.62
APR 2	.22	.42	.56	.61	.65	.78	.82	.82	.82	.82	.82	.82
APR 2	.35	.65	.73	.80	.90	1.16	1.41	1.59	1.59	1.59	1.59	1.59
APR 4	.20	.31	.43	.54	.70	.93	1.08	1.12	1.25	1.32	1.34	1.36
APR 5	.17	.28	.32	.39	.48	.67	.78	.93	.95	1.09	1.32	1.56
APR 9	.39	.78	1.13	1.42	1.77	1.91	2.21	2.29	2.30	3.01	3.50	3.58
APR 10	.36	.55	.64	.68	.72	.72	.72	.72	.72	.72	.76	.76
APR 15	.39	.60	.72	.75	.78	.78	.78	.78	.78	.99	1.22	1.22
APR 16	.44	.67	.97	1.20	1.27	1.35	1.36	1.54	1.55	1.55	2.29	2.85
APR 17	.30	.48	.52	.52	.52	.53	.53	.53	.53	.53	.53	.53
APR 24	.22	.43	.52	.60	.75	.80	.82	.83	.83	.83	.83	.83
APR 29	.39	.61	.90	1.00	1.09	1.13	1.14	1.15	1.15	1.15	1.15	1.15
MAY 5	.17	.30	.39	.44	.54	.61	.73	.74	.76	.81	.85	.87
MAY 9	.22	.30	.36	.46	.50	.56	.56	.60	.62	.63	.65	.67
MAY 11	.41	.71	.83	.86	.89	1.08	1.47	1.59	1.74	1.78	1.78	1.78
JUN 10	.22	.37	.44	.51	.59	.73	.83	.88	.95	.96	.99	1.02
JUN 14	.16	.22	.32	.43	.46	.47	.55	.67	.68	.68	.68	.68
JUN 19	.15	.24	.29	.32	.54	.58	.62	.68	.78	.81	.88	.89
JUN 27	.19	.30	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36
JUN 28	.39	.58	.69	.71	.72	.82	.86	.90	.91	.92	.93	1.15
JUN 30	.30	.45	.55	.60	.63	.65	.67	.70	.73	.74	.74	.74
JUL 1	.16	.23	.31	.37	.58	.73	.80	.80	.82	.83	.83	.83
JUL 1	.30	.49	.68	.81	1.10	1.32	1.47	1.51	1.52	1.52	1.52	1.53
AUG 10	.23	.43	.54	.67	.89	1.13	1.35	1.55	1.75	2.06	2.42	2.55
AUG 11	.27	.52	.75	.87	1.02	1.28	1.56	1.64	1.83	1.87	2.06	2.10
AUG 14	.13	.22	.31	.40	.57	.71	.83	.94	1.02	1.10	1.22	1.42
AUG 22	.19	.29	.36	.36	.37	.37	.37	.38	.41	.44	.44	.44
SEP 27	.28	.42	.49	.64	.79	.83	.90	.96	1.00	1.00	1.01	1.02
OCT 5	.28	.35	.41	.47	.57	.64	.71	.77	.79	.81	.86	.95
OCT 6	.22	.32	.46	.53	.55	.61	.63	.65	.66	.67	.67	.67
OCT 7	.16	.30	.37	.43	.46	.56	.69	.79	.79	.79	.79	.79
OCT 9	.26	.49	.67	.87	1.14	1.61	1.76	2.06	2.46	2.64	2.76	2.78
OCT 9	.19	.25	.32	.37	.54	.78	1.03	1.35	1.53	1.72	1.79	2.06
OCT 9	.19	.36	.52	.69	.84	1.01	1.09	1.31	1.51	1.56	1.71	1.71
OCT 11	.23	.33	.37	.39	.40	.40	.40	.40	.40	.40	.40	.40
NOV 1	.28	.51	.54	.54	.62	.64	.64	.64	.64	.64	.64	.64
NOV 4	.30	.55	.75	.90	1.04	1.18	1.28	1.35	1.43	1.48	1.58	1.66
NOV 6	.25	.48	.63	.83	1.15	1.43	1.49	1.51	1.53	1.53	1.53	1.56
NOV 14	.24	.34	.38	.40	.43	.46	.48	.49	.49	.49	.49	.49
NOV 15	.17	.33	.46	.57	.76	1.09	1.40	1.71	1.80	1.90	1.92	1.92
DEC 4	.17	.31	.44	.60	.78	1.19	1.31	1.43	1.53	1.60	1.75	1.94
DEC 5	.20	.39	.56	.73	.91	.98	.99	1.03	1.21	1.55	1.83	2.11
DEC 6	.17	.27	.32	.41	.61	.79	.88	1.01	1.10	1.23	1.36	1.37
DEC 12	.21	.38	.50	.55	.81	.95	1.00	1.03	1.05	1.05	1.05	1.05
PONAPE												
JAN 1	.21	.30	.40	.40	.40	.41	.42	.42	.42	.42	.57	.77
JAN 7	.18	.28	.38	.48	.59	.71	.76	.82	.88	.92	.95	.96
JAN 13	.30	.50	.60	.77	.93	1.00	1.15	1.16	1.17	1.18	1.21	1.21
FEB 2	.28	.40	.43	.46	.49	.62	.83	1.06	1.19	1.32	1.53	1.62
FEB 5	.18	.27	.37	.44	.53	.63	.73	.79	.90	.99	1.18	1.27
FEB 6	.18	.29	.34	.41	.51	.64	.74	.77	.78	.80	.84	.90
FEB 9	.35	.45	.47	.51	.62	.72	.92	.99	1.00	1.01	1.03	1.05
FEB 9	.17	.30	.41	.53	.63	.76	.82	1.09	1.11	1.14	1.15	1.17
FEB 19	.19	.30	.45	.54	.64	.73	.75	.77	.92	.97	1.17	1.37
FEB 22	.29	.40	.52	.64	.91	1.05	1.18	1.30	1.70	2.07	2.45	2.61
MAR 13	.44	.68	.71	.72	.74	.76	.76	1.04	1.14	1.15	1.19	1.33
MAR 28	.33	.52	.63	.73	.80	.85	.87	1.15	1.45	1.52	1.77	1.79
MAR 29	.24	.30	.31	.31	.31	.31	.50	.53	.54	.56	.87	.87
MAR 29	.47	.65	.79	.89	.98	1.00	1.02	1.07	1.18	1.27	1.59	1.93
MAR 30	.26	.39	.43	.48	.52	.55	.58	.58	.58	.58	.60	.60
MAR 31	.39	.59	.70	.75	.77	.79	.79	.79	.79	.79	.82	.84
APR 3	.34	.55	.74	.84	.99	1.26	1.32	1.32	1.33	1.64	2.03	2.36
APR 19	.36	.66	.91	1.05	1.06	1.06	1.06	1.07	1.07	1.17	1.20	1.36
APR 23	.55	.88	1.09	1.30	1.57	1.69	1.74	1.77	1.84	1.87	1.91	1.95
APR 24	.23	.33	.41	.48	.56	.58	.65	.69	.77	.81	.82	.82
APR 25	.36	.51	.65	.79	.95	.98	1.03	1.16	1.24	1.36	1.53	1.82
APR 30	.28	.36	.36	.45	.49	.51	.51	.52	.62	.64	.67	.70
MAY 4	.19	.27	.36	.43	.55	.70	.80	.84	.85	.85	.85	.85
MAY 4	.35	.67	.81	.86	.96	1.04	1.06	1.49	1.72	1.80	1.81	1.81
MAY 12	.16	.22	.28	.33	.51	.59	.61	.71	.71	.71	.72	.72
MAY 30	.31	.46	.47	.47	.48	.48	.49	.51	.63	.64	.65	.65
JUN 18	.19	.29	.42	.53	.63	.63	.64	.70	.75	.76	.76	.77
JUN 22	.14	.23	.32	.40	.43	.45	.45	.45	.45	.45	.45	.45
JUN 24	.46	.88	1.16	1.30	1.42	1.43	1.45	1.48	1.48	1.48	1.54	1.62
JUN 27	.22	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
JUL 4	.19	.30	.36	.40	.53	.72	.86	.91	.92	.96	1.12	1.13
JUL 6	.27	.37	.44	.46	.48	.52	.52	.52	.52	.55	.69	.69
JUL 14	.42	.59	.73	.89	1.24	1.58	1.81	1.99	2.20	2.30	2.55	2.69
JUL 18	.18	.33	.40	.42	.45	.48	.51	.55	.56	.77	.96	1.00
JUL 19	.26	.33	.37	.41	.43	.45	.52	.58	.59	.81	.65	.97
JUL 23	.28	.37	.40	.45	.54	.62	.65	.66	.66	.66	.66	.66
JUL 28	.25	.37	.39	.39	.39	.45	.45	.45	.46	.46	.46	.46

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
PONAPE												
JUL 29	.29	.53	.71	.80	.85	.94	1.02	1.03	1.05	1.07	1.15	1.17
AUG 1	.25	.26	.26	.26	.26	.26	.27	.27	.30	.34	.34	.35
AUG 4	.27	.36	.41	.42	.53	.62	.72	.86	.99	1.22	1.44	1.44
AUG 14	.50	.86	1.06	1.15	1.21	1.21	1.27	1.41	1.55	1.59	1.59	1.59
AUG 15	.20	.29	.36	.41	.48	.54	.55	.58	.58	.59	.59	.59
AUG 16	.28	.43	.55	.61	.67	.74	.83	.94	1.00	1.02	1.04	1.10
AUG 19	.21	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
AUG 22	.30	.50	.56	.57	.57	.57	.57	.65	.66	.72	.84	.85
AUG 26	.46	.70	.81	.89	1.13	1.49	1.85	2.13	2.14	2.17	2.18	2.18
AUG 27	.27	.37	.48	.54	.63	.73	1.05	1.24	1.43	1.44	1.45	1.51
AUG 28	.24	.36	.46	.57	.65	.79	.81	.89	.93	.98	1.04	1.11
SEP 6	.20	.35	.49	.63	.85	.97	1.21	1.48	1.64	1.75	1.80	1.82
SEP 11	.33	.44	.52	.58	.73	.93	1.04	1.25	1.52	1.77	1.96	1.99
SEP 16	.33	.50	.68	.82	.98	1.09	1.48	1.76	2.18	2.36	2.89	3.22
SEP 21	.37	.53	.69	.90	1.19	1.46	1.59	1.85	1.95	2.03	2.09	2.12
SEP 25	.39	.71	1.02	1.24	1.53	1.99	2.21	2.30	2.32	2.33	2.33	2.35
SEP 27	.36	.39	.48	.48	.64	.76	.76	.76	.76	.76	.76	.76
SEP 29	.22	.33	.45	.62	.66	.66	.66	.66	.66	.66	.66	.66
OCT 5	.36	.42	.45	.47	.47	.47	.47	.47	.49	.51	.51	.58
OCT 7	.29	.44	.59	.64	.66	.70	.73	.74	.74	.74	.74	.75
OCT 12	.19	.32	.40	.44	.53	.65	.81	1.00	1.19	1.34	1.48	1.56
OCT 14	.21	.33	.43	.48	.49	.50	.50	.50	.51	.52	.53	.54
OCT 23	.25	.38	.47	.55	.76	1.00	1.02	1.04	1.09	1.12	1.14	1.14
OCT 24	.17	.30	.40	.47	.59	.76	.95	1.06	1.13	1.22	1.34	1.44
OCT 28	.46	.69	.82	.94	1.19	1.44	1.76	2.11	2.34	2.48	2.74	2.92
NOV 1	.20	.36	.46	.55	.62	.65	.66	.66	.74	.81	.81	.81
NOV 8	.36	.51	.69	.82	.96	1.14	1.25	1.47	1.55	1.56	1.57	1.63
NOV 11	.41	.47	.48	.48	.49	.49	.50	.50	.52	.91	.92	.92
NOV 12	.24	.39	.54	.58	.61	.65	.67	.67	.67	.67	.68	1.20
NOV 14	.37	.51	.55	.57	.62	.62	.62	.62	.62	.62	.62	.62
NOV 17	.44	.60	.84	.90	.97	.98	.98	.98	1.15	1.19	1.19	1.19
NOV 22	.21	.30	.42	.48	.51	.55	.59	.60	.61	.62	.62	.62
NOV 25	.29	.40	.42	.43	.44	.44	.44	.44	.44	.45	.48	.48
NOV 29	.22	.30	.35	.36	.41	.41	.41	.57	.61	.61	.61	.61
DEC 9	.18	.30	.40	.48	.57	.62	.65	.66	.69	.72	.72	.78
DEC 12	.30	.53	.74	.99	1.18	1.35	1.62	1.78	1.94	2.00	2.04	2.31
DEC 27	.28	.50	.60	.67	.73	.75	.82	1.05	1.15	1.15	1.22	1.58
DEC 28	.27	.42	.51	.54	.67	.68	.68	.68	.68	.68	.68	.68
TRUK												
FEB 1	.20	.30	.39	.43	.52	.63	.64	.66	.66	.66	.66	.66
FEB 2	.57	.80	.92	.97	.98	1.01	1.02	1.06	1.10	1.10	1.10	1.10
MAR 2	.34	.39	.46	.48	.63	.66	.89	.99	1.00	1.04	1.40	1.41
MAR 3	.25	.38	.55	.63	.73	1.07	1.21	1.59	1.71	1.75	1.82	1.90
MAR 12	.25	.39	.50	.62	.82	.97	1.02	1.05	1.07	1.12	1.21	1.25
MAR 12	.26	.35	.44	.46	.46	.46	.46	.46	.46	.46	.47	.47
MAR 14	.36	.50	.71	.78	.84	.94	.98	1.02	1.05	1.08	1.12	1.30
MAR 15	.48	.83	.96	1.12	1.40	1.54	1.66	1.73	1.78	1.80	1.81	1.81
MAR 19	.25	.39	.50	.57	.71	.84	1.03	1.09	1.13	1.16	1.19	1.42
MAR 23	.34	.50	.55	.59	.68	.82	.86	.89	.91	.91	.91	.91
MAR 24	.28	.42	.58	.70	.80	.81	.82	.82	.82	.82	.82	.82
MAR 25	.18	.27	.33	.43	.53	.64	.70	.73	.74	.76	.76	.76
MAR 31	.34	.49	.51	.52	.60	.74	.80	.94	1.05	1.31	1.56	1.73
APR 1	.32	.41	.45	.47	.50	.55	.60	.63	.64	.65	.67	.69
APR 2	.41	.68	.86	.98	1.22	1.49	1.63	1.70	1.94	2.10	2.86	3.12
APR 3	.26	.36	.42	.51	.60	.69	.81	.88	.96	.99	1.03	1.05
APR 22	.20	.36	.51	.57	.62	.64	.65	.66	.67	.68	.68	.68
APR 25	.28	.37	.52	.61	.73	1.08	1.09	1.09	1.09	1.10	1.10	1.11
APR 27	.16	.27	.35	.51	.53	.56	.57	.61	.64	.66	.68	.69
MAY 27	.24	.42	.54	.57	.59	.63	.65	.68	.71	.72	.72	.72
MAY 29	.52	.84	1.04	1.21	1.62	2.25	2.62	2.79	2.93	3.12	3.30	3.45
MAY 31	.47	.71	.85	1.08	1.35	1.60	2.19	2.76	2.89	2.96	3.05	3.12
JUN 9	.30	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
JUN 19	.44	.68	.99	1.12	1.55	1.92	2.01	2.03	2.03	2.04	2.05	2.07
JUN 21	.40	.58	.73	.86	1.05	1.28	1.31	1.40	1.40	1.40	1.43	1.43
JUN 25	.24	.39	.54	.63	.71	.91	.93	1.04	1.04	1.04	1.07	1.17
JUN 25	.23	.37	.48	.59	.79	1.02	1.23	1.61	1.66	1.71	1.78	1.87
JUN 29	.17	.30	.45	.52	.58	.60	.68	.79	.83	.84	.84	.84
JUL 4	.21	.36	.55	.62	.72	.81	.87	.88	.89	.89	.89	.89
JUL 4	.29	.40	.52	.62	.89	1.00	1.02	1.04	1.05	1.06	1.08	1.09
JUL 5	.35	.53	.64	.71	.73	.76	.80	.81	.81	.81	.81	.81
JUL 6	.26	.36	.37	.38	.43	.57	.71	.94	.98	1.02	1.06	1.12
JUL 7	.15	.25	.30	.43	.55	.72	.85	.91	.94	.98	1.05	1.15
JUL 8	.36	.55	.69	.83	1.04	1.32	1.67	1.75	1.78	1.80	1.89	2.00
JUL 10	.37	.59	.74	.89	1.06	1.27	1.49	1.68	2.04	2.19	2.42	2.64
JUL 14	.46	.75	.86	.95	1.30	1.69	1.77	1.83	2.03	2.13	2.24	2.36
JUL 28	.19	.27	.38	.45	.60	.77	.90	1.01	1.07	1.14	1.31	1.41
AUG 1	.26	.33	.36	.36	.37	.40	.40	.40	.40	.40	.40	.40
AUG 3	.43	.79	.97	1.14	1.40	1.55	1.62	1.62	1.62	1.63	1.73	1.73
AUG 8	.30	.41	.49	.60	.84	.92	1.00	1.04	1.08	1.13	1.19	1.24
AUG 9	.61	1.04	1.21	1.26	1.38	1.54	1.98	2.14	2.19	2.25	2.31	2.34
AUG 12	.27	.36	.53	.60	.71	.76	.78	.78	.78	.78	1.03	1.05
AUG 12	.27	.36	.40	.43	.44	.45	.45	.48	.48	.57	.60	.60
AUG 17	.28	.42	.67	.80	.83	.83	.83	.83	.85	.85	.85	.86
AUG 17	.31	.42	.54	.60	.60	.61	.70	.76	.77	.84	.87	.87
AUG 25	.20	.27	.37	.51	.58	.62	.62	.63	.63	.67	.69	.71
AUG 26	.48	.65	.76	.78	.78	.78	.78	.78	.86	.86	.86	.86
AUG 28	.38	.47	.50	.51	.52	.55	.58	.66	.68	.87	.92	.97
SEP 4	.38	.52	.64	.68	.68	.68	.70	.71	.71	.71	.71	.79
SEP 7	.42	.61	.74	.81	.86	.86	.94	.97	.98	1.06	1.13	1.14
SEP 16	.24	.33	.35	.38	.42	.47	.48	.48	.50	.50	.53	.60
SEP 29	.33	.43	.46	.47	.49	.56	.62	.69	.73	.83	.93	.98
OCT 3	.34	.37	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38
OCT 7	.40	.72	.90	1.07	1.15	1.26	1.43	1.56	1.57	1.58	1.58	1.63
OCT 10	.24	.32	.47	.62	.71	.74	.74	.77	.81	.89	.98	.98
OCT 10	.22	.32	.45	.54	.75	.80	.95	1.00	1.02	1.03	1.12	1.22
OCT 19	.17	.30	.32	.32	.33	.34	.34	.36	.40	.42	.44	.44
OCT 24	.43	.62	.72	.80	.92	1.14	1.27	1.42	1.52	1.62	1.76	1.88
OCT 24	.44	.61	.70	.71	.72	.75	.80	.81	.83	.85	.85	.85
OCT 30	.38	.59	.68	.78	.92	1.16	1.25	1.33	1.38	1.44	1.47	1.50
NOV 4	.24	.41	.59	.68	.73	.75	.75	.75	.75	.75	.78	.87
NOV 10	.47	.71	.76	.82	.95	1.38	1.59	1.83	2.01	2.14	2.19	2.34
NOV 11	.45	.70	.79	.88	1.04	1.39	1.72	1.85	1.93	1.96	1.97	2.03
NOV 24	.29	.40	.49	.69	.87	.90	.90	.92	.93	.93	.93	.93
NOV 29	.23	.41	.48	.60	.91	1.25	1.49	1.63	1.78	1.87	1.96	1.97
DEC 13	.25	.31	.40	.46	.60	.82	.86	.91	1.01	1.09	1.18	1.26
DEC 25	.26	.36	.41	.48	.63	.71	.89	.99	1.03	1.03	1.03	1.03
DEC 27	.42	.61	.91	1.14	1.58	1.93	2.04	2.17	2.36	2.38	2.40	2.81
DEC 27	.38	.59	.93	.99	1.08	1.45	1.55	1.78	2.08	2.65	3.18	3.69

EXCESSIVE SHORT DURATION RAINFALL

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
PACIFIC AREA												
WAKE												
FEB 14	.20	.36	.40	.48	.68	.78	.81	.83	.83	.83	.83	.83
MAR 5	.24	.44	.46	.53	.60	.83	.94	1.30	1.43	1.46	1.63	1.75
APR 13	.13	.24	.32	.40	.50	.58	.67	.70	.77	.83	.88	.92
MAY 7	.18	.32	.33	.33	.36	.56	.71	.74	.76	.76	.80	.84
JUN 7	.23	.34	.49	.54	.61	.63	.63	.63	.63	.63	.63	.63
JUN 26	.23	.39	.54	.59	.71	.84	.90	.95	1.04	1.10	1.15	1.18
JUN 30	.21	.29	.36	.38	.41	.45	.55	.58	.58	.59	.59	.59
JUL 1	.25	.35	.39	.40	.40	.41	.50	.56	.56	.56	.70	.70
JUL 24	*.55	*.96	*1.38	1.75	*2.36	2.82	*2.93	3.09	3.21	*3.27	3.38	*3.67
JUL 30	.26	.36	.44	.45	.55	.70	.74	.83	1.20	1.27	1.37	1.44
JUL 31	.24	.47	.62	.70	.75	.79	.81	.86	.89	.91	.92	.93
AUG 12	.22	.38	.46	.52	.66	.72	.73	.74	.76	.78	.78	.80
AUG 13	.14	.22	.27	.33	.51	.53	.54	.54	.64	.64	.65	.65
AUG 19	.28	.42	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45
AUG 27	.37	.72	1.01	1.14	1.39	1.60	1.61	1.62	1.62	1.63	1.74	1.82
AUG 29	.23	.30	.30	.30	.31	.31	.32	.33	.59	.63	.63	.69
SEP 2	.29	.39	.49	.53	.57	.58	.60	.70	.82	.88	.91	.99
SEP 2	.31	.32	.33	.33	.33	.33	.34	.34	.34	.35	.35	.35
SEP 4	.31	.52	.74	.95	1.16	1.28	1.33	1.35	1.37	1.38	1.40	1.40
SEP 9	.25	.36	.50	.58	.61	.74	.79	.82	.83	.83	.92	1.08
SEP 9	.25	.49	.57	.58	.59	.59	.59	.60	.60	.60	.60	.60
SEP 10	.25	.36	.38	.38	.46	.50	.50	.55	.60	.63	.64	.67
SEP 11	.18	.28	.40	.51	.54	.54	.54	.54	.57	.58	.58	.59
NOV 29	.20	.34	.38	.40	.45	.66	.70	.78	.78	.81	.84	.84
YAP R												
JAN 11	.31	.56	.64	.67	.69	.74	.78	.82	.82	.83	.84	1.36
JAN 17	.18	.28	.38	.38	.38	.39	.50	.54	.54	.54	.54	.54
JAN 30	.23	.41	.52	.64	.77	.79	.80	.80	.80	.87	.87	.95
FEB 1	.25	.38	.48	.72	.87	1.04	1.18	1.61	1.80	1.96	2.02	2.06
FEB 9	.20	.38	.47	.51	.57	.60	.63	.70	.79	.87	1.04	1.09
APR 3	.22	.37	.47	.56	.70	.95	1.29	1.55	1.69	1.90	2.09	2.24
APR 3	.16	.27	.38	.48	.63	.80	.91	1.05	1.17	1.30	1.66	1.83
APR 20	.21	.31	.43	.51	.82	1.11	1.34	1.36	1.36	1.36	1.36	1.36
APR 29	.22	.34	.37	.44	.46	.48	.50	.51	.53	.73	.74	.75
MAY 9	.35	.60	.81	1.15	1.50	2.27	*2.74	3.24	3.86	*4.99	5.55	*6.28
JUN 5	.28	.56	.81	.94	1.18	1.20	1.20	1.20	1.43	1.54	1.94	2.53
JUN 6	.30	.44	.47	.47	.49	.50	.51	.52	.52	.52	.65	.75
JUN 16	.22	.29	.35	.50	.62	.63	.63	.63	.63	.63	.63	.63
JUN 28	.30	.51	.63	.68	.78	.91	1.02	1.17	1.19	1.20	1.26	1.27
JUN 29	.27	.47	.65	.71	.87	1.09	1.10	1.11	1.40	1.57	1.57	1.58
JUL 1	.19	.30	.33	.33	.33	.34	.36	.42	.42	.42	.42	.42
JUL 7	.13	.22	.35	.43	.52	.52	.53	.54	.54	.57	.58	.59
JUL 8	.19	.36	.49	.57	.66	.85	.91	.94	.98	1.00	1.11	1.18
JUL 9	.25	.42	.48	.53	.55	.55	.56	.57	.58	.59	.60	.60
JUL 23	.20	.40	.58	.66	.83	.90	.92	.97	1.00	1.00	1.00	1.00
JUL 23	.20	.32	.48	.52	.56	.61	.65	.73	.73	.74	.76	.80
JUL 25	.20	.31	.41	.51	.68	.79	.86	1.00	1.02	1.03	1.03	1.03
JUL 27	.24	.46	.62	.67	.80	.84	.85	.86	.89	.91	.93	.94
JUL 27	.36	.61	.64	.64	.65	.65	.65	.65	.65	.68	.68	.68
AUG 14	.37	.68	.83	.87	.89	.90	1.22	1.55	1.95	2.01	2.10	2.11
AUG 18	.25	.43	.65	.78	1.21	1.52	1.61	1.68	1.77	1.85	1.91	1.91
AUG 20	.40	.55	.61	.63	.65	.68	1.11	1.50	1.53	1.53	1.53	1.53
AUG 27	.19	.32	.43	.51	.58	.79	.87	1.05	1.37	1.47	1.51	1.51
SEP 4	.20	.37	.41	.45	.46	.47	.48	.49	.51	.54	.60	.65
SEP 5	.40	.71	.94	1.15	1.57	1.95	2.33	2.35	2.40	2.53	2.64	3.01
SEP 6	.39	.49	.50	.50	.50	.50	.50	.50	.50	.50	.51	.51
SEP 6	.29	.55	.67	.72	.82	.86	.88	.94	1.04	1.18	1.20	1.23
SEP 29	.33	.63	.86	.99	1.16	1.43	1.59	1.65	1.65	1.65	1.66	1.66
OCT 5	.32	.58	.72	.82	1.01	1.11	1.12	1.12	1.23	1.23	1.23	1.23
NOV 1	.25	.49	.62	.76	.92	1.20	1.32	1.37	1.48	1.51	1.61	1.65
DEC 12	.16	.32	.42	.52	.61	.62	.63	.64	.64	.64	.64	.66
DEC 24	.18	.32	.43	.51	.66	.83	.83	.83	.86	.90	.90	1.29
PENNSYLVANIA												
ALLENTOWN												
JAN 27	.22	.32	.38	.40	.43	.47	.52	.55	.63	.70	.87	.95
JUN 18	.45	.65	.95	1.05	1.35	1.75	2.12	2.63	2.90	*3.10	3.23	*3.30
JUL 3	.23	.40	.53	.73	1.06	1.28	1.35	1.40	1.47	1.54	1.66	1.70
JUL 15	.25	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28	.28
JUL 28	.25	.43	.47	.51	.54	.53	.53	.53	.53	.68	.93	.97
AUG 9	.36	.43	.46	.66	.76	.80	.86	.89	.92	.92	.92	.92
ERIE												
JUN 21	.28	.47	.60	.62	.65	.69	.72	.75	.75	.75	.75	.75
JUL 11	.30	.51	.61	.70	.81	.88	.94	.98	1.04	1.13	1.26	1.40
AUG 2	.21	.32	.35	.38	.50	.68	.71	.75	.76	.77	.81	.81
AUG 18	.16	.28	.38	.44	.65	.86	.93	.94	.94	.94	.96	1.01
HARRISBURG												
JAN 27	.30	.46	.48	.51	.58	.64	.71	.80	.86	.96	1.02	1.02
MAY 2	.26	.30	.33	.36	.38	.39	.39	.40	.42	.44	.44	.44
JUN 15	.15	.23	.34	.41	.48	.50	.50	.50	.50	.50	.50	.50
JUL 2	.18	.31	.38	.48	.59	.74	.98	1.15	1.26	1.43	1.56	1.63
JUL 25	.15	.22	.36	.39	.39	.41	.48	.53	.53	.53	.53	.54
JUL 29	.12	.24	.28	.32	.48	.66	.82	1.11	1.25	1.33	1.38	1.42
AUG 3	.30	.47	.59	.71	.91	1.13	1.47	1.90	2.04	2.05	2.05	2.05
AUG 4	.26	.35	.39	.42	.46	.46	.46	.46	.46	.46	.46	.46
AUG 8	.12	.20	.32	.39	.50	.56	.58	.68	.82	.84	.86	.90
SEP 21	.20	.34	.45	.46	.47	.48	.49	.52	.54	.54	.54	.54
SEP 28	.16	.27	.33	.44	.50	.52	.53	.53	.53	.53	.53	.53
OCT 18	.27	.37	.39	.40	.46	.62	.68	.74	.76	.79	.87	.90
OCT 25	.13	.24	.32	.42	.50	.58	.65	.70	.78	.82	.86	.92
PHILADELPHIA												
JAN 27	.20	.34	.36	.40	.46	.50	.63	.68	.71	.84	.92	1.06
MAY 15	.20	.39	.39	.39	.39	.39	.39	.40	.40	.40	.41	.41
JUN 22	.40	.69	.84	.96	1.35	1.66	1.82	2.00	2.39	2.45	2.47	2.47
JUL 10	.25	.40	.46	.49	.55	.57	.57	.57	.60	.61	.65	.65
JUL 11	.52	1.00	1.34	1.46	1.62	1.63	1.63	1.63	1.63	1.63	1.63	1.63
JUL 29	.28	.42	.52	.61	.61	.62	.63	.77	.80	1.02	1.03	1.17
JUL 31	.24	.46	.60	.61	.62	.63	.63	.65	.65	.65	.65	.65
AUG 9	.13	.26	.35	.44	.55	.62	.64	.67	.74	.81	.84	.94
AUG 27	.24	.42	.44	.50	.55	.56	.58	.62	.64	.66	.73	.80
SEP 21	.24	.38	.49	.50	.76	.76	.90	1.06	1.08	1.08	1.10	1.10

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
PENNSYLVANIA												
PITTSBURGH												
APR 17	.20	.31	.34	.36	.39	.42	.43	.43	.43	.43	.43	.43
APR 22	.22	.35	.36	.39	.47	.50	.51	.52	.52	.52	.52	.55
JUL 2	.20	.32	.37	.43	.50	.51	.52	.55	.55	.55	.55	.55
JUL 24	.38	.76	.86	.93	1.12	1.34	1.44	1.44	1.44	1.44	1.44	1.44
AUG 20	.32	.44	.64	.74	.83	1.04	1.09	1.09	1.09	1.09	1.09	1.09
PITTSBURGH C												
APR 6	.25	.42	.45	.49	.76	.76	.78	.80	.80	.88	.99	.99
JUL 2	.58	.83	.99	1.03	1.07	1.10	1.11	1.13	1.13	1.13	1.13	1.13
JUL 27	.28	.53	.80	.83	.86	.88	1.03	1.40	1.50	1.50	1.60	1.60
READING C												
JUL 10	.17	.33	.40	.57	.72	.78	.90	.95	1.01	1.11	1.25	1.30
JUL 16	.21	.35	.41	.44	.45	.45	.51	.52	.52	.52	.52	.52
JUL 28	.14	.28	.37	.44	.46	.51	.53	.53	.54	.55	.55	.56
AUG 6	.23	.40	.45	.46	.48	.49	.51	.52	.53	.53	.53	.54
AUG 9	.21	.35	.45	.52	.75	.89	.90	.90	.91	.92	.91	.92
OCT 10	.23	.39	.45	.50	.59	.65	.66	.66	.66	.66	.66	.66
WILKES BARRE												
JUN 15	.26	.39	.41	.42	.48	.49	.49	.49	.49	.49	.49	.49
JUN 16	.34	.57	.75	.84	1.09	1.16	1.16	1.17	1.75	2.24	2.27	2.28
JUL 2	.17	.31	.34	.35	.36	.37	.40	.45	.47	.50	.53	.55
JUL 11	.17	.33	.35	.35	.36	.36	.37	.39	.41	.41	.41	.41
AUG 3	.19	.26	.29	.37	.51	.52	.54	.67	.70	.73	.73	.73
AUG 20	.25	.36	.44	.47	.47	.47	.48	.50	.51	.52	.52	.52
RHODE ISLAND												
BLOCK ISLAND												
JUL 20	.26	.46	.56	.68	1.01	1.13	1.27	1.46	1.61	1.70	1.80	1.85
DEC 28	.15	.26	.35	.42	.55	.70	.85	1.03	1.18	1.34	1.46	1.90
PROVIDENCE												
JUN 12	.27	.51	.64	.65	.66	.66	.66	.66	.66	.66	.66	.66
JUL 15	.20	.32	.37	.42	.48	.50	.59	.64	.65	.65	.65	.65
JUL 25	.30	.36	.38	.38	.39	.40	.40	.40	.41	.41	.41	.41
OCT 26	.26	.37	.42	.45	.50	.53	.64	.72	.73	.74	.75	.75
SOUTH CAROLINA												
CHARLESTON												
MAR 12	.55	.87	.88	.89	.89	.90	.90	.90	.90	.90	.90	.90
MAY 22	.15	.23	.31	.34	.50	.62	.67	.75	1.00	1.20	1.33	1.56
MAY 22	.23	.43	.54	.68	.98	1.33	1.58	1.80	2.09	2.23	2.29	2.39
MAY 22	.35	.50	.75	.95	.98	1.02	1.02	1.05	1.05	1.07	1.17	1.24
MAY 31	.40	.80	1.00	1.02	1.17	1.18	1.31	1.33	1.38	1.38	1.38	1.38
JUN 18	.24	.27	.35	.46	.47	.47	.47	.47	.47	.47	.47	.47
JUN 27	.37	.55	.60	.68	.69	.69	.69	.69	.74	.76	.81	.84
JUN 27	.35	.67	.73	.74	.79	.92	.95	.96	.97	1.00	1.03	1.10
JUL 14	.40	.41	.41	.41	.55	.60	.62	.65	.85	.85	.86	.86
JUL 18	.40	.65	.80	1.05	1.55	1.80	1.90	2.10	2.24	2.31	2.32	2.33
JUL 22	.30	.43	.50	.73	1.00	1.18	1.20	1.29	1.29	1.29	1.29	1.29
JUL 26	.18	.28	.36	.38	.40	.45	.46	.47	.50	.65	.68	.75
SEP 26	.25	.32	.34	.36	.39	.40	.41	.43	.43	.43	.43	.43
NOV 23	.28	.31	.36	.38	.43	.46	.48	.50	.50	.50	.50	.50
DEC 28	.33	.52	.55	.61	.86	.92	.98	1.07	1.13	1.17	1.18	1.25
CHARLESTON C												
MAR 12	.29	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
MAY 13	.24	.40	.47	.56	.79	.83	.83	.83	.84	.84	.84	.84
MAY 22	.20	.35	.48	.62	.75	.79	.87	1.14	1.31	1.44	1.54	1.73
MAY 22	.25	.43	.57	.61	.79	1.15	1.24	1.33	1.43	1.51	1.60	1.61
JUN 27	.51	.99	1.27	1.40	1.57	1.60	1.68	1.71	1.71	1.71	1.71	1.78
JUN 27	.45	.68	.77	.84	.89	.91	.92	.93	.93	.93	.93	.93
JUL 7	.18	.31	.44	.51	.63	.73	.78	.79	.79	.79	.79	.80
JUL 8	.28	.47	.53	.63	.74	.75	.91	.97	1.05	1.05	1.06	1.09
JUL 9	.30	.43	.45	.45	.45	.45	.46	.52	.57	.61	.61	.61
JUL 13	.26	.30	.30	.30	.30	.30	.31	.38	.38	.38	.56	.56
JUL 14	.29	.32	.34	.36	.37	.38	.41	.42	.65	.69	.73	.75
JUL 18	.45	.67	.84	.89	.96	1.05	1.06	1.07	1.11	1.12	1.16	1.24
JUL 26	.23	.35	.44	.50	.54	.57	.60	.65	.73	.75	.76	.79
AUG 21	.26	.43	.44	.45	.46	.46	.46	.46	.46	.46	.46	.46
DEC 28	.14	.23	.37	.41	.44	.49	.56	.69	.73	.76	.78	.88
COLUMBIA												
MAR 12	.54	.64	.80	.88	.94	.96	1.04	1.04	1.04	1.04	1.04	1.04
APR 23	.20	.39	.49	.65	.74	.78	.84	.85	.87	.87	.87	.87
MAY 21	.39	.63	.86	.95	1.16	1.40	1.51	1.52	1.55	1.55	1.55	1.56
MAY 22	.18	.30	.42	.48	.61	.69	.77	.89	1.04	1.18	1.36	1.54
MAY 22	.26	.32	.36	.38	.42	.59	.79	.85	.87	.88	.90	.90
JUN 4	.37	.64	.77	.84	.91	.94	.96	1.02	1.03	1.06	1.06	1.07
JUN 25	.73	.86	.93	.94	.96	.96	.96	.96	.96	.96	.96	.96
JUL 7	.38	.45	.53	.55	.56	.56	.56	.56	.56	.56	.56	.56
JUL 7	.55	.95	1.35	1.70	2.20	2.66	2.76	2.79	2.82	2.89	2.97	3.00
JUL 25	.50	.55	.57	.62	.73	.79	.79	.79	.79	.79	.79	.79
JUL 29	.25	.43	.46	.52	.59	.65	.70	.72	.74	.74	.74	.74
AUG 2	.26	.45	.51	.56	.68	.76	.80	.81	.81	.81	.81	.81
AUG 10	.40	.72	1.00	1.33	2.00	2.47	3.25	3.63	3.80	3.83	3.83	3.83
AUG 21	.20	.33	.36	.37	.40	.41	.42	.45	.59	.60	.63	.73
AUG 22	.45	.71	.84	.92	1.13	1.23	1.27	1.27	1.27	1.27	1.27	1.27
AUG 23	.25	.48	.65	.75	.79	1.03	1.17	1.40	1.46	1.55	1.66	1.83
SEP 9	.20	.31	.35	.43	.53	.57	.64	.74	.75	.76	.76	.76
NOV 24	.35	.41	.52	.56	.58	.72	.74	.75	.88	.95	1.08	1.25
GNVLE SPARTANBURG												
JAN 27	.30	.38	.42	.45	.51	.55	.57	.57	.57	.57	.57	.57
MAY 2	.35	.37	.38	.39	.41	.41	.41	.41	.41	.41	.62	.81
MAY 7	.41	.56	.68	.76	.80	.83	.87	.89	.96	1.02	1.19	1.29
JUN 25	*.70	*1.05	*1.33	1.44	*1.92	1.97	*1.97	1.97	1.97	1.98	2.05	2.08
JUL 1	.27	.37	.41	.45	.49	.52	.53	.55	.58	.60	.60	.60
JUL 6	.29	.40	.45	.53	.72	.93	1.09	1.30	1.37	1.42	1.47	1.48
JUL 25	.22	.35	.49	.53	.53	.54	.54	.54	.57	.60	.60	.60

EXCESSIVE SHORT DURATION RAINFALL

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
SOUTH CAROLINA												
GNVLE SPARTANBURG												
AUG 22	.27	.52	.63	.68	.81	1.02	1.09	1.28	1.34	1.39	1.42	1.42
AUG 23	.27	.50	.60	.66	.73	.78	.91	1.02	1.23	1.57	1.70	1.73
OCT 17	.19	.33	.39	.41	.53	.65	.72	.77	.87	.96	1.05	1.07
SOUTH DAKOTA												
ABERDEEN												
APR 30	.41	.49	.51	.51	.52	.54	.54	.55	.55	.55	.55	.55
JUN 26	.25	.32	.36	.37	.38	.47	.50	.58	.61	.64	.68	.80
JUL 9	.26	.48	.53	.70	.89	.94	.97	.97	.97	.97	.97	.97
AUG 15	.38	.72	.80	.96	.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SEP 17	.36	.56	.65	.78	.81	.81	.98	1.13	1.17	1.20	1.21	1.24
HURON												
JUN 18	*1.05	*1.75	*2.45	2.80	*3.42	3.73	*3.83	4.83	4.93	*4.98	5.08	*5.08
SEP 18	.16	.22	.36	.42	.50	.55	.63	.68	.80	.88	.93	.98
RAPID CITY												
APR 19	.37	.47	.49	.50	.60	1.00	1.07	1.08	1.10	1.13	1.17	1.18
SIOUX FALLS												
APR 6	.25	.44	.62	.75	.83	.84	.84	.84	.84	.84	.84	.84
JUN 4	.26	.32	.33	.35	.38	.39	.40	.40	.40	.40	.40	.40
JUN 18	.17	.32	.41	.48	.60	.78	.97	1.05	1.17	1.25	1.34	1.35
AUG 25	.29	.40	.53	.69	.84	1.20	1.20	1.50	1.55	1.65	1.68	1.68
TENNESSEE												
BRISTOL												
MAR 11	.15	.30	.35	.36	.39	.40	.40	.40	.40	.40	.40	.40
MAY 19	.24	.36	.42	.43	.46	.53	.82	.83	.86	.99	1.00	1.06
JUL 29	.20	.35	.42	.50	.57	.62	.73	.84	.93	1.23	1.28	1.28
AUG 22	.25	.50	.54	.57	.77	.83	.87	.93	.94	.95	.95	.95
SEP 21	.22	.30	.35	.40	.43	.46	.53	.57	.60	.60	.60	.60
SEP 21	.20	.35	.36	.36	.36	.36	.36	.36	.36	.36	.40	.40
CHATTANOOGA												
MAY 15	.21	.38	.49	.54	.89	.93	.93	.94	.94	.94	.94	.94
JUL 1	.29	.42	.45	.47	.67	.84	.84	.84	.84	.86	.90	.90
JUL 6	.14	.28	.33	.44	.49	.72	.78	.88	1.13	1.21	1.26	1.31
JUL 6	.16	.31	.44	.47	.69	.69	.70	.70	.70	.71	.71	.71
JUL 7	.21	.40	.46	.51	.57	.59	.75	.79	.85	.90	.92	.93
JUL 26	.27	.51	.59	.60	.60	.60	.60	.60	.60	.60	.60	.60
AUG 26	.14	.20	.28	.37	.41	.66	.67	.67	.68	.69	.76	.76
DEC 18	.21	.34	.42	.54	.70	.71	.73	.75	.76	.79	.83	.84
DEC 18	.25	.50	.63	.70	.74	.76	.85	.86	.88	1.00	1.05	1.09
DEC 21	.24	.32	.38	.41	.43	.45	.49	.55	.62	.68	.73	.78
KNOXVILLE												
MAR 6	.14	.23	.25	.34	.50	.70	.82	1.00	1.16	1.31	1.45	1.50
MAY 7	.20	.35	.37	.41	.45	.46	.49	.55	.58	.61	.61	.65
JUN 1	.18	.35	.41	.45	.64	.73	.82	.89	.93	1.01	1.05	1.09
JUN 3	.31	.51	.57	.66	.80	.89	1.07	1.11	1.20	1.32	1.37	1.51
JUN 22	.23	.45	.47	.55	.55	.55	.56	.56	.56	.57	.60	.61
JUL 22	.45	.65	.70	.72	.80	.92	.95	.95	1.00	1.05	1.07	1.07
JUL 28	.47	.77	.78	.81	.82	.83	.92	1.06	1.09	1.10	1.32	1.39
JUL 29	.33	.65	.70	.81	1.05	1.12	1.12	1.13	1.14	1.14	1.33	1.33
AUG 23	.20	.30	.35	.45	.63	.75	.99	1.11	1.17	1.30	1.39	1.45
SEP 21	.16	.31	.34	.35	.36	.37	.37	.37	.37	.37	.37	.37
DEC 22	.19	.29	.37	.49	.53	.56	.58	.68	.77	.85	1.01	1.07
MEMPHIS												
JAN 26	.20	.31	.34	.44	.56	.69	.76	.83	.90	.96	1.00	1.01
FEB 2	.14	.24	.33	.39	.50	.56	.58	.59	.59	.60	.60	.60
MAY 1	.19	.32	.36	.40	.47	.51	.52	.53	.53	.54	.54	.54
MAY 6	.35	.45	.48	.65	.91	1.04	1.47	1.56	1.60	1.61	1.62	1.63
MAY 31	.41	.53	.63	.65	.69	.72	.74	.75	.75	.76	.92	1.02
JUL 2	.36	.54	.76	.92	1.32	1.56	1.59	1.62	1.63	1.64	1.64	1.65
JUL 28	.26	.47	.58	.63	.67	.88	1.13	1.20	1.21	1.21	1.23	1.24
AUG 2	.23	.40	.53	.69	.76	.82	.87	.91	.94	.98	1.06	1.12
AUG 3	.44	.66	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70
AUG 26	.39	.68	.92	1.13	1.75	2.11	2.11	2.12	2.12	2.12	2.12	2.12
SEP 8	.31	.42	.47	.47	.59	.83	.85	.88	.89	.90	.90	.90
OCT 16	.15	.27	.39	.45	.55	.62	.66	.70	.74	.76	.79	.84
DEC 2	.36	.54	.72	.86	1.11	1.31	1.38	1.63	2.37	2.54	2.63	2.70
NASHVILLE												
APR 23	.30	.45	.65	.70	.70	.70	.70	.70	.70	.70	.70	.70
MAY 1	.20	.35	.40	.43	.43	.43	.44	.44	.44	.44	.44	.45
MAY 13	.22	.40	.45	.66	.83	.93	1.07	1.19	1.25	1.33	1.36	1.56
JUN 21	.17	.22	.30	.40	.50	.63	.64	.65	.65	.65	.65	.65
JUN 28	.27	.39	.43	.47	.77	.82	.88	1.04	1.04	1.04	1.04	1.04
JUN 29	.25	.35	.48	.50	.72	.78	.83	.86	.86	.89	.96	.97
JUL 22	.25	.30	.41	.46	.68	.79	.83	.86	1.20	1.38	1.40	1.40
JUL 28	.25	.35	.37	.40	.50	.52	.52	.52	.52	.53	.54	.54
SEP 9	.17	.27	.37	.42	.58	.74	.81	.83	.84	.84	.86	.86
TEXAS												
ABILENE												
MAY 5	.25	.45	.48	.53	.60	.75	.88	.88	.88	.88	.88	.88
MAY 19	.19	.30	.35	.38	.40	.49	.51	.55	.57	.57	.58	.58
MAY 20	.35	.50	.53	.61	.68	.79	.83	.86	.93	.97	.99	.99
MAY 29	.25	.46	.61	.68	.73	.75	.76	.83	.87	.91	.97	1.01
JUL 11	.25	.42	.44	.54	.70	.75	.83	.86	.90	.93	.97	1.50
SEP 5	.16	.25	.35	.42	.43	.53	.73	.77	.81	.84	.85	.85
SEP 14	.35	.50	.52	.62	.74	.79	.84	.93	1.10	1.23	1.33	1.36
SEP 21	.22	.35	.36	.42	.51	.52	.55	.57	.80	.85	.85	.86

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
	Maximum precipitation in inches (5 to 180 minutes)											
TEXAS												
AMARILLO												
APR 11	.30	.48	.58	.62	.65	.68	.70	.70	.70	.70	.70	.70
APR 12	.22	.38	.56	.60	.61	.62	.64	.65	.82	.83	.83	.83
JUN 16	.17	.27	.36	.44	.52	.57	.59	.65	.68	.71	.76	.79
JUN 28	.20	.30	.34	.47	.51	.51	.51	.51	.51	.51	.51	.52
JUL 18	.30	.50	.68	.82	1.02	1.29	1.36	1.44	1.74	1.82	1.84	1.84
AUG 15	.14	.22	.30	.38	.50	.52	.52	.52	.52	.52	.52	.52
SEP 3	.22	.34	.38	.40	.60	.78	.78	.78	.78	.78	.78	.78
SEP 17	.18	.31	.38	.39	.39	.39	.39	.39	.39	.39	.39	.39
SEP 20	.40	.72	.77	.77	.80	.80	.80	.80	.80	.80	.80	.80
OCT 6	.20	.32	.36	.46	.68	.96	1.04	1.45	1.48	1.52	1.54	1.54
AUSTIN												
APR 23	.69	1.12	1.25	1.28	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
APR 30	.19	.31	.42	.52	.75	.81	.81	.81	.81	.81	.81	.81
MAY 20	.14	.24	.31	.38	.54	.73	.88	.99	1.01	1.04	1.09	1.10
JUL 2	.35	.52	.72	.83	.91	.94	.94	.94	.94	.94	.94	.94
AUG 17	.32	.56	.67	.80	.90	1.01	1.24	1.35	1.38	1.38	1.38	1.38
AUG 18	.25	.35	.42	.52	.56	.59	.62	.63	.63	.63	.64	.64
AUG 25	.15	.29	.38	.48	.68	.84	.85	.87	.87	.87	.87	.87
AUG 31	.13	.22	.32	.42	.54	.61	.62	.63	.63	.63	.63	.63
SEP 2	.16	.32	.42	.52	.62	.67	.70	.75	.80	.83	.85	.87
SEP 20	.18	.25	.34	.40	.43	.47	.51	.54	.56	.59	.65	.67
OCT 15	.25	.42	.58	.75	.99	1.25	1.45	1.67	2.05	2.21	2.69	2.83
OCT 30	.27	.38	.40	.40	.43	.52	.56	.61	.65	.68	.71	.71
NOV 9	.12	.21	.27	.37	.47	.58	.72	1.00	1.10	1.21	1.27	1.36
DEC 15	.23	.45	.62	.79	1.02	1.16	1.24	1.34	1.38	1.40	1.46	1.58
BROWNSVILLE												
JUN 2	.17	.31	.44	.57	.71	.81	.95	1.00	1.03	1.04	1.06	1.07
AUG 12	.25	.34	.36	.36	.36	.37	.37	.37	.37	.37	.37	.37
AUG 20	.16	.30	.36	.41	.43	.43	.43	.43	.43	.43	.44	.44
AUG 22	.44	.69	1.04	1.28	1.67	1.87	1.92	1.95	1.97	2.01	2.09	2.15
SEP 19	.25	.32	.39	.47	.53	.62	.73	.78	.79	.82	1.09	1.15
SEP 20 T	M	M	M	M	M	M	M	M	M	M	M	M
OCT 16	.24	.39	.47	.57	.79	.99	1.02	1.07	1.11	1.12	1.15	1.22
CORPUS CHRISTI												
FEB 6 T	M	M	M	M	M	M	M	M	M	M	M	M
MAY 20	.29	.44	.59	.71	.82	.84	.87	.90	.93	.99	1.02	1.03
JUL 21	.21	.29	.35	.38	.39	.44	.49	.53	.59	.66	.73	.75
AUG 17	.50	.72	.73	.80	.82	.82	.82	.82	.82	.82	.82	.82
AUG 18	.20	.30	.35	.38	.40	.42	.45	.50	.55	.58	.60	.60
AUG 20	.26	.32	.39	.47	.62	.86	1.05	1.13	1.13	1.14	1.15	1.15
AUG 24	.19	.31	.36	.39	.40	.43	.43	.43	.43	.43	.43	.43
SEP 3	.24	.43	.61	.81	1.01	1.04	1.04	1.04	1.04	1.04	1.04	1.05
SEP 3	.19	.27	.39	.43	.60	.88	1.19	1.37	1.63	1.76	1.86	1.95
SEP 5	.32	.49	.57	.64	.73	.85	.95	1.03	1.05	1.06	1.09	1.13
SEP 19	.31	.31	.31	.32	.33	.34	.35	.35	.36	.37	.52	.52
SEP 20	.21	.33	.41	.49	.56	.69	.79	.89	.93	.99	1.00	1.22
SEP 21	.20	.32	.36	.36	.37	.37	.38	.39	.39	.40	.40	.40
SEP 21	.42	.77	1.02	1.08	1.71	2.33	2.42	2.54	2.60	2.66	2.73	2.89
SEP 21	.21	.33	.36	.48	.66	.89	1.06	1.38	1.41	1.41	1.46	1.98
SEP 21	.27	.54	.60	.65	.71	.72	.72	.73	.74	.77	.77	.78
SEP 22	.42	.64	.85	1.11	1.36	1.42	1.54	1.70	1.81	1.81	2.24	2.50
OCT 15	.12	.20	.30	.36	.47	.62	.77	1.00	1.09	1.16	1.35	1.56
DALLAS												
MAR 25	.32	.49	.50	.54	.58	.58	.58	.58	.58	.58	.58	.58
APR 21	.27	.42	.47	.55	.75	.98	1.19	1.31	1.41	1.43	1.52	1.59
APR 25	.17	.32	.41	.46	.49	.49	.49	.49	.50	.50	.50	.54
APR 30	.33	.54	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
JUN 12	.27	.43	.58	.71	.76	.94	1.19	1.21	1.22	1.22	1.23	1.23
OCT 7	.18	.29	.41	.50	.68	.93	1.07	1.15	1.20	1.25	1.29	1.29
DEL RIO												
APR 17	.33	.50	.56	.62	.75	.81	.84	.84	.84	.93	.94	.94
MAY 4	.22	.44	.51	.53	.59	.62	.65	.65	.65	.65	.65	.65
AUG 25	.26	.35	.37	.39	.40	.41	.41	.41	.41	.41	.41	.41
SEP 2	*1.15	1.62	*2.12	2.74	*3.28	3.34	3.41	3.57	3.64	3.72	3.74	3.76
OCT 29	.20	.30	.36	.41	.44	.45	.50	.56	.62	.68	.78	.84
EL PASO												
SEP 20	.25	.32	.42	.43	.56	.68	.95	.96	.96	.96	.96	.96
FORT WORTH												
MAR 20	.17	.30	.37	.39	.42	.44	.46	.49	.50	.54	.61	.75
APR 20	.24	.39	.42	.47	.50	.55	.69	.70	.70	.70	.70	.70
APR 21	.25	.40	.43	.46	.58	.78	.88	.90	1.00	1.13	1.23	1.26
MAY 14	.25	.36	.36	.38	.40	.43	.48	.48	.58	.59	.62	.63
MAY 19	.21	.36	.48	.55	.60	.62	.66	.72	.74	.76	.80	.82
MAY 30	.29	.35	.40	.44	.46	.53	.53	.53	.53	.53	.53	.53
MAY 31	.20	.26	.38	.41	.56	.76	.89	.96	.99	.99	.99	.99
SEP 7	.16	.29	.32	.35	.50	.55	.55	.55	.56	.56	.57	.57
SEP 14	.21	.37	.39	.47	.54	.68	.93	.97	1.00	1.06	1.10	1.11
SEP 19	.35	.57	.67	.76	.80	1.02	1.08	1.08	1.08	1.08	1.08	1.08
OCT 7	.17	.32	.42	.48	.55	.79	.88	.93	1.00	1.05	1.17	1.22
GALVESTON U												
MAR 20	.23	.40	.51	.60	.63	.69	.72	.75	.77	.78	.82	.83
APR 13	.22	.35	.51	.61	.66	.90	1.02	1.14	1.16	1.39	1.45	1.46
MAY 1	.19	.30	.36	.40	.58	.71	.72	.72	.72	.72	.72	.72
MAY 20	.20	.26	.37	.50	.66	.88	.96	1.01	1.06	1.07	1.07	1.11
JUN 1	.21	.33	.41	.44	.45	.45	.45	.45	.49	.50	.51	.51
JUL 13	.34	.57	.76	.93	1.24	1.50	1.65	1.72	1.75	1.81	1.87	1.97
JUL 19	.50	.70	.92	1.07	1.39	1.62	1.69	1.75	1.81	1.86	1.88	1.89
JUL 20	.17	.27	.40	.45	.50	.55	.61	.62	.62	.62	.63	.63
JUL 21	.23	.40	.50	.52	.57	.61	.63	.63	.63	.65	.68	.70
JUL 23	.34	.53	.65	.75	.92	1.40	1.73	2.05	2.13	2.20	2.37	2.47
AUG 11	.19	.31	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37
AUG 16	.30	.45	.59	.80	.88	.89	.89	.89	.89	.93	.94	.94
AUG 19	.35	.60	.75	.89	1.10	1.24	1.33	1.39	1.41	1.42	1.44	1.44
SEP 5	.16	.26	.37	.49	.64	.70	.77	.88	1.00	1.05	1.09	1.10
OCT 15	.25	.37	.44	.48	.52	.56	.59	.64	.69	.71	.73	.88
OCT 16	.14	.25	.33	.45	.61	.80	.97	1.10	1.14	1.25	1.37	1.42
NOV 11	.20	.36	.49	.56	.73	.95	1.03	1.21	1.39	1.48	1.54	1.57

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Maximum precipitation in inches (5 to 180 minutes)

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
TEXAS												
HOUSTON U												
APR 13	.20	.35	.52	.60	.73	.82	.93	1.28	1.36	1.42	1.43	1.46
MAY 3	.28	.48	.60	.66	.80	.81	.82	.82	.82	.82	.82	.82
MAY 15	.21	.33	.38	.41	.44	.44	.44	.44	.44	.44	.44	.44
MAY 29	.41	.62	1.00	1.24	1.39	1.60	1.64	1.70	1.71	1.71	1.76	1.77
JUL 12	.19	.32	.40	.44	.48	.69	.82	1.00	1.04	1.04	1.04	1.04
JUL 13	.20	.32	.37	.38	.38	.38	.44	.44	.44	.45	.67	.83
JUL 23	.19	.33	.44	.55	.69	.76	.78	.79	.79	.82	.84	.85
SEP 5	.17	.30	.41	.48	.53	.60	.67	.74	.76	.77	.77	.77
SEP 21	.22	.30	.45	.52	.63	.76	1.00	1.32	1.55	1.64	1.91	1.96
OCT 15	.15	.28	.38	.44	.59	.69	.76	.85	.94	1.01	1.05	1.06
DEC 9	.30	.38	.47	.63	.77	.90	.91	.94	.95	.97	1.02	1.08
LUBBOCK												
MAR 24	.25	.31	.38	.50	.70	.70	.70	.70	.70	.70	.70	.70
APR 11	.18	.25	.35	.40	.50	.63	.73	.82	.82	.82	.82	.87
MAY 19	.27	.37	.43	.49	.74	.77	.80	.80	.80	.80	.80	.80
MAY 27	*.52	.73	*.97	1.15	*1.27	1.29	1.30	1.35	1.46	1.46	1.55	1.69
MAY 28	.25	.37	.47	.60	.74	.78	.79	.82	.84	.85	.85	.85
JUN 1	*.58	*1.04	*1.50	1.87	*2.50	2.85	*3.45	4.38	4.50	*4.60	4.76	*5.09
JUN 24	.25	.45	.60	.80	.93	.98	1.05	1.11	1.17	1.22	1.25	1.26
JUL 18	.25	.50	.70	.85	1.25	1.65	1.81	1.94	2.00	2.00	2.10	2.18
MIDLAND												
MAR 22	.27	.54	.71	.81	.90	.90	.93	.93	.93	.93	.93	.93
JUN 29	.36	.47	.50	.50	.52	.52	.52	.52	.52	.52	.52	.52
PORT ARTHUR												
JAN 26	.34	.42	.45	.48	.50	.51	.51	.51	.51	.51	.51	.51
APR 13	.38	.60	.76	.94	1.22	1.63	2.02	2.55	2.82	3.03	3.47	3.50
APR 15	.32	.51	.63	.76	.91	1.03	1.08	1.36	1.42	1.47	1.48	1.48
MAY 1	*.82	*1.29	1.70	1.98	2.31	2.42	2.46	2.47	2.47	2.47	2.48	2.48
MAY 15	.21	.31	.38	.40	.47	.53	.59	.61	.61	.64	.64	.65
MAY 29	.20	.32	.43	.63	.77	.93	1.00	1.00	1.01	1.02	1.05	1.06
JUL 13	.25	.40	.46	.47	.48	.48	.48	.48	.48	.48	.48	.48
JUL 13	.26	.44	.60	.69	.80	.86	.87	.87	.88	.90	1.06	1.14
JUL 19	.29	.36	.39	.44	.46	.56	.61	.68	.74	.77	.82	.89
JUL 20	.21	.32	.36	.45	.54	.64	.71	.78	.81	.82	.84	.85
AUG 5	.16	.31	.44	.55	.82	1.03	1.04	1.04	1.05	1.05	1.05	1.06
AUG 17	.42	.78	1.04	1.16	1.54	2.02	2.11	2.44	2.68	2.90	2.92	3.01
AUG 18	.41	.61	.76	.86	.92	.92	.92	.92	.92	.92	.92	.92
AUG 19	.25	.37	.46	.49	.61	1.04	1.16	1.24	1.31	1.41	1.53	1.56
AUG 25	.29	.40	.42	.44	.45	.45	.46	.48	.49	.50	.53	.55
SEP 4	.25	.31	.34	.35	.36	.36	.36	.36	.36	.36	.36	.36
SEP 4	.23	.36	.40	.46	.51	.74	.92	1.00	1.02	1.02	1.04	1.04
SEP 5	.24	.37	.43	.57	.64	.68	.72	.76	.79	.81	.82	.83
SAN ANGELO												
MAY 29	.17	.33	.34	.42	.53	.74	.89	.92	.98	.99	1.02	1.04
JUN 29	.19	.33	.38	.52	.73	.75	.76	.78	.78	.78	.78	.78
AUG 17	.12	.20	.29	.40	.53	.69	.74	.74	.74	.74	.74	.74
SEP 14	.17	.30	.40	.50	.75	.93	1.01	1.30	1.56	1.71	1.80	1.88
OCT 7	.28	.56	.64	.83	.90	.91	.92	.92	.92	.92	.92	.92
OCT 7	.30	.35	.39	.66	.70	.72	.72	.72	.72	.72	.72	.72
SAN ANTONIO												
MAY 20	.28	.53	.75	.84	.94	.98	.98	1.01	1.01	1.03	1.03	1.03
MAY 29	.20	.30	.42	.45	.47	.55	.60	.67	.70	.73	.73	.73
JUL 1	.20	.34	.37	.39	.45	.51	.52	.54	.56	.57	.58	.59
JUL 13	.30	.47	.59	.73	.81	.85	.86	.86	.86	.86	.86	.86
AUG 17	.16	.28	.34	.43	.52	.63	.71	.93	.97	1.00	1.05	1.15
AUG 23	.26	.43	.51	.60	.66	.71	.87	.89	.89	.91	.91	.91
SEP 2	.21	.35	.44	.59	.64	.84	1.01	1.09	1.13	1.15	1.15	1.15
SEP 15	.31	.50	.65	.71	.71	.71	.75	.92	.95	.95	.95	.95
SEP 15	.22	.31	.44	.55	.75	1.00	1.19	1.21	1.21	1.21	1.21	1.21
SEP 16	.19	.31	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
SEP 20	.21	.36	.44	.61	.65	.74	.82	.91	1.03	1.10	1.15	1.16
OCT 29	.20	.30	.36	.41	.46	.50	.50	.53	.56	.56	.58	.59
VICTORIA												
APR 13	.24	.45	.55	.65	.83	.88	1.03	1.21	1.45	1.48	1.48	1.48
MAY 20	.15	.30	.35	.40	.70	.82	.89	.89	.89	.89	.90	.90
JUL 20	.25	.40	.48	.50	.52	.52	.52	.52	.52	.52	.52	.52
JUL 23	.15	.30	.35	.35	.40	.42	.46	.46	.46	.46	.46	.46
AUG 18	.20	.35	.38	.48	.62	.64	.66	.66	.66	.66	.68	.68
SEP 20	.33	.47	.56	.63	.72	.84	1.01	1.25	1.42	1.55	1.67	1.76
SEP 20	.43	.80	.92	1.12	1.51	1.59	1.63	1.70	1.81	1.93	2.05	2.25
SEP 21	.30	.34	.39	.50	.77	.95	1.31	1.40	1.50	1.63	2.12	2.26
OCT 7	.30	.55	.60	.67	.77	.90	.97	1.00	1.03	1.05	1.08	1.12
OCT 15	.24	.36	.53	.62	.78	1.12	1.44	1.74	1.88	1.96	2.23	2.31
WACO												
MAR 25	.25	.35	.39	.44	.48	.74	.78	.80	.80	.80	.80	.80
APR 11	.30	.42	.53	.69	.93	1.30	1.77	2.18	2.41	2.48	2.77	2.90
APR 13	.34	.54	.61	.72	.77	.81	.88	.93	1.00	1.04	1.07	1.07
APR 17	.42	.57	.68	.78	.97	1.03	1.03	1.09	1.09	1.11	1.20	1.23
APR 22	.32	.48	.57	.72	1.03	1.14	1.26	1.30	1.30	1.30	1.30	1.30
APR 30	.35	.55	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
MAY 29	.28	.45	.50	.63	.78	.97	1.02	1.02	1.05	1.10	1.22	1.32
MAY 31	.43	.60	.62	.64	.79	.93	.94	.97	.98	.98	.98	.98
JUL 19	.20	.30	.35	.38	.53	.65	.73	.76	.78	.81	.93	.98
SEP 15	.25	.35	.45	.55	.75	.90	1.00	1.07	1.10	1.12	1.15	1.15
DEC 14	.25	.38	.42	.60	.60	.61	.62	.63	.64	.64	.64	.64
WICHITA FALLS												
APR 12	.30	.51	.62	.68	.81	.98	1.20	1.72	1.92	2.26	2.35	2.87
MAY 4	.28	.50	.78	.83	.84	.84	.85	.86	.86	.86	.86	.86
MAY 20	.36	.60	.73	.78	.98	1.06	1.18	1.48	1.50	1.50	1.50	1.50
MAY 29 T	M	M	M	M	M	M	M	M	M	M	M	M
MAY 30	.21	.36	.48	.53	.58	.60	.61	.63	.66	.66	.79	1.03
JUL 3	.21	.34	.44	.51	.63	.74	.77	.80	.84	.84	.84	.84
JUL 5	.20	.34	.43	.54	.60	.82	.82	.82	.82	.82	.82	.82
SEP 3	.16	.30	.36	.50	.69	.84	.88	.90	.90	.90	.90	.90
SEP 26	.20	.30	.44	.52	.56	.56	.56	.56	.56	.56	.56	.56

T CLOCK MALFUNCTION
M NO RECORD

Maximum precipitation in inches (5 to 180 minutes)

Station and date	5	10	15	20	30	45	60	80	100	120	150	180
UTAH												
MILFORD												
JUL 17	*.45	*.56	*.58	.58	.60	.62	.66	.68	.70	.70	.70	.70
SALT LAKE CITY												
JUL 16	.25	.48	.55	.58	.64	.73	.77	.77	.77	.78	.80	.83
WENDOVER												
JUL 15	.32	.37	.38	.38	.44	.46	.46	.46	.46	.46	.46	.46
VERMONT												
BURLINGTON												
JUN 16	.21	.35	.38	.39	.39	.39	.40	.42	.44	.44	.44	.44
JUL 21	.38	.56	.78	.93	1.16	1.17	1.69	1.98	2.02	2.03	2.03	2.04
AUG 4	.24	.42	.52	.56	.65	.89	.95	1.00	1.04	1.04	1.04	1.04
SEP 22	.27	.32	.36	.40	.43	.50	.57	.76	.84	.90	.92	.95
VIRGINIA												
LYNCHBURG												
JUN 23	.24	.47	.60	.75	1.00	1.08	1.43	1.72	1.74	1.98	2.01	2.01
JUL 14	.17	.28	.33	.40	.44	.46	.46	.46	.46	.46	.48	.52
JUL 18	.27	.39	.43	.48	.64	.69	.69	.69	.69	.69	.75	.82
JUL 20	.33	.60	.75	.80	.82	.84	.84	.84	.84	.84	.84	.84
AUG 19	.30	.49	.54	.60	.67	.72	.88	1.04	1.25	1.40	1.44	1.45
AUG 20	.26	.48	.55	.57	.62	.63	.64	.65	.65	.65	.65	.65
AUG 23	.18	.30	.42	.49	.70	.96	1.00	1.05	1.07	1.46	1.54	1.71
SEP 21	.25	.33	.34	.34	.34	.46	.48	.49	.50	.50	.50	.50
NORFOLK												
MAY 7	.24	.31	.37	.45	.51	.51	.51	.51	.51	.51	.51	.51
JUN 25	.17	.29	.38	.46	.53	.57	.69	.74	.78	.80	.81	.81
JUL 19	.16	.31	.46	.56	.77	.95	1.04	1.08	1.14	1.17	1.17	1.17
JUL 21	.65	*1.28	1.61	1.90	2.28	2.30	2.30	2.30	2.30	2.30	2.30	2.30
AUG 10	.28	.48	.61	.68	.73	.82	.86	.89	.91	.92	.94	.94
AUG 21	.29	.40	.44	.44	.44	.45	.46	.54	.54	.57	.57	.57
AUG 24	.52	.96	1.43	1.81	2.36	3.19	3.64	3.79	3.81	3.81	3.81	3.81
DEC 3	.21	.34	.43	.52	.58	.64	.68	.72	.79	.83	.89	.91
RICHMOND												
MAY 7	.30	.42	.58	.65	.69	.81	.91	.97	1.00	1.01	1.01	1.09
JUN 23	.29	.50	.53	.53	.56	.57	.57	.57	.57	.57	.57	.57
JUN 25	.35	.51	.54	.57	.74	.84	.86	1.28	1.34	1.39	1.42	2.01
JUL 20	.45	.81	1.01	1.07	1.14	1.27	1.45	1.75	2.13	2.19	2.19	2.20
AUG 4	.26	.47	.50	.51	.52	.53	.54	.58	.60	.62	.64	.65
AUG 10	.29	.37	.38	.38	.38	.40	.41	.41	.41	.41	.41	.41
AUG 20	.18	.26	.42	.51	.64	.72	.79	.85	.89	.90	.97	1.01
AUG 24	.32	.44	.54	.60	.73	.79	.88	.94	.97	1.02	1.12	1.15
DEC 3	.13	.24	.31	.38	.55	.61	.68	.77	.84	.89	.92	.97
ROANOKE												
MAR 7	.15	.30	.34	.36	.46	.57	.86	.98	1.33	1.49	1.74	1.78
JUN 19	.50	*.88	.95	1.16	*1.36	1.41	1.41	1.41	1.41	1.41	1.41	1.41
JUN 25	.34	.40	.45	.50	.65	.66	.66	.66	.66	.66	.66	.66
JUL 15	.20	.38	.48	.64	.79	.82	.85	.85	.85	.85	.85	.85
AUG 22	.22	.36	.44	.56	.88	.93	.97	1.21	1.23	1.25	1.25	1.25
SEP 26	.16	.32	.38	.46	.56	.63	.65	.66	.66	.66	.66	.76
WALLOPS ISLAND												
MAY 29	*.32	*.44	*.48	.54	*.68	.78	*.80	.84	.84	*.84	.84	*.84
JUN 19 T	M	M	M	M	M	M	M	M	M	M	M	M
JUL 4	*.32	.41	*.57	.58	.59	.61	.61	.62	.62	.62	.62	.62
AUG 4	.15	.29	.35	.45	.50	.51	.52	.53	.53	.53	.53	.57
AUG 10	.35	*.69	*.79	.95	*1.57	1.72	*1.81	2.02	2.02	*2.02	2.02	*2.16
AUG 27	.32	.36	.44	.49	.49	.49	.49	.49	.50	.50	.50	.51
DEC 3	.22	.38	.40	.44	.54	.58	.64	.69	.77	.80	.84	.86
DEC 10	.15	.22	.24	.32	.47	.65	.85	1.03	1.34	1.48	1.70	1.83
WASH NATL AP												
JAN 27	.39	.45	.46	.49	.50	.56	.59	.60	.70	.93	.93	.95
JUN 22	.24	.44	.50	.61	.64	.67	.68	.68	.70	.71	.78	.80
JUL 2	.27	.36	.45	.55	.75	1.07	1.12	1.14	1.18	1.19	1.92	2.05
JUL 11	.38	.60	.71	.85	.94	.94	.94	.94	.94	.94	.94	.94
AUG 3	.31	.50	.53	.58	.64	.64	.65	.65	.66	.66	.66	.66
AUG 20	.28	.38	.44	.56	.66	.77	1.07	1.18	1.22	1.22	1.47	1.57
AUG 24	.41	.58	.61	.67	.79	.87	.93	1.12	1.25	1.43	1.46	1.48
WASHINGTON												
OLYMPIA						NONE						
QUILLAYUTE												
OCT 1	*.19	*.34	*.38	.56	*.67	.81	*.92	1.01	1.10	*1.23	1.24	*1.30
DEC 23	.15	.29	.37	.47	.52	.55	.55	.57	.58	.63	.80	.84
SEATTLE TACOMA						NONE						
SPOKANE						NONE						
STAMPEDE PASS						NONE						
WALLA WALLA C						NONE						
YAKIMA						NONE						

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
WEST INDIES												
SAN JUAN P.R.												
JAN 9	.20	.30	.33	.36	.37	.51	.56	.65	.68	.70	.72	.75
JUL 26	.36	.50	.51	.52	.57	.59	.66	.66	.66	.67	.67	.67
AUG 18	.32	.51	.60	.80	1.18	1.41	1.65	1.77	1.77	1.77	1.77	1.77
SEP 19	.29	.42	.51	.59	.64	1.06	1.14	1.43	1.50	1.50	1.51	1.51
SEP 20	.39	.55	.65	.72	.87	1.06	1.34	1.72	1.85	1.87	1.90	1.90
SEP 24	.20	.28	.41	.46	.48	.50	.53	.55	.55	.55	.57	.57
OCT 3	.29	.41	.58	.70	.95	.99	1.00	1.00	1.00	1.00	1.00	1.00
OCT 10	.38	.53	.56	.56	.57	.57	.57	.57	.57	.57	.57	.57
OCT 25	.43	.65	.76	.75	.79	.79	.79	.79	.79	.79	.79	.79
NOV 4	.18	.30	.35	.38	.41	.44	.44	.44	.44	.44	.44	.54
WEST VIRGINIA												
BECKLEY												
MAR 13	.20	.31	.33	.35	.40	.44	.46	.79	.88	.92	.93	1.00
MAR 14	.22	.35	.38	.39	.39	.40	.45	.66	.67	.67	.68	.68
MAY 14	.18	.26	.29	.38	.51	.61	.67	.70	.70	.70	.70	.70
MAY 14	.35	.64	.67	.68	.72	.77	.84	.89	.89	.89	.95	.97
JUN 29	.20	.35	.45	.53	.62	.65	.69	.73	.76	.77	.77	.77
JUL 22	.25	.36	.44	.50	.56	.56	.56	.56	.56	.56	.56	.56
JUL 25	.22	.32	.33	.33	.52	.53	.58	.64	.70	.71	.72	.72
JUL 26	.25	.37	.45	.52	.61	.69	.71	.73	.74	.74	.74	.74
AUG 23	.21	.38	.54	.75	.85	.94	.99	1.02	1.04	1.04	1.04	1.05
CHARLESTON												
MAR 13	.25	.32	.38	.40	.44	.46	.48	.50	.52	.56	.60	.82
JUN 25	.25	.34	.35	.37	.40	.42	.43	.44	.44	.44	.44	.44
ELKINS												
MAY 29	.29	.50	.53	.55	.61	.66	.75	.77	.78	.79	.80	.80
JUN 29	.23	.35	.36	.47	.64	.64	.64	.85	.86	.88	1.19	1.50
JUL 8	.25	.35	.43	.50	.60	.62	.62	.62	.62	.62	.63	.65
AUG 19	.37	.52	.52	.52	.59	.77	1.07	1.08	1.12	1.12	1.12	1.12
HUNTINGTON												
MAR 14	.25	.41	.45	.47	.50	.54	.60	.65	.71	.75	.75	.80
APR 17	.16	.30	.35	.45	.55	.57	.62	.75	.78	.78	.79	.79
MAY 11	.25	.40	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46
MAY 29	.20	.35	.37	.40	.55	.66	.68	.68	.68	.68	.68	.68
JUN 29	.17	.30	.35	.36	.38	.39	.39	.39	.39	.39	.40	.40
JUL 2	.33	.51	.56	.57	.63	.64	.64	.64	.64	.64	.64	.64
JUL 8	.39	.75	.77	.83	.84	.84	.84	.84	.84	.84	.84	.84
JUL 22	.15	.29	.30	.40	.49	.55	.55	.55	.55	.55	.55	.55
JUL 28	.20	.40	.47	.49	.55	.55	.65	.70	.75	.80	1.23	1.28
PARKERSBURG U												
JUL 2	.20	.31	.47	.58	.82	1.25	1.48	1.65	1.67	1.80	2.10	2.20
AUG 2	.23	.32	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
AUG 3	.20	.38	.46	.58	.58	.58	.58	.58	.58	.58	.58	.58
AUG 4	.20	.30	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
AUG 19	.25	.38	.55	.72	.91	1.00	1.04	1.08	1.08	1.08	1.08	1.08
WISCONSIN												
GREEN BAY												
JUN 7	.16	.27	.31	.36	.50	.60	.75	.95	1.04	1.06	1.13	1.15
JUN 9	.34	.53	.54	.55	.57	.63	.66	.71	.74	.81	.88	.90
JUN 9	.23	.30	.31	.34	.54	.57	.61	.62	.62	.62	.62	.62
JUN 14	.55	.92	.96	.97	1.00	1.52	1.53	1.53	1.53	1.53	1.53	1.53
JUN 15	.25	.35	.36	.36	.36	.43	.50	.58	.60	.63	.66	.66
JUL 1	.45	.56	.57	.63	.66	.70	.74	.76	.76	.77	.79	.89
OCT 24	.22	.30	.32	.33	.36	.44	.47	.51	.52	.52	.52	.70
LA CROSSE												
JUN 7 T	M	M	M	M	M	M	M	M	M	M	M	1.10
JUN 8	.66	.97	1.12	1.21	1.31	1.43	1.46	1.47	1.47	1.47	1.50	1.50
JUN 15	.27	.36	.40	.46	.48	.57	.58	.58	.58	.58	.58	.58
JUN 15	.36	.44	.53	.64	.79	.90	.98	1.23	1.48	1.74	2.15	2.38
MADISON												
APR 16	.26	.35	.36	.38	.39	.41	.65	.74	.74	.74	.74	.74
JUN 9	.17	.32	.39	.40	.40	.43	.54	.65	.72	.99	1.01	1.13
JUN 11	.45	.79	.90	.96	1.01	1.02	1.04	1.04	1.04	1.04	1.04	1.04
JUN 19	.29	.39	.47	.59	.60	.63	.64	.64	.64	.64	.64	.64
JUL 11	.24	.40	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
JUL 17	.17	.26	.38	.41	.41	.41	.41	.41	.41	.41	.41	.41
JUL 26	.46	.71	.78	.78	.78	.78	.78	.78	.78	.78	.78	.78
AUG 2	.25	.35	.40	.41	.47	.57	.62	.64	.67	.67	.67	.67
AUG 18	.21	.36	.42	.44	.45	.46	.46	.46	.46	.46	.46	.46
MILWAUKEE												
JUN 10	.16	.24	.36	.40	.54	.74	.80	.82	.86	.91	.96	1.00
JUN 11	.34	.56	.82	.83	.84	.84	1.04	1.04	1.04	1.04	1.04	1.04
JUN 16	.29	.36	.41	.42	.48	.68	.69	.70	.70	.70	.70	.70
JUL 23	.28	.38	.48	.51	.56	.58	.60	.64	.69	.71	.71	.71
AUG 29	.14	.24	.34	.42	.51	.60	.63	.64	.69	.78	.79	.79
DEC 21	.20	.35	.36	.37	.37	.37	.37	.39	.42	.43	.43	.45
WYOMING												
CASPER						NONE						
CHEYENNE												
MAY 29	.13	.23	.30	.40	.46	.50	.52	.53	.53	.53	.53	.53
LANDER												
JUN 12	.29	.55	.59	.59	.59	.59	.59	.59	.59	.59	.59	.59
JUL 14	.15	.24	.32	.41	.61	.69	.75	.76	.79	.83	.90	.97

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
WYOMING												
SHERIDAN JUN 12	.22	.37	.49	.51	.52	.53	.53	.54	.54	.54	.58	.62
LATE REPORTS												
NEW MEXICO												
RATON JUN 17, 1965	.46	.67	.99	1.24	1.81	2.04	2.81	3.11	3.67	3.86	4.22	4.51

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

* Maximum of record for this duration and station. Period of record is that compiled in Weather Bureau Technical Paper No. 2, revised, plus 1962 and 1963 data. New records are denoted only for 5, 10, 15, 30, 60, 120, and 180 minutes. The continuity of record at stations that have changed location is described on page 2 of the above reference.

SUNSHINE, AMOUNT AND PERCENT

YEAR 1967

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
ALABAMA																										
BIRMINGHAM	151	48	139	45	267	72	272	70	257	60	255	59	207	47	176	43	221	60	264	75	185	59	105	34	2500	56
MONTGOMERY	138	43	140	45	256	69	268	69	253	59	254	59	246	57	189	46	203	55	259	73	192	61	102	33	2498	56
ALASKA																										
ANCHORAGE	117	57	127	50	256	70	263	59	355	65	164	29	264	46	117	24	104	27	169	54	70	32	45	26	2050	45
JUNEAU	80	36	58	22	210	57	285	66	199	38	210	39	139	26	125	26	73	19	82	26	74	31	35	17	1570	35
NOME	43	26	83	35	77	21	52	11	193	33	293	46	115	19	119	23	235	60	115	38	54	28	38	30	1417	31
ARIZONA																										
PHOENIX	272	86	280	91	314	85	341	87	385	89	398	93	351	80	348	84	323	87	339	96	260	83	221	72	3830	86
TUCSON	288	90	266	86	314	85	343	88	409	96	379	89	333	77	341	83	299	81	325	92	246	78	212	68	3755	85
YUMA	270	85	274	89	320	86	335	86	405	94	426	100	375	86	346	84	293	79	339	96	264	84	238	76	3884	87
ARKANSAS																										
FORT SMITH	203	65	180	59	240	65	198	50	282	65	264	61	290	66	264	63	182	49	221	63	190	61	135	44	2649	60
LITTLE ROCK	194	62	180	59	250	67	162	41	262	61	326	75	344	78	322	77	226	61	257	73	221	71	172	56	2915	66
CALIFORNIA																										
EUREKA U	121	40	178	60	162	44	192	48	254	57	181	40	238	52	186	44	210	56	224	65	145	49	168	58	2258	51
FRESNO	158	51	160	53	245	66	251	64	388	89	384	87	411	92	394	94	318	85	323	93	125	41	175	58	3332	75
LOS ANGELES U	256	81	271	88	238	64	342	87	339	78	284	66	370	84	345	83	194	52	249	71	137	44	216	70	3242	73
RED BLUFF	155	52	216	72	175	47	172	43	393	88	377	84	436	96	399	94	349	94	288	83	155	52	197	68	3311	74
SACRAMENTO	161	53	175	58	226	61	233	59	396	90	384	86	447	99	417	99	354	95	312	90	215	71	234	79	3553	80
SAN DIEGO	263	83	272	88	237	64	267	68	263	61	230	54	302	69	277	67	197	53	298	85	204	65	245	79	3053	69
SAN FRANCISCO U	187	61	234	77	262	71	285	72	379	86	293	66	320	71	278	66	260	70	300	86	222	73	247	83	3267	73
COLORADO																										
DENVER	210	70	233	78	278	75	297	75	240	54	244	54	319	70	275	65	285	76	246	71	187	62	156	53	2969	67
GRAND JUNCTION	171	56	217	72	237	64	254	64	294	66	303	68	320	71	325	77	315	84	294	85	190	63	120	41	3039	68
PUEBLO	251	82	256	85	301	81	337	85	291	66	324	73	335	74	282	67	286	77	277	80	235	77	174	59	3348	75
CONNECTICUT																										
HARTFORD	142	48	186	63	214	58	221	55	264	58	252	55	231	50	241	56	281	75	185	54	123	42	159	56	2499	56
NEW HAVEN	161	54	185	62	217	59	232	58	268	60	308	68	259	56	255	60	289	77	234	68	172	58	156	54	2735	61
FLORIDA																										
APALACHICOLA U	180	55	162	52	265	71	294	76	297	70	214	51	246	57	204	50	211	57	264	74	244	76	135	42	2717	61
JACKSONVILLE	181	56	157	50	250	67	280	72	288	68	155	37	230	53	200	49	211	57	221	62	205	64	162	51	2540	57
KEY WEST	222	66	233	74	316	85	324	85	378	91	245	60	337	81	316	79	273	74	203	57	238	72	234	71	3318	75
LAKELAND U	237	72	217	69	268	72	337	87	339	81	239	57	225	53	245	60	222	60	287	81	272	84	221	68	3107	70
PENSACOLA	172	53	178	57	300	81	274	71	291	69	289	69	277	64	177	43	229	62	287	81	237	74	100	32		
TAMPA	209	64	204	65	301	81	311	81	241	57	200	48	219	52	217	53	174	47	264	74	241	75	208	65	2790	63
GEORGIA																										
ATLANTA	146	46	127	41	225	61	298	76	299	69	280	65	288	66	219	53	231	62	280	80	202	64	149	48	2741	62
MACON	208	65	177	57	308	83	299	77	290	68	224	52	243	56	194	47	246	66	267	76	205	65	157	50	2817	63
HAWAII																										
HONOLULU	172	50	129	40	148	40	245	65	256	63	289	72	288	70	256	64	237	65	229	63	148	44	175	52	2571	58
HILO	160	47	153	47	126	34	128	34	132	33	168	42	116	28	139	35	176	48	156	43	90	27	104	31	1648	37
KAHULUI	226	66	210	66	163	44	242	64	302	74	314	78	288	70	234	59	311	85	257	71	203	61	235	69	2987	67
LIHUE	155	46	148	46	123	33	232	61	247	60	314	78	301	73	280	70	278	76	235	65	137	41	135	40	2585	58
IDAHO																										
BOISE	113	39	206	70	238	64	228	56	364	80	353	77	418	90	396	92	318	85	226	66	98	34	153	55	3111	70
POCATELLO	72	25	189	64	218	59	225	56	308	68	251	55	386	83	384	89	302	81	236	69	120	41	90	32	2782	62
ILLINOIS																										
CAIRO U	172	56	174	57	216	58	245	62	264	60	261	59	292	65	300	71	224	60	205	59	145	47	120	40	2617	59
CHICAGO MIDWAY	147	50	137	46	141	38	159	40	269	60	280	62	303	66	271	63	253	67	157	46	95	32	104	36	2316	52
MOLINE	136	46	156	52	138	37	178	44	249	55	236	52	294	64	282	66	223	60	185	54	123	42	86	30	2285	51
PEORIA	143	48	153	51	175	47	219	55	256	57	252	56	292	64	285	67	241	64	173	50	122	41	80	28	2389	54
SPRINGFIELD	205	68	162	54	184	50	216	54	253	57	282	63	310	68	334	79	253	68	182	53	142	47	87	30	2610	59
INDIANA																										
EVANSVILLE	162	53	158	52	203	55	243	61	277	63	255	58	288	64	291	69	233	63	194	56	146	48	114	38	2565	58
FORT WAYNE	129	43	136	46	176	47	219	55	257	57	305	67	305	66	286	67	260	69	169	49	105	35	106	37	2452	55
INDIANAPOLIS	101	34	156	52	159	43	205	51	231	52	245	55	252	55	310	73	236	63	143	41	100	33	82	28	2220	50
IOWA																										
DES MOINES	170	57	186	63	210	57	171	43	233	52	254	56	383	83	346	81	267	71	201	59	163	55	102	36	2685	60
SIOUX CITY	147	50	192	65	258	70	244	61	241	53	321	70	405	88	387	90	292	78	220	64	180	61	134	47	3020	68
KANSAS																										
CONCORDIA	178	59	215	72	223	60	247	62	251	56	280	62	324	71	359	85	247	66	247	71	199	66	142	48	2910	65
DODGE CITY	212	69	199	66	246	66	250	63	315	71	334	76	336	75	333	79	275	74	291	84	231	76	192	64	3213	72
TOPEKA	203	67	210	70	187	50	227	57	212	48	213	48	324	72	326	77	234	63	217	63	154	51	109	37	2615	59
WICHITA	209	68	183	60	229	62	221	56	251	57	231	52	281	63	320	76	222	60	262	75	180	59	137	46	2725	61
KENTUCKY																										
LOUISVILLE	168	55	155	51	203	55	265	67	256	58	254	57	259	57	300	71	263	71	199	57	132	43	114	38	2566	58
LOUISIANA																										
SHREVEPORT	168	53	170	53	270	73	192	49	293	68	314	74	279	64	274	66	207	56	255	72	210	67	144	46	2776	62
MAINE																										
PORTLAND	123	42	157	53	199	54	234	58	244	54	220	48	192	41	233	54	240	64	193	57	134	46	150	54	2318	52
MARYLAND																										
BALTIMORE	154	51	186	62	196	53	229	58	246	55	311	70	272	60	250	59	248	66	183	53	165	55	133	45	2574	58
MASSACHUSETTS																										
BLUE HILL OBS R	137	48	147	52	155	43	211	54	230	53	257	59	190	43	198	48	251	70	202	61	135	48	143	52	2257	52
BOSTON	145	49	164	55	183	49	222	55	262	58	283	62	223	48	234	54	287	77	225	65	138	47	160	57	2526	57
NANTUCKET	138	46	150	50	199	54	210	52	257	57	288	64	193	42	215	50	254	68	214	62	126	42	116	40	2360	53
MICHIGAN																										
ALPENA	84	29	137	47	208	56	229	57	336	73	285	61	274	58	277	64	252	67	141	41	66	23	94	34	2383	53
DETROIT M WAYNE CO	108	37	149	50	193	52	188	47	271	60	282	62	283	61	294	68	260	69	180	53	102	35	91	32	2400	54
GRAND RAPIDS	86	29	112	38	166	45	172	43	242	53	270	59	259	56	283	66	253	68	126	37	41	14	87	31	2096	47
LANSING	110	38	172	58	195	53	172	43	282	62	271	59	303	65	319	74	293	78	165	48	71	24	84	30	2436	55
MARQUETTE U	92	33	145	50	225	61	229	56	319	68	257	54	309	65	308	70	258	69	131	39	85	30	117	44	2475	55
SAULT STE MARIE	79	28	163	56	217	59	217	53	314	67	252	53	257	54	285	65	253	67	116	34	30	10	70	26	2253	50
MINNESOTA																										
DULUTH	117	42	167	58	213	58	189	46	320	69	221	47	320	67	271	62	258	69	129	38	59	21	91	34	2354	53
MINNEAPOLIS	95	33	145	50	215	58	222	55	319	69	277	59	307	65	290	67	317	84	208	61	109	38	114	42	2620	59

SUNSHINE, AMOUNT AND PERCENT

Station	January Hours	January Percent of possible	February Hours	February Percent of possible	March Hours	March Percent of possible	April Hours	April Percent of possible	May Hours	May Percent of possible	June Hours	June Percent of possible	July Hours	July Percent of possible	August Hours	August Percent of possible	September Hours	September Percent of possible	October Hours	October Percent of possible	November Hours	November Percent of possible	December Hours	December Percent of possible	Annual Hours	Annual Percent of possible
MISSISSIPPI																										
JACKSON	140	44	158	51	270	73	275	71	314	73	337	79	252	58	212	51	210	57	272	77	185	59	109	35	2733	62
MISSOURI																										
COLUMBIA	227	75	223	74	240	65	254	64	269	61	279	62	357	79	337	80	222	59	180	52	173	57	119	40	2879	65
KANSAS CITY	184	61	188	63	175	47	226	57	222	50	216	48	325	72	303	72	220	59	198	57	147	49	93	32	2497	56
ST LOUIS	220	72	180	60	184	50	232	59	291	66	297	67	302	67	321	76	236	63	179	52	152	50	104	35	2698	61
SPRINGFIELD	236	76	196	65	200	54	217	55	270	61	248	56	300	67	281	67	173	47	185	53	172	56	126	42	2602	58
MONTANA																										
BILLINGS	111	39	169	58	267	72	256	63	336	72	261	55	382	81	372	85	267	71	187	55	108	38	62	23	2778	62
GREAT FALLS	104	38	139	48	254	69	-	-	290	62	273	57	418	87	397	90	313	83	190	56	131	47	80	30	2589	58
HAVRE	112	41	144	51	199	54	280	68	268	57	289	60	438	90	388	88	289	77	184	55	155	56	125	48	2870	64
HELENA	111	40	141	49	206	56	188	46	299	64	273	58	397	83	395	90	295	78	177	52	120	42	89	33	2690	60
MISSOULA	61	22	119	41	171	46	230	56	286	61	278	59	413	86	408	93	309	82	132	39	81	29	44	17	2532	57
NEBRASKA																										
LINCOLN U	153	51	212	71	236	64	268	67	244	54	264	58	359	78	347	81	263	70	222	64	187	63	121	42	2875	65
NORTH PLATTE	156	52	219	74	236	64	255	64	195	43	268	59	307	67	325	76	275	73	264	77	192	64	148	52	2841	64
OMAHA	137	46	187	63	234	63	258	65	294	65	253	56	338	74	335	78	273	73	212	62	165	55	128	45	2813	63
VALENTINE	186	64	231	78	223	60	276	69	204	45	225	49	339	73	340	79	258	69	225	66	182	62	164	58	2853	64
NEVADA																										
ELY	183	60	209	69	243	66	208	52	261	59	292	65	326	72	272	64	250	67	260	75	164	55	179	61	2847	64
LAS VEGAS	264	85	286	94	325	88	340	87	395	90	417	95	379	85	349	83	291	78	337	96	236	77	232	77	3851	87
RENO	169	56	245	82	279	75	315	79	407	91	387	86	411	90	391	92	326	87	312	90	185	61	213	73	3637	82
WINNEMUCCA	89	30	188	63	169	46	75	19	244	54	234	52	358	78	325	76	258	69	211	61	99	33	104	36	2353	53
NEW HAMPSHIRE																										
CONCORD	130	44	176	60	205	55	239	59	273	60	268	58	257	55	252	59	248	66	198	58	145	50	159	57	2548	57
MT WASHINGTON OBS	64	22	99	33	140	37	180	44	136	29	143	30	98	21	105	24	169	44	130	38	61	21	114	40	1440	32
NEW JERSEY																										
ATLANTIC CITY	142	47	128	42	187	50	208	52	237	53	316	71	192	42	185	44	239	64	187	54	128	42	118	40	2265	51
TRENTON U	159	53	152	51	177	48	200	50	217	49	289	64	178	39	201	47	250	67	204	59	138	46	136	47	2299	52
NEW MEXICO																										
ALBUQUERQUE	275	88	238	78	288	78	287	73	375	86	328	75	335	76	307	74	303	81	318	91	229	74	195	64	3476	78
ROSWELL	285	90	221	72	288	77	295	76	347	81	318	74	350	80	301	73	266	72	295	84	170	54	152	49	3288	74
NEW YORK																										
ALBANY	108	37	144	49	208	56	212	53	217	48	279	61	254	55	238	55	242	64	150	44	111	38	111	39	2272	51
BINGHAMTON	106	36	114	39	169	46	224	56	254	56	302	66	239	52	230	54	267	71	139	40	97	33	87	31	2227	50
BUFFALO	80	27	116	39	180	48	199	50	229	50	329	72	242	52	264	61	266	71	171	50	85	29	71	25	2230	50
NEW YORK U	143	48	137	46	196	53	218	55	252	56	306	68	222	48	210	49	265	71	216	63	142	48	130	45	2434	55
ROCHESTER	107	37	126	43	198	53	230	57	271	60	352	77	241	52	257	59	246	66	139	41	66	23	71	25	2304	52
SYRACUSE	83	28	121	41	191	52	238	59	244	54	291	63	218	47	241	56	272	72	150	44	71	24	68	24	2188	49
NORTH CAROLINA																										
ASHEVILLE	211	68	202	66	305	82	295	75	254	58	295	68	249	56	192	46	238	64	223	64	199	64	149	49	2810	60
CAPE HATTERAS R	144	46	148	48	234	63	282	72	273	63	211	49	229	52	241	58	210	57	221	63	214	69	-	-	2409	54
CHARLOTTE	219	70	207	68	275	74	309	79	289	67	333	77	284	64	308	74	319	86	231	66	209	68	169	55	3152	71
GREENSBORO	198	64	180	59	277	75	274	70	223	51	249	57	224	50	154	37	238	64	225	64	200	65	145	48	2586	58
RALEIGH	168	54	162	53	254	68	288	73	217	50	278	64	252	57	218	52	214	58	220	63	216	70	157	52	2643	59
WILMINGTON	181	58	177	58	268	72	338	86	309	72	284	66	322	73	280	67	234	63	251	72	220	71	183	60	3049	69
NORTH DAKOTA																										
BISMARCK	131	47	185	64	258	70	196	48	321	69	263	55	412	86	351	80	274	73	154	46	113	40	153	57	2810	63
FARGO	138	49	196	68	253	69	212	52	274	59	212	45	408	85	350	80	259	69	144	43	116	41	121	45	2683	60
WILLISTON	103	38	216	76	261	71	231	56	331	70	337	70	417	86	372	84	285	75	177	53	117	42	177	68	3023	68
OHIO																										
CINCINNATI OBS	118	39	151	50	206	56	229	58	227	51	325	73	282	62	256	60	214	57	160	46	86	29	81	28	2335	52
CLEVELAND	105	35	129	43	186	50	223	56	238	53	277	61	248	54	218	51	223	60	171	50	74	25	70	24	2162	49
COLUMBUS	118	39	160	53	202	55	244	61	249	56	284	63	268	59	260	60	204	54	159	46	89	30	96	33	2333	52
DAYTON	137	45	164	55	167	45	210	53	211	47	305	68	311	68	297	70	247	66	175	51	84	28	100	34	2406	54
TOLEDO	119	40	142	48	162	44	191	48	277	62	294	65	274	59	279	65	239	64	187	54	111	38	86	30	2361	53
OKLAHOMA																										
OKLAHOMA CITY	262	84	234	76	301	81	257	65	285	66	273	63	258	58	295	71	204	55	260	74	191	62	172	57	2991	67
TULSA	239	77	202	66	247	67	197	50	258	59	237	54	269	61	296	71	199	54	236	67	197	64	136	45	2712	61
OREGON																										
PORTLAND	46	16	126	43	176	48	183	45	275	59	275	59	386	82	354	81	271	72	126	37	111	39	60	22	2389	54
PACIFIC AREA																										
KOROR R	131	36	192	58	254	68	269	73	270	70	252	67	247	64	214	56	289	79	253	68	248	70	269	74	2886	65
MAJURO	161	44	172	52	179	48	197	54	211	55	179	48	225	58	255	67	237	65	204	55	191	54	213	59	2424	55
MARCUS ISLAND	180	54	194	61	249	67	255	67	271	66	322	79	249	60	340	85	195	53	258	74	204	62	184	56	2902	65
PAGO PAGO	239	60	212	60	292	77	174	49	194	54	155	46	223	63	252	72	300	83	151	39	147	38	157	39	2496	57
PONAPE R	209	57	180	54	211	56	216	59	227	59	163	44	188	49	164	43	189	52	165	45	106	30	97	27	2115	48
TRUK MOEN ISLAND	279	77	275	83	282	75	288	78	314	81	218	58	250	64	219	57	236	65	209	56	187	53	188	52	2944	67
YAP R	186	52	236	71	208	55	229	62	288	74	232	61	196	50	206	54	189	52	148	40	180	51	150	42	2449	55
PENNSYLVANIA																										
HARRISBURG	174	58	197	66	203	55	238	60	257	58	332	74	263	58	236	55	279	75	160	46	154	52	119	41	2612	59
PHILADELPHIA	157	52	163	54	189	51	217	54	216	48	289	65	247	54	235	55	265	71	203	59	146	49	122	42	2448	55
PITTSBURGH	86	29	87	29	143	39	190	48	196	44	276	61	231	51	214	50	213	57	142	41	65	22	76	26	5918	43
PITTSBURGH U	83	28	87	29	151	41	194	49	198	44	264	59	219	48	199	47	222	59	133	39	59	20	66	23	1873	42
READING U	152	51	161	54	202	55	234	59	252	56	309	69	231	51	213	50	260	69	173	50	148	50	118	41	2453	55
SCRANTON	116	39	156	52	210	57	210	52	245	54	294	65	248	54	231	54	253	67	176	51	122	41	99	35	2358	53
RHODE ISLAND																										
PROVIDENCE	158	53	144	49	179	48	216	54	236	52	247	54	159	35	186	43	262	70	197	57	149	50	157	55	2291	51
SOUTH CAROLINA																										
CHARLESTON	173	54	149	48	283	76	287	74	269	63	161	38	263	60	272	66	179	48	245	70	235	75	213	69	2730	61
COLUMBIA	190	60	199	65	287	77	294	75	272	63	285	66	298	68	262	63	289	78	250	71	204	65	193	63	3022	68
GNVLE SPARTANBURG	192	61	147	48	256	69	263	67	237	55	228	52	228	52	228	55	263	71	210	60	192	62	150	49	2595	58
SOUTH DAKOTA																										
HURON	145	50	207	71	277	75	274	68	279	61	250	54	385	82	356	82	251	67	209	61	189	66	151	55	2973	67
RAPID CITY	137	47	198	67	206	56	218	54	233	51	234	50	355	76	334	77	242	64	233	68	172	59	129	47	2690	60
TENNESSEE																										
CHATTANOOGA	167	53	144	47	253	68	227	58	210	48	216	50	180	41	166	40	229	62	221	63	187	60	94	31	2294	52
KNOXVILLE	132	43	138	45	245	66	274	70	222	51	229	52	211	48	238	57	230	62	239	68	168	54	82	27	2407	54
MEMPHIS	178	57	167	55	248	67	257	66	260	60	287	66	257	58	293	70	224	60	267	76	183	59	145	48	2766	62
NASHVILLE	169	54	163	54	249	67	258	65	247	57	305	70	296	67	265	63	241	65	254	73	178	58	135	45	2758	62

SUNSHINE, AMOUNT AND PERCENT

YEAR 1967

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
TEXAS																										
ABILENE	288	90	220	71	297	80	257	66	330	77	317	74	330	76	300	73	194	52	252	72	167	53	199	64	3150	71
AMARILLO	275	88	250	82	294	79	291	74	322	74	288	66	290	66	266	64	263	71	282	80	192	62	148	49	3160	71
AUSTIN	181	56	178	57	238	64	191	49	246	58	337	80	336	78	309	75	216	58	252	71	150	47	135	42	2767	62
BROWNSVILLE	143	43	165	52	224	60	296	77	302	73	293	71	345	82	281	70	231	63	254	71	139	43	111	34	2783	63
CORPUS CHRISTI	132	40	135	43	181	49	157	41	181	43	330	79	308	73	236	58	200	54	241	68	138	43	111	34	2349	53
DALLAS	216	68	186	60	261	70	199	51	291	68	314	73	318	73	311	75	194	52	273	77	173	55	173	55	2909	65
EL PASO	312	97	269	87	355	95	332	85	375	88	342	80	354	82	301	73	309	83	324	92	219	69	209	67	3701	83
GALVESTON U	153	47	181	58	263	71	233	60	264	63	319	76	267	62	204	50	201	54	236	66	163	51	99	31	2582	58
HOUSTON	144	44	169	54	242	65	248	64	273	65	349	83	267	62	230	56	227	61	251	71	176	55	111	35	2686	60
PORT ARTHUR	141	43	171	55	257	69	248	64	281	66	350	83	313	73	255	62	243	66	240	68	180	56	108	34	2787	63
SAN ANTONIO	182	56	188	58	223	60	156	40	279	66	326	77	348	81	283	69	182	49	251	71	164	51	133	42	2715	61
UTAH																										
SALT LAKE CITY	74	25	193	65	258	70	286	72	306	68	310	69	375	82	381	89	300	80	260	75	155	52	115	40	3013	68
VERMONT																										
BURLINGTON	142	49	145	50	249	67	237	59	271	59	316	68	365	78	295	68	281	75	210	62	137	47	121	44	2768	62
VIRGINIA																										
LYNCHBURG	177	58	180	59	234	63	271	69	252	57	316	72	236	53	226	54	278	75	206	59	189	62	150	50	2714	61
NORFOLK	211	68	227	75	297	80	283	72	278	63	334	76	296	66	270	64	273	73	275	79	208	68	162	54	3116	70
RICHMOND	194	63	197	65	235	63	271	69	262	60	341	77	279	62	261	62	267	72	228	65	209	68	158	53	2902	65
WASH NATL AP	185	61	169	56	195	53	240	60	233	53	324	73	192	42	194	46	250	67	185	53	177	51	157	53	2501	56
WASHINGTON																										
QUILLAYUTE	51	18	78	27	104	28	237	58	165	35	233	48	275	57	282	64	219	58	51	15	71	26	32	12	1797	40
SEATTLE TACOMA	48	17	127	44	147	40	251	61	295	63	298	63	343	71	328	74	274	73	96	29	89	32	39	15	2335	52
SPOKANE	85	30	149	52	150	41	205	50	270	57	340	71	433	90	393	89	315	84	144	43	96	34	54	21	2632	59
WALLA WALLA U	42	15	113	39	140	38	209	51	344	74	370	79	434	91	409	94	312	83	158	47	90	32	55	20	2676	60
WEST INDIES																										
SAN JUAN P.R.	251	73	246	76	279	75	282	75	268	66	216	54	251	62	317	80	240	65	240	66	211	62	206	60	3007	68
JOHNSTON	261	75	236	73	172	46	185	49	203	51	222	56	239	59	282	72	242	66	245	67	226	66	255	74	2767	62
WEST VIRGINIA																										
PARKERSBURG U	111	37	152	50	189	51	195	49	200	45	319	72	231	51	212	50	245	66	180	52	94	31	107	37	2235	50
WISCONSIN																										
GREEN BAY	118	41	150	51	164	44	145	36	283	62	223	48	301	64	294	68	256	68	149	44	77	27	83	30	2242	50
MADISON	131	45	172	58	169	46	171	43	299	66	260	57	309	66	284	66	252	67	168	49	118	41	117	42	2451	55
MILWAUKEE	129	44	165	56	176	47	188	47	298	66	277	60	325	70	286	66	240	64	153	45	101	35	120	43	2458	55
WYOMING																										
CHEYENNE	178	60	210	71	200	54	280	70	225	50	225	50	297	65	277	65	242	65	231	67	163	55	142	50	2670	60
LANDER	215	73	232	79	251	68	246	61	247	54	252	55	361	78	352	82	267	71	255	74	176	60	97	34	2950	66
SHERIDAN	127	44	167	57	197	53	200	49	244	53	260	56	374	80	361	83	239	63	215	63	162	56	108	39	2654	59

Data from airport unless otherwise specified.
"U" indicates Urban, "R" indicates Rural, sites.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature – Averages – Daily maximum °F	Temperature – Averages – Daily minimum °F	Temperature – Averages – Annual °F	Temperature – Extremes – Highest °F	Temperature – Extremes – Date	Temperature – Extremes – Lowest °F	Temperature – Extremes – Date	Heating degree days Base 65 °F	Precipitation – Total In	Precipitation – Greatest in 24 hours In	Precipitation – Date (s)	Snow, Sleet – Total In	Snow, Sleet – Greatest in 24 hours In.	Snow, Sleet – Date (s)	Relative humidity – 1 00am E S T %	Relative humidity – 7 00am E S T %	Relative humidity – 1 00p.m E S T %	Relative humidity – 7 00p.m E S T %	Wind – Average speed M.p.h	Wind – Resultant speed M.p.h	Wind – Resultant direction	Wind – Fastest mile – Speed M.p.h	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine %	Average sky cover sunrise to sunset Tenths	Number of days – Sunrise to sunset – Clear, 0-03	Number of days – Sunrise to sunset – Partly cloudy, 04-07	Number of days – Sunrise to sunset – Cloudy, 08-10	Number of days – Precipitation .01 inch or more	Number of days – Snow, Sleet 1.0 inch or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp – 90 °F and above	Number of days – Max temp – 32 °F and below	Number of days – Min temp – 32 °F and below	Number of days – Min temp – 0 °F and below
ALABAMA																																					
BIRMINGHAM	72.4	49.4	60.9	94	JUN 20+	12	FEB 25	2859	66.84	4.64	DEC 14-15	.8	.8	FEB 9	83	87	58	66	6.8	0.2	23	41	SW	MAR 6	56	6.1	108	79	178	117	0	53	3	17	2	63	0
HUNTSVILLE	71.2	49.7	60.5	97	JUN 18	7	FEB 25	3102	65.05	5.49	DEC 17-18	2.4	1.4	DEC 27	75	79	58	60	7.5	0.9	16	44	18	DEC 21		6.1	111	91	163	114	2	59	14	18	4	66	0
MOBILE	78.6	58.2	68.4	100	JUN 26	25	FEB 26+	1380	61.34	6.58	SEP 6	T	T	FEB 9	82	85	57	68	8.1	0.7	12	28	14	OCT 30+		5.8	103	124	141	117	0	60	53	74	0	12	0
MONTGOMERY	75.1	54.2	64.7	97	JUN 20	20	FEB 26	2054	48.41	2.59	MAY 4	T	T	FEB 22 +	81	86	56	61	6.7	0.2	22	35	W	MAR 6	56	6.0	96	111	158	104	0	55	23	46	0	26	0
ALASKA																																					
ANCHORAGE	43.1	28.6	35.9	78	JUL 11	-18	FEB 14	10521	19.16	.79	SEP 5-6	79.6	8.3	DEC 7-8	64	69	67	59	6.8	0.7	14	44	4	JAN 28	45	7.1	79	60	226	131	21	1	27	B 13	166	192	45
ANNETTE	53.1	40.4	46.8	83	AUG 28	14	DEC 21	6570	111.43	3.48	OCT 8-9	77.7	8.9	DEC 4-5	81	83	77	70	9.8	3.7	14	46	14	DEC 2		7.9	49	57	259	232	21	1	15	35	7	78	0
BARROW	15.9	5.1	10.5	61	AUG 17	-38	JAN 3	19823	4.70	.35	JUL 14	37.6	2.6	DEC 30	83	83	83	82	11.2	[illegible]	9	43	24	MAR 12			V46	V41	V212	108	6	0	[illegible]	0	261	332	161
BARTER ISLAND	17.1	4.1	10.6	75	JUL 13	-43	FEB 14	19773	9.59	.63	JUL 31	51.6	5.5	MAR 13-14	76	77	76	74	13.3	0.5	17	64	27	MAR 12			X50	X53	X207	97	17	0	72	1	243	331	164
BETHEL	38.8	24.2	31.5	82	JUL 12	-30	JAN 3	12126	14.86	.98	NOV 11-12	42.1	4.9	JAN 18	81	88	87	75	12.6	3.7	15	46	15	FEB 6		7.8	48	56	261	13[illegible]	18	1	49	11	126	216	58
COLD BAY	44.3	34.6	39.5	67	AUG 15+	5	FEB 1	9225	38.00	1.83	NOV 11-12	53.8	3.2	FEB 16-17	83	86	85	77	17.4	3.3	21	73	16	FEB 19		8.5	14	70	281	231	24	0	17	0	43	151	0
FAIRBANKS	36.6	17.5	27.1	91	JUN 18	-44	JAN 29+	13837	17.33	3.42	AUG 12	94.7	7.6	MAR 30-31	65	74	70	58	5.1	0.3	30	36	25	MAR 12		7.4	60	69	236	140	37	5	9	44	156	230	112
JUNEAU	47.0	32.4	39.7	80	JUN 17	- 4	MAR 26	9124	50.07	1.92	SEP 17-18	110.4	9.0	FEB 24	85	91	85	75	9.2	5.6	11	48	12	SEP 18	35	8.0	52	43	272	218	37	0	23	17	62	177	5
KING SALMON	41.3	26.2	33.8	80	JUL 12+	-29	JAN 3	11300	20.77	.90	AUG 15-16	30.2	3.3	MAR 26-27	72	78	76	65	11.2	1.5	13	48	14	NOV 12		7.4	62	65	238	152	11	1	49	8	101	193	50
KOTZEBUE	30.3	17.0	23.7	80	JUN 18	-35	FEB 14+	14979	7.28	.74	AUG 15-16	66.2	3.7	JAN 4-5	79	80	80	76	13.4	3.7	10	63	12	JAN 4		6.9	74	85	206	1[illegible]	24	0	12	5	188	247	104
MC GRATH	36.7	18.4	27.6	87	JUL 13	-43	JAN 15+	13573	18.84	1.08	NOV 11-12	110.8	6.6	APR 31-1	67	78	74	61	6.3	[illegible]	[illegible]	35	19	NOV 12		7.5	56	70	239	124	38	5	13	23	140	220	98
NOME	34.6	20.0	27.3	79	AUG 7	-33	FEB 13	13632	12.59	1.40	AUG 11-12	41.3	4.4	APR 4-5	71	75	72	67	10.2	[illegible]	7	54	9	JAN 4	31	7.3	68	68	229	134	13	0	47	3	181	256	59
ST. PAUL ISLAND	41.6	34.2	37.9	58	AUG 7	9	FEB 1	9773	23.95	.63	APR 15-16	67.0	3.7	NOV 21-22	85	86	86	82	18.5	1.9	16	63	3	NOV 22		8.8	6	71	288	253	22	0	65	0	[illegible]	152	0
SHEMYA	42.0	34.9	38.5	59	AUG 2	17	FEB 5+	9581	36.90	2.02	SEP 3-4	49.7	5.7	FEB 16-17	88	90	90	84	19.4	[illegible]	24	90	19	JAN 3		8.7	7	86	272	238	13	0	106	0	31	150	0
YAKUTAT	43.8	29.7	36.8	73	JUN 17	-10	JAN 28+	10182	126.83	3.71	DEC 13	249.4	18.4	FEB 31-1	89	92	87	79	6.2	2.9	11	39	12	DEC 14		8.2	46	37	282	225	48	2	[illegible]	[illegible]	63	197	20
ARIZONA																																					
FLAGSTAFF	60.9	30.4	45.7	90	JUL 1	- 6	DEC 21	7050	22.27	2.65	DEC 18-19	129.5	27.3	DEC 13-14	64	71	39	37	7.9	[illegible]	21	29	1	MAY 19+		4.8	138	117	11[illegible]	76	18	63	7	1	15	211	8
PHOENIX	84.6	55.5	70.1	110	AUG 26+	21	JAN 7	1488	8.34	1.89	DEC 14-15	T	T	DEC 13	42	55	31	23	7.0	[illegible]	13	47Y	5	DEC 19	86	3.8	199	81	85	36	0	[illegible]	2	155	0	18	0
TUCSON	82.0	54.2	68.1	107	JUL 2	20	JAN 7	1525	12.93	1.54	DEC 14-15	1.6	1.6	DEC 17	41	51	30	24	9.2	2.5	17	40	W	JUL 31	85	4.1	183	90	92	60	1	43	0	125	0	16	0
WINSLOW	70.3	37.8	54.1	101	JUL 3+	-12	DEC 22	4997	10.23	1.51	DEC 13-14	40.4	17.0	DEC 13-14	44	53	34	27	8.9	3.7	21	52	18	APR 12		4.2	182	91	93	51	5	45	4	57	26	156	14
YUMA	85.9	59.4	72.7	112	AUG 27	32	JAN 1	974	4.77	1.88	SEP 1-2	T	T	DEC 16 +	41	52	32	22	7.7	0.8	26	49	E	AUG 31	87	3.2	223	72	70	18	0	7	0	160	0	1	0
ARKANSAS																																					
FORT SMITH	73.1	48.3	60.7	99	AUG 7	10	JAN 9	3193	37.51	3.28	OCT 29-30	6.1	4.0	MAR 6	76	82	52	53	7.4	0.8	7	44	W	JUN 21	60	6.2	90	111	164	94	2	50	13	50	3	82	0
LITTLE ROCK	71.7	50.0	60.9	95	AUG 9+	11	JAN 18	3082	50.75	4.05	SEP 7	2.7	1.6	JAN 17	77	82	58	60	9.0	[illegible]	20	36	SW	FEB 15	66	6.0	101	109	155	105	2	55	19	44	5	73	0
TEXARKANA	74.8	53.6	64.2	98	AUG 30+	17	JAN 19	2337	45.29	3.53	DEC 9-10	2.0	2.0	DEC 27	74	83	57	58	7.8	2.8	18					5.7	115	135	145	96	1	49	14	52	1	45	0
CALIFORNIA																																					
BAKERSFIELD	76.5	53.7	65.1	111	AUG 31	25	DEC 14+	2421	7.05	.82	JAN 22	T	T	DEC 15	56	66	52	36	5.9	2.3	34	25	32	APR 15		4.1	178	97	90	41	0	8	28	114	0	13	0
BISHOP	73.5	38.5	56.0	105	JUL 1	- 4	DEC 21	4296	4.36	.54	JAN 22	23.5	7.6	JAN 24			31													36	5			86	2	140	2
BLUE CANYON	58.1	42.9	50.5	87	AUG 14	9	DEC 14	5740	72.77	7.24	JAN 20-21	287.7	16.7	DEC 17-18			49					46	18	JAN 21		4.7	173	60	132	109	48			0	31	109	0
EUREKA U	57.3	46.3	51.8	74	OCT 17	30	DEC 15+	4725	37.12	2.17	NOV 13-14	T	T	DEC 18								45	SE	OCT 2	51	7.0	59	109	197	102	0			0	0	5	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature – Averages – Daily maximum	Temperature – Averages – Daily minimum	Temperature – Averages – Annual	Temperature – Extremes – Highest	Temperature – Extremes – Date	Temperature – Extremes – Lowest	Temperature – Extremes – Date	Heating degree days	Precipitation – Total	Precipitation – Greatest in 24 hours	Precipitation – Date (s)	Snow, Sleet – Total	Snow, Sleet – Greatest in 24 hours	Snow, Sleet – Date (s)	Relative humidity – 100am EST	Relative humidity – 700am EST	Relative humidity – 100pm EST	Relative humidity – 700pm EST	Wind – Average speed	Wind – Resultant speed	Wind – Resultant direction	Wind – Fastest mile – Speed	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days – Sunrise to sunset – Clear, 0-03	Number of days – Sunrise to sunset – Partly cloudy, 04-07	Number of days – Sunrise to sunset – Cloudy, 0.8-1.0	Number of days – Precipitation .01 inch or more	Number of days – Snow, Sleet 1.0 inch or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp – 90 °F and above	Number of days – Max temp – 32 °F and below	Number of days – Min temp – 32 °F and below	Number of days – Min temp – 0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In		%	%	%	%	M.p.h	M.p.h		M.p.h			%	Tenths											
CALIFORNIA																																					
FRESNO	76.2	47.6	61.9	108	AUG 15+	21	DEC 14	2735	12.98	1.22	APR 18	T	T	DEC 12	69	80	61	43	5.8	1.7	30	29	NW	MAY 31+	75	4.3	177	82	106	50	0	11	51	119	0	27	0
LONG BEACH	75.1	54.6	64.9	105	AUG 30	33	DEC 14	1477	13.82	3.14	NOV 20-21	.0	.0		7[illegible]	75	57	50	6.5	2.0	24	28	34	MAR 29		4.6	140	139	86	34	0	7	49	38	0	0	0
LOS ANGELES	70.4	56.2	63.3	97	OCT 15	38	DEC 21+	1347	15.90	5.60	NOV 21	.0	.0		74	76	60	63	8.6	3.8	26	38Y	W	APR 11		4.8	139	131	95	37	0	8	43	8	0	0	0
LOS ANGELES U	75.6	57.3	66.5	103	AUG 31	38	DEC 21+	1040	23.66	3.69	JAN 22	.0	.0									29	N	MAR 29	73	4.0	181	112	72	36	0			30	0	0	0
MT SHASTA R	62.6	37.0	49.8	98	AUG 18	7	DEC 19	5927	37.25	2.87	MAR 15-16	118.7	22.5	APR 17																92	35			40	7	144	0
OAKLAND	64.2	51.1	57.7	90	SEP 20	36	DEC 31+	2721	23.98	3.38	JAN 20-21	.0	.0		75	78	72	66	7.8	3.9	28	35	2	DEC 13		4.8	156	94	115	66	0	5	10	1	0	0	0
RED BLUFF	75.4	50.1	62.8	110	AUG 14	22	DEC 16	2788	19.11	2.14	JAN 20-21	T	T	DEC 19 +	60	68	52	38	8.1	0.4	30	56	SE	DEC 17	74	4.5	172	76	117	74	0	12	23	108	0	24	0
SACRAMENTO	73.6	47.6	60.6	107	AUG 18	25	DEC 16	3003	19.62	3.41	JAN 20-21	.0	.0		75	84	66	48	6.7	2.8	21	58	SE	JAN 24	80	4.4	174	83	108	60	0	10	37	97	0	25	0
SANDBERG R	62.7	45.4	54.1	98	AUG 14	12	DEC 13	4871	17.66	2.79	NOV 19-20	39.0	8.8	MAR 31	55	58	45	46				55	34	JAN 5		4.0	193	76	96	40	12			25	12	86	0
SAN DIEGO	70.2	56.2	63.2	91	OCT 16+	38	DEC 14+	1380	11.21	1.57	JAN 22-23	T	T	DEC 13	74	77	62	62	6.8	2.7	28	32	S	DEC 18	69	4.7	157	109	99	45	0	4	31	2	0	0	0
SAN FRANCISCO	65.2	48.6	56.9	92	SEP 20+	31	DEC 15	3001	17.27	4.58	JAN 20-21	.0	.0		75	81	67	59	11.2	6.7	29	49	NNW	DEC 13		4.7	163	92	110	70	0	2	10	3	0	1	0
SAN FRANCISCO U	62.5	51.4	57.0	87	SEP 20+	37	DEC 14	2978	24.26	2.88	JAN 20-21	.0	.0									40	SW	JAN 21	73					72	0			0	0	0	0
SANTA CATALINA	67.9	54.8	61.4	103	AUG 29	34	DEC 14	2278	13.30	4.22	NOV 20-21	.0	.0																	41	0			16	0	0	0
SANTA MARIA	68.4	45.1	56.8	94	MAY 16	21	DEC 14	2990	13.85	1.93	JAN 23-24	.0	.0				65	64								4.2	171	111	83	60	0			4	0	19	0
STOCKTON	73.6	48.9	61.3	107	AUG 18	27	DEC 16+	2970	15.81	3.01	JAN 21	.0	.0		68	77	62	45	8.3	3.1	30	46	14	JAN 24		4.5	167	86	112	65	0	4	53	99	0	26	0
COLORADO																																					
ALAMOSA	58.5	23.9	41.2	86	JUL 1	-30	DEC 22	8610	10.86	.86	MAY 26	57.5	15.8	DEC 13		78	44	39								4.8	137	141	87	87	14			0	36	224	48
COLORADO SPRINGS	61.8	35.7	48.8	91	AUG 25	0	DEC 21	6115	19.28	2.01	JUL 11	38.5	13.9	APR 13	59	64	39	40	9.9	1.6	3	41	17	MAY 25		5.6	103	134	128	91	10	61	16	4	24	156	1
DENVER	64.1	34.6	49.4	93	AUG 24+	-12	DEC 31	5918	23.31	3.25	APR 13	51.7	6.2	NOV 2	66	72	42	43	8.6	1.2	20	42	NW	DEC 6+	67	5.6	104	127	134	107	18	46	22	4	15	172	6
GRAND JUNCTION	65.2	38.8	52.0	98	AUG 25	- 4	DEC 24+	5705	7.68	.59	JUL 17	20.6	6.0	DEC 13-14	49	57	38	33	7.7	1.5	13	56	W	FEB 14	68	5.3	131	111	123	72	8	33	7	59	42	140	9
PUEBLO	66.8	37.1	52.0	97	JUL 30	- 8	DEC 22	5434	13.11	2.03	APR 12-13	23.0	6.8	DEC 12	53	61	38	33	9.6	0.8	36	59	N	MAY 19	75	5.2	122	132	111	71	7	42	5	33	17	146	5
CONNECTICUT																																					
BRIDGEPORT	57.9	42.5	50.2	90	JUL 12+	- 2	FEB 13	5983	41.74	2.38	MAR 6-7	59.8	11.1	MAR 22	78	78	63	69	12.4	3.3	30	52	27	FEB 16		6.4	89	100	176	124	14	15	39	2	20	115	1
HARTFORD	59.2	39.5	49.4	96	JUN 16+	-13	FEB 8	6310	45.05	2.71	MAY 25-26	88.2	13.6	DEC 28-29	75	76	54	63	9.4	2.2	31	53	SW	FEB 16	56	7.0	63	94	208	126	18	26	34	9	29	131	4
NEW HAVEN	57.7	41.3	49.5	86	JUL 12+	- 3	FEB 13	6085	40.63	2.24	MAR 6-7	63.9	10.1	FEB 7		82	64					41	W	FEB 16	61	6.3	87	105	173	133	18			0	17	123	1
DELAWARE																																					
WILMINGTON	61.5	43.1	52.3	92	JUN 16	1	FEB 9	5364	44.65	3.08	AUG 9-10	32.8	9.9	FEB 6-7	81	82	59	69	8.9	2.2	29	42	24	FEB 16		6.4	86	103	176	120	7	38	43	1	15	106	0
DIST.OF COLUMBIA																																					
WASH NATL AP	66.2	46.5	56.4	95	JUN 13	11	FEB 25+	4274	38.15	3.63	AUG 24-25	34.2	10.3	FEB 6-7	72	74	53	59	8.9	1.3	27	42	NW	MAR 16	56	6.4	93	93	179	98	9	24	15	24	5	77	0
FLORIDA																																					
APALACHICOLA U	75.3	60.9	68.1	92	JUN 19+	26	FEB 26	1180	52.16	4.11	DEC 10-11	.0	.0									34	E	SEP 3	61	5.3	140	100	125	106	0	60	34	11	0	3	0
DAYTONA BEACH	80.0	60.9	70.5	98	MAY 12	28	FEB 26	588	34.58	3.90	JUL 17-18	.0	.0		85	87	59	75	9.3	1.1	6	37	27	JAN 27		6.0	86	145	134	88	0	73	33	31	0	2	0
FORT MYERS	83.7	65.3	74.5	95	JUN 1+	32	FEB 26	198	49.39	6.73	AUG 10-11	.0	.0		84	88	56	72	8.5	1.8	7	35	33	DEC 23		5.2	98	189	78	102	0	98	32	88	0	1	0
JACKSONVILLE	80.1	59.4	69.8	100	MAY 13	22	FEB 26	1014	49.68	3.67	AUG 21-22	.0	.0		82	85	53	69	8.8	0.7	34	76	NE	JUN 30	57	5.8	102	135	128	102	0	48	36	77	0	5	0
KEY WEST	83.5	74.8	79.2	93	JUL 16	49	FEB 26	19	34.88	3.12	DEC 11-12	.0	.0		77	78	67	72	11.0	6.2	9	36	N	DEC 23+	75	5.6	94	152	119	105	0	64	0	63	0	0	0
LAKELAND U	81.8	62.7	72.3	96	JUN 1+	28	FEB 26	427	37.80	2.88	AUG 12-13	.0	.0												70	5.3	104	169	92	101	0			69	0	1	0

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ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature – Averages – Daily maximum	Temperature – Averages – Daily minimum	Temperature – Averages – Annual	Temperature – Extremes – Highest	Temperature – Extremes – Date	Temperature – Extremes – Lowest	Temperature – Extremes – Date	Heating degree days	Precipitation – Total	Precipitation – Greatest in 24 hours	Precipitation – Date (s)	Snow, Sleet – Total	Snow, Sleet – Greatest in 24 hours	Snow, Sleet – Date (s)	Relative humidity – 1:00a.m. E.S.T.	Relative humidity – 7:00a.m. E.S.T.	Relative humidity – 1:00p.m. E.S.T.	Relative humidity – 7:00p.m. E.S.T.	Wind – Average speed	Wind – Resultant speed	Wind – Resultant direction	Wind – Fastest mile – Speed	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days – Sunrise to sunset – Clear, 0–0.3	Number of days – Sunrise to sunset – Partly cloudy, 0.4–0.7	Number of days – Sunrise to sunset – Cloudy, 0.8–1.0	Number of days – Precipitation .01 inch or more	Number of days – Snow, Sleet 1.0 inch or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp – 90 °F and above	Number of days – Max temp – 32 °F and below	Number of days – Min temp – 32 °F and below	Number of days – Min temp – 0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In		In	In.		%	%	%	%	M.p.h.	M.p.h.		M.p.h.			%	Tenths											
FLORIDA																																					
MIAMI	82.8	68.8	75.8	94	JUN 22	36	FEB 26	94	66.22	4.74	JUN 12	.0	.0		81	85	61	71	9.7	3.9	10	38	32	DEC 23		6.2	57	171	137	132	0	67	4	33	0	0	0
ORLANDO	83.4	62.5	73.0	97	JUL 12+	28	FEB 26	410	40.91	2.30	FEB 12-13	.0	.0		85	89	54	68	9.0	0.9	5	40	32	JUN 5+		5.7	98	148	119	104	0	76	29	113	0	2	0
PENSACOLA	76.3	58.0	67.2	93	JUN 25+	25	FEB 8	1448	63.61	10.02	SEP 6-7	T	T	FEB 9	84	86	62	72	8.0	1.0	10	59	SW	AUG 1	63	5.7	106	117	142	109	0			29	0	8	0
TALLAHASSEE	80.7	55.2	68.0	100	JUN 20	21	FEB 26	1325	56.92	3.21	DEC 10-11	.0	.0		89	91	53	67	6.2	0.4	4	29	30	JUN 21		5.5	107	134	124	110	0	70	58	90	0	29	0
TAMPA	82.0	61.9	72.0	96	JUN 1+	27	FEB 26	491	39.36	5.10	AUG 12-13	.0	.0		85	89	58	71	8.4	1.3	6	29	14	JUN 15	63	5.5	109	137	119	80	0	74	27	66	0	3	0
WEST PALM BEACH	83.2	65.9	74.6	96	MAY 9	35	FEB 26	164	51.54	4.80	OCT 4-5	.0	.0		81	83	60	73	9.4	3.5	10	35	26	OCT 17+		6.1	66	165	134	111	0	85	10	55	0	0	0
GEORGIA																																					
ATHENS	71.2	49.3	60.3	94	JUN 19	8	FEB 25	2877	66.16	9.93	JUN 4	3.0	2.5	FEB 9	80	85	57	64	6.7	1.3	30	28	27	MAR 6		5.8	105	115	145	115	1	56	45	15	0	56	0
ATLANTA	69.7	49.6	59.7	90	JUL 25+	9	FEB 25	2987	54.84	3.30	AUG 23-24	2.0	2.0	FEB 9	78	83	58	63	7.8	1.2	29	38	NW	JUL 26	62	5.9	100	110	155	125	1	47	30	2	1	51	0
AUGUSTA	75.3	49.2	62.3	94	JUN 25+	12	FEB 26	2419	53.46	5.31	MAR 10	3.3	3.3	FEB 9	82	85	[illegible]	66	6.7	1.0	26	48	28	MAY 8		5.8	107	120	138	109	1	51	30	34	0	60	0
COLUMBUS	75.6	52.9	64.3	98	JUN 20+	17	FEB 25	2111	50.23	3.29	JUN 29-30	T	T	NOV 28 +	84	87	55	63	5.5	0.7	34	35	16	MAY 29		5.8	109	102	154	111	0			34	0	41	0
MACON	75.6	50.0	62.8	99	MAY 28	14	FEB 25	2319	34.70	2.13	JUN 2	1.0	1.0	FEB 9	78	81	53	61	6.5	0.7	32	50	NW	DEC 22	63	5.8	110	110	145	106	1	38	18	50	0	53	0
ROME	71.3	46.4	58.9	95	JUN 18	8	FEB 25	3281	58.78	4.78	AUG 24-25	.1	1.0	FEB 27																128	0			18	1	82	0
SAVANNAH	77.5	53.9	65.7	98	MAY 14	16	FEB 26	1708	41.27	2.80	JAN 1-2	.0	.0		84	86	51	68	7.0	0.4	20	31	N	NOV 27+		5.8	108	111	146	112	0	55	42	62	0	33	0
HAWAII																																					
HILO	82.9	68.2	75.6	91	MAY 18	55	FEB 21	0	154.00	9.38	AUG 7-8	.0	.0		81	82	76	69	7.2	1.2	19	29	SE	DEC 16	37	7.3	42	118	205	266	0	21	0	2	0	0	0
HONOLULU	84.5	70.6	77.6	92	OCT 3+	59	DEC 28+	0	34.34	4.33	DEC 17-18	.0	.0		70	75	71	58	10.0	7.5	6	34	NE	JAN 10	58	6.0	81	160	124	138	0	14	0	49	0	0	0
KAHULUI	82.8	67.0	74.9	91	JUL 30+	55	DEC 28	0	32.70	5.42	MAR 23-24	.0	.0		77	83	[illegible]	61	11.4	8.2	5	34	N	DEC 13	67	5.8	94	146	125	111	0	10	0	8	0	0	0
LIHUE	80.3	69.1	74.7	88	MAY 17	56	DEC 29+	0	53.28	5.07	DEC 8	.0	.0		80	84	80	70	11.5	7.9	6	34	SW	DEC 23	58	6.9	33	165	167	212	0	16	0	0	0	0	0
IDAHO																																					
BOISE	64.0	40.5	52.3	107	JUL 12	2	DEC 16+	5671	7.68	.62	APR 19	17.8	6.0	APR 19	63	71	53	42	8.5	0.9	17	34	W	JUN 21+	70	5.7	130	74	161	85	6	17	15	69	14	135	0
LEWISTON	65.3	42.9	54.1	110	JUL 12	6	DEC 15	4998	11.05	1.27	JUN 21	12.2	3.2	DEC 31		74	59	47								6.4	106	68	191	98	5			60	8	80	0
POCATELLO	59.9	33.4	46.7	97	AUG 23+	-12	DEC 13	7044	11.43	.90	MAY 9-10	45.0	7.3	APR 29-30	61	73	51	44	9.8	5.5	22	48	SW	NOV 24	62	6.3	96	87	180	94	14	29	10	49	33	175	6
ILLINOIS																																					
CAIRO U	67.0	50.0	58.5	95	JUN 14	6	DEC 31	3713	51.73	6.16	MAY 14-15	15.5	8.0	MAR 6								47	SW	FEB 15	59	6.0	105	100	160	107	3			21	12	71	0
CHICAGO MIDWAY	57.5	41.4	49.5	93	MAY 26	-10	DEC 31+	6259	41.10	2.95	JUN 10-11	68.5	19.8	JAN 26-27	71	75	60	62	11.3	2.5	22	51	SW	FEB 15	52	6.6	73	117	175	133	16	35	10	4	46	108	6
MOLINE	58.2	38.6	48.4	94	MAY 25	-17	DEC 31	6613	42.36	5.02	JUN 6-7	41.0	11.7	JAN 26	78	82	62	66	9.8	2.0	23	50	NW	MAY 18	51	6.5	90	96	179	120	10	47	22	8	52	135	13
PEORIA	58.8	40.1	49.5	92	JUN 15	-14	DEC 31	6262	35.95	2.38	APR 31-1	24.2	9.0	JAN 26-27	76	80	63	65	10.8	1.7	22	46	NW	FEB 23+	54	6.6	85	98	182	128	6	50	21	8	51	123	6
ROCKFORD	55.9	37.0	46.5	91	JUL 24+	-16	JAN 18	7122	39.05	3.32	JUN 10	34.9	6.3	MAR 19-20	80	83	62	65	10.7	1.9	25	46	27	MAY 18		6.4	83	107	175	119	12	48	26	4	53	144	14
SPRINGFIELD	60.7	42.4	51.6	95	MAY 25	- 9	DEC 31	5661	36.31	2.37	DEC 20-21	21.9	5.8	JAN 26-27	79	81	63	66	11.6	2.3	21	51	SW	JAN 6	59	6.3	91	101	173	125	10	51	18	10	37	116	3
INDIANA																																					
EVANSVILLE	65.6	44.1	54.9	94	JUN 14	- 3	FEB 25	4556	43.19	3.67	JUL 9-10	13.3	6.7	MAR 6	78	80	61	62	8.0	1.8	23	39	W	FEB 15	58	6.3	91	97	177	112	2	52	16	13	16	99	2
FORT WAYNE	57.5	38.2	47.9	92	JUN 16+	-13	FEB 8	6690	32.79	1.60	DEC 2-3 +	35.4	5.0	FEB 5	76	79	61	64	10.6	3.1	24	61	W	FEB 15	55	7.0	66	102	197	151	13	34	14	5	55	137	9
INDIANAPOLIS	62.2	42.8	52.5	93	JUL 11+	- 9	DEC 31	5410	34.75	1.96	OCT 16-17	23.3	4.1	FEB 27	78	82	60	63	7.9	2.1	24	49	W	FEB 15	50	6.7	73	106	186	126	9	39	15	9	28	109	4
SOUTH BEND	56.3	40.1	48.2	90	JUN 16	-10	DEC 31	6580	39.47	2.61	JAN 26-27	100.7	15.6	JAN 26-27	77	80	64	66	10.2	3.0	24	41	26	FEB 15		7.1	60	101	204	158	33	39	20	1	64	125	9

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature: Averages: Daily maximum	Daily minimum	Annual	Extremes: Highest	Date	Lowest	Date	Heating degree days	Precipitation: Total	Greatest in 24 hours	Date (s)	Snow, Sleet: Total	Greatest in 24 hours	Date (s)
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In	
IOWA														
BURLINGTON	59.0	40.2	49.6	95	JUL 23	-10	DEC 31+	6104	39.18			22.2		
DES MOINES	59.0	38.5	48.8	98	MAY 25	-13	JAN 18	6529	21.82	2.20	JUN 9-10	13.4	2.4	OCT 26
DUBUQUE	54.8	36.2	45.5	93	JUL 26	-23	JAN 18	7415	52.97	6.65	SEP 14	35.8	9.3	MAR 19-20
SIOUX CITY	59.0	36.5	47.8	102	MAY 25	-19	JAN 18	6893	22.43	2.07	MAY 29-30	10.4	2.8	JAN 6-7
WATERLOO	55.6	34.1	44.9	94	MAY 26	-26	JAN 18	7642	28.68	[illegible]	JUN 7	18.7	3.1	MAR 19-20
KANSAS														
CONCORDIA	63.8	40.8	52.3	99	JUL 23+	-5	DEC 31+	5439	38.24	5.46	JUN 9-10	12.2	3.2	DEC 26-27
DODGE CITY	67.6	42.2	54.9	102	MAY 24	-1	DEC 31+	4734	21.30	2.14	AUG 31-1	8.7	2.2	JAN 25-26
GOODLAND	65.1	35.9	50.5	99	JUL 22	-7	DEC 31	5792	15.72	2.04	SEP 18-19	21.5	3.3	DEC 26-27
TOPEKA	64.2	42.8	53.5	96	JUL 23+	-6	DEC 31	5070	50.64	5.52	JUN 20-25	17.2	4.1	DEC 21
WICHITA	67.6	44.6	56.1	103	AUG 29	0	MAR 8	4441	23.44	[illegible]	OCT 6-7 +	14.7	4.5	DEC 21
KENTUCKY														
COVINGTON	62.9	43.5	53.2	93	JUN 16+	-7	FEB 25	5064	35.24	1.77	JUL 27-28	24.1	7.7	MAR 6-7
LEXINGTON	64.0	45.0	54.5	92	JUN 14	-3	FEB 25	4569	45.59	2.56	MAR 5-6	27.6	7.8	DEC 31
LOUISVILLE	65.4	45.4	55.4	93	JUL 25	0	FEB 25	4420	43.92	2.40	AUG 9	20.2	9.3	MAR 6-7
LOUISIANA														
ALEXANDRIA	76.1	52.8	64.5	96	AUG 10	22	FEB 25+	2171	55.65	5.75	DEC 14-15	T	T	DEC 30 +
BATON ROUGE	78.2	56.1	67.2	96	JUN 19	23	DEC 29	1576	57.88	12.08	APR 14-15	.0	.0	
LAKE CHARLES	78.4	59.0	68.7	95	JUL 10+	28	FEB 8	1327	54.71	5.89	DEC 9	.0	.0	
NEW ORLEANS	78.0	57.9	68.0	98	JUN 27	30	DEC 24+	1405	53.43	5.58	FEB 5-6	.0	.0	
SHREVEPORT	76.5	54.5	65.5	100	AUG 9	21	JAN 19	2061	38.13	4.42	MAY 30-31	.7	.7	DEC 27
MAINE														
CARIBOU	48.0	28.4	38.2	88	JUN 4	-29	FEB 20	9831	37.01	2.15	AUG 28-29	118.0	12.1	DEC 29
PORTLAND	53.6	34.2	43.9	92	JUN 16	-22	FEB 13	7817	44.16	5.58	JUN 20-21	114.0	17.1	FEB 23
MARYLAND														
BALTIMORE	63.6	43.3	53.5	96	JUN 16	-1	FEB 8	5042	36.93	2.91	JUL 2-3	36.0	10.6	FEB 6-7
MASSACHUSETTS														
BLUE HILL OBS R	55.8	39.3	47.6	92	JUN 16+	-10	FEB 13	6770	54.05	3.85	MAY 25-26	124.4	17.8	MAR 15-16
BOSTON	56.6	42.3	49.5	94	JUN 16	-3	FEB 13	6153	47.60	3.64	MAY 25-26	67.1	10.8	MAR 6-7
NANTUCKET	54.7	40.4	47.6	82	JUL 10	5	FEB 13	6365	57.20	6.53	MAY 24-25	58.5	8.8	FEB 10
PITTSFIELD	54.5	33.3	43.9	89	JUN 16+	-16	FEB 13	7862	40.04	1.74	JUN 22-23	104.1	13.4	MAR 6-7
WORCESTER	54.4	37.3	45.9	90	JUN 16	-12	FEB 13	7315	50.73	3.03	MAY 25	111.9	14.7	DEC 28-29
MICHIGAN														
ALPENA	52.2	30.1	41.2	88	JUN 14	-20	MAR 8	8722	35.17	2.01	JUN 12-13	97.2	12.8	JAN 27-28
DETROIT	57.0	41.5	49.3	94	JUN 16	0	FEB 12+	6306						

State and Station	Relative humidity: 100am EST	700am EST	100pm EST	700pm EST	Wind: Average speed	Resultant speed	Resultant direction	Fastest mile: Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-03	Partly cloudy, 04-07	Cloudy, 08-10	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	Max temp: 90 °F and above	32 °F and below	Min temp: 32 °F and below	0 °F and below
	%	%	%	%	M.p.h	M.p.h		M.p.h			%	Tenths											
IOWA																							
BURLINGTON	78	81	65	66	10.4	1.5	25	52	36	JUL 30		6.2	100	97	168	106	5	50	24	2	41	125	6
DES MOINES	75	82	61	59	10.8	0.6	27	50	NW	APR 17	63	6.4	91	101	173	96	4	45	19	12	42	141	9
DUBUQUE		82	62	66								6.7	81	96	188	113	13			4	66	148	18
SIOUX CITY	74	80	[illegible]	57	10.9	[illegible]	24	66	NW	JUL 9	68	6.0	99	109	157	97	3	45	11	14	48	157	19
WATERLOO	81	85	63	64	[illegible]	[illegible]	25	46	21	AUG 1		6.5	88	100	177	101	8	37	19	6	54	165	24
KANSAS																							
CONCORDIA	76	84	59	59	11.6	1.9	17	67	NE	JUN 9	65	5.4	128	99	138	104	5	67	9	26	28	132	3
DODGE CITY	66	75	48	46	13.1	2.4	18	54	[illegible]	JUN 28	72	5.5	125	101	139	86	2	57	10	47	18	122	2
GOODLAND	72	81	49	46	12.2	[illegible]	23	51	34	SEP 12		5.2	131	120	114	87	10	47	32	27	18	169	3
TOPEKA	74	79	59	59	9.2	[illegible]	21	49		MAY 27	59	6.2	97	100	168	101	7	61	14	17	21	114	2
WICHITA	68	74	51	50	12.7	2.5	17	51	NW	JUN 29	61	5.7	115	99	151	79	6	54	6	42	19	104	1
KENTUCKY																							
COVINGTON	75	80	58	62	9.6	2.7	24	40	29	FEB 15		6.9	64	110	191	131	8	34	18	10	23	101	3
LEXINGTON	76	82	60	63	9.2	3.1	20	31	28	FEB 15		6.5	87	98	180	134	8	39	14	5	17	89	2
LOUISVILLE	75	80	58	61	8.6	1.8	23	61	NW	FEB 15	58	6.4	87	113	165	132	5	50	9	13	18	88	1
LOUISIANA																							
ALEXANDRIA	90	92	59	67	6.4	0.7	15	46	30	MAY 1		6.1	94	104	167	89	0	47	59	53	1	47	0
BATON ROUGE	80	84	59	63	7.4	[illegible]	13	48	17	MAY 1		5.9	92	130	143	94	0	44	45	64	0	24	0
LAKE CHARLES	89	90	61	70	8.3	2.2	13	35	15	APR 13		5.9	92	130	143	85	0	57	61	59	0	10	0
NEW ORLEANS	83	86	62	69	8.0	1.2	9	30	17	DEC 18+		5.4	124	115	126	100	0	41	43	56	0	14	0
SHREVEPORT	78	87	58	59	8.3	2.4	16	37	22	JAN 26	62	5.9	99	121	145	87	0	35	20	67	1	39	0
MAINE																							
CARIBOU		79	63	70								7.3	55	86	224	147	30			0	105	197	51
PORTLAND	80	78	61	72	7.2	1.6	27	41	W	FEB 16	52	6.5	91	87	187	127	31	18	64	2	52	170	17
MARYLAND																							
BALTIMORE	74	79	55	61	9.6	2.6	28	49	W	FEB 16	58	6.0	100	112	153	105	9	26	37	17	10	103	1
MASSACHUSETTS																							
BLUE HILL OBS R	73	80	62	73				60	NE	MAY 25	52					138	22			2	42	133	3
BOSTON	71	72	60	66	14.2	3.6	28	50	NE	MAY 25+	57	6.3	95	92	178	135	14	20	19	3	22	103	1
NANTUCKET	86	84	73	85	13.1	2.3	28	63	N	APR 28	53	6.9	74	87	204	133	14	19	114	0	14	116	0
PITTSFIELD																147	35			0	57	178	15
WORCESTER	75	76	58	67	10.2	4.5	28	46	29	FEB 21		6.4	92	96	177	137	21	22	95	1	61	153	5
MICHIGAN																							
ALPENA	79	80	58	67	7.0	1.4	24	35	NE	JAN 27	53	6.7	78	101	186	157	22	31	38	0	70	195	34
DETROIT	72	75	59	61	9.6	3.1	26	37	29	APR 22								33	16	5	44	119	2

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
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YEAR 1967

State and Station	Temperature: Averages: Daily maximum (°F)	Daily minimum (°F)	Annual (°F)	Extremes: Highest (°F)	Date	Lowest (°F)	Date	Heating degree days (Base 65 °F)	Precipitation: Total (In.)	Greatest in 24 hours (In.)	Date (s)	Snow, Sleet: Total (In)	Greatest in 24 hours (In.)	Date (s)
MICHIGAN														
DETROIT M WAYNE CO	57.0	38.4	47.7	93	JUN 16+	- 5	DEC 31	6666	33.83	2.17	DEC 21	29.8	4.0	JAN 26-27
DETROIT WILLOW RUN	56.3	37.3	46.8	95	JUN 16	- 5	FEB 8	6964	27.04	2.36	DEC 21	29.5	4.0	JAN 26-27
FLINT	54.6	36.4	45.5	88	JUN 16+	-22	FEB 12	7335	30.29	2.00	APR 16-17	62.7	19.8	JAN 26-27
GRAND RAPIDS	56.1	37.2	46.7	91	JUL 22	-16	FEB 12	7015	40.75	2.53	JUN 7-8	86.6	12.6	JAN 26-27
HOUGHTON LAKE	52.1	31.5	41.8	86	JUL 22	-24	FEB 12	8542	29.47	1.30	JUN 7-8	77.1	6.1	JAN 6-7
LANSING	56.0	35.9	46.0	92	JUN 16+	-24	FEB 12	7289	32.13	2.09	AUG 26	70.3	20.4	JAN 26-27
MARQUETTE U	49.1	33.5	41.3	92	JUL 21	-12	FEB 12+	8737	27.13	1.48	OCT 24-25	99.6	8.7	JAN 6-7
MUSKEGON	55.6	38.9	47.3	88	JUN 3	- 6	FEB 7	6812	35.41	3.19	JUN 7-8	111.3	9.3	JAN 26-27
SAULT STE MARIE	48.4	28.2	38.3	86	JUN 3	-25	FEB 12+	9688	32.43	1.77	AUG 7	117.7	9.7	FEB 15-16
MINNESOTA														
DULUTH	47.1	27.4	37.3	87	JUL 21+	-30	JAN 18	10091	21.43	1.87	JUN 13-14	58.5	13.0	JAN 6
INTERNATIONAL FALLS	46.1	23.5	34.8	92	JUL 20	-39	DEC 31+	11015	21.80	1.14	JUN 8	56.8	7.2	DEC 20-21
MINNEAPOLIS	52.5	32.7	42.6	91	JUL 22+	-31	JAN 18	8451	25.44	1.45	APR 1-2	65.6	8.5	FEB 15
ROCHESTER	52.2	32.2	42.2	88	JUL 20+	-31	JAN 18	8473	26.30	2.42	JUN 14-15	32.9	5.5	MAR 19-20
ST CLOUD	51.4	29.9	40.7	92	JUL 22	-32	JAN 18	9100	21.14	4.20	AUG 25-26	45.2	7.6	JAN 5-6
MISSISSIPPI														
JACKSON	75.2	50.9	63.1	96	JUN 19	17	FEB 8	2387	45.71	3.26	MAY 21-22	T	T	DEC 28 +
MERIDIAN	75.9	51.0	63.5	98	JUN 20	18	FEB 8	2317	47.49	3.25	AUG 9	T	T	DEC 27 +
MISSOURI														
COLUMBIA	64.3	44.3	54.3	97	JUL 23	- 3	DEC 31	4886	33.50	2.54	MAY 30	14.5	3.1	JAN 26-27
KANSAS CITY	65.3	45.8	55.6	99	JUL 24	1	DEC 31	4619	48.69	3.32	SEP 13-14	16.8	7.5	JAN 25-26
ST JOSEPH	65.3	41.4	53.4	98	MAY 25	- 5	MAR 8	5124	37.42	1.98	JUN 5	15.6	6.0	JAN 26
ST LOUIS	64.4	44.9	54.7	95	JUL 23	- 5	DEC 31	4814	41.30	2.16	JAN 25-26	9.3	1.7	DEC 2
SPRINGFIELD	67.3	43.4	55.4	96	AUG 29	3	JAN 18	4449	43.74	3.41	OCT 29-30	9.7	2.4	DEC 30-31
MONTANA														
BILLINGS	57.7	36.2	47.0	96	AUG 23	-12	DEC 30	7025	14.85	1.71	JUN 6-7	59.2	9.0	APR 29-30
GLASGOW	53.0	29.4	41.2	98	JUL 17	-34	JAN 17	9049	9.92	1.34	JUN 12-13	53.5	5.2	APR 28-29
GREAT FALLS	57.0	34.5	45.8	98	SEP 5	-27	DEC 21	7496	18.68	1.32	SEP 11-12	96.4	10.0	MAR 29-30
HAVRE	55.6	30.0	42.8	101	SEP 5+	-23	DEC 21	8498	8.27	1.19	APR 20-21	66.5	16.2	APR 20-21
HELENA	57.9	32.7	45.3	99	SEP 5	-26	DEC 21	7545	14.40	1.11	MAY 10	91.5	12.5	MAY 10
KALISPELL	56.5	32.0	44.3	99	SEP 1	- 2	DEC 20	7647	11.22	1.00	JUN 21-22	53.2	4.8	DEC 30-31
MILES CITY	57.7	33.5	45.6	102	AUG 23	-28	DEC 31	7716	17.50			66.3		
MISSOULA	58.3	34.1	46.2	100	JUL 12	- 8	NOV 27	7156	12.40	.54	JUN 6	44.8	4.3	APR 28-29
NEBRASKA														
GRAND ISLAND	62.6	37.3	50.0	102	JUL 22	-17	DEC 31	6207	24.37	4.54	JUN 13-14	20.8	4.3	MAY 3
LINCOLN U	61.7	40.8	51.3	100	MAY 24	- 7	DEC 31	5832	32.33	3.31	JUN 6-7	14.6	3.7	APR 23

State and Station	Relative humidity: 1:00am EST (%)	7:00am EST (%)	1:00pm EST (%)	7:00pm EST (%)	Wind: Average speed (M.p.h.)	Resultant speed (M.p.h.)	Resultant direction	Fastest mile: Speed (M.p.h)	Direction	Date	Possible sunshine (%)	Average sky cover sunrise to sunset (Tenths)	Number of days: Sunrise to sunset: Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	Max temp: 90 °F and above	Max temp: 32 °F and below	Min temp: 32 °F and below	Min temp: 0 °F and below
MICHIGAN																							
DETROIT M WAYNE CO	78	80	60	66	10.6	2.9	25	52	SW	FEB 16	54	6.7	76	99	190	133	10	29	23	6	38	132	3
DETROIT WILLOW RUN	70	75	56	60	11.3	3.6	25	44	27	APR 17+		6.8	73	100	192	119	10	33	26	4	49	144	6
FLINT	75	76	61	64	10.4	3.6	24	46	25	JUN 10		7.1	59	109	197	137	17	30	15	0	53	140	14
GRAND RAPIDS	78	81	64	68	9.9	2.5	23	54	N	APR 16	47	7.1	62	94	209	160	31	28	25	1	52	147	8
HOUGHTON LAKE	83	84	62	68	9.1	2.4	26	31	27	DEC 22		6.8	74	102	189	152	30	37	31	0	79	180	31
LANSING	79	81	61	67	10.2	3.5	25	56	W	FEB 16	55	6.9	61	113	191	142	14	31	21	7	59	150	16
MARQUETTE U								41	S	MAR 30	55	6.9	74	92	199	163	32			1	87	173	15
MUSKEGON	75	78	62	66	11.1	2.3	25	40	20	JAN 24		7.1	64	98	203	162	35	43	22	0	51	141	4
SAULT STE MARIE	83	82	66	72	9.2	1.0	30	35	NW	JAN 17	50	7.0	77	87	201	171	42	23	63	0	100	203	36
MINNESOTA																							
DULUTH	72	75	60	61	10.5	1.5	28	63	E	APR 30	53	6.7	80	98	187	128	13	27	48	0	106	203	50
INTERNATIONAL FALLS	74	77	60	56	9.3	1.6	25	35	16	MAR 1		6.5	74	112	179	126	22	26	15	1	120	210	77
MINNEAPOLIS	75	80	60	60	10.7	0.9	27	63	N	AUG 6	59	6.3	95	99	171	103	19	33	6	2	77	170	36
ROCHESTER	79	82	63	65	13.1	2.8	24	41	21	AUG 1+		6.3	93	99	173	100	11	35	27	0	78	177	33
ST CLOUD	75	79	55	56								6.3	93	107	165	104	13			4	91	179	51
MISSISSIPPI																							
JACKSON	89	94	60	67	8.2	1.5	16	40	NW	MAY 31	62	5.9	113	93	159	93	0	41	30	46	0	58	0
MERIDIAN	83	85	53	62	6.2	0.6	22	35	17	MAY 1		6.0	100	110	155	85	0	38	32	49	0	57	0
MISSOURI																							
COLUMBIA	73	80	55	58	10.5	1.3	21	52	SW	JAN 24	65	6.1	99	101	165	110	5	63	14	19	24	104	2
KANSAS CITY	73	80	58	58	9.6	1.4	20	41	NW	JUN 7+	56	6.2	100	100	165	92	5	54	9	28	18	95	0
ST JOSEPH	81	85	62	61	9.3	0.8	21	40	3	JUL 24+		5.6	124	96	145	97	5	52	22	26	22	118	4
ST LOUIS	78	84	60	61	9.8	1.8	23	48	SW	OCT 24	61	6.3	84	122	159	114	5	48	9	17	21	95	1
SPRINGFIELD	76	80	55	57	9.3	2.4	18	47	N	APR 23	58	5.9	110	96	159	110	4	60	18	22	13	101	0
MONTANA																							
BILLINGS	59	67	51	46	11.4	4.3	27	56	NW	OCT 19	62	6.2	96	96	173	103	20	28	17	19	42	153	9
GLASGOW	66	73	56	51								6.3	91	105	169	100	18			25	83	185	40
GREAT FALLS	55	60	48	44	11.4	6.5	24	56	SW	OCT 19	58	6.4	85	98	182	109	26	21	17	34	45	151	20
HAVRE		75	56	51				50	NW	JUN 3	64	6.2	100	104	161	75	18			36	67	188	35
HELENA	61	69	52	47	8.1	4.2	28	54	W	JAN 15	60	6.2	100	87	178	111	21	27	4	31	33	177	15
KALISPELL	74	81	61	52	8.0	1.2	18	32	31	JAN 15		6.5	92	87	186	125	22	19	15	29	38	188	3
MILES CITY	66	74	54	50	9.8	2.3	31									113	26	24	14	39	58	177	29
MISSOULA	67	77	58	49	6.2	1.4	30	38	SW	JAN 15	57	6.5	89	85	191	126	16	20	26	38	31	182	5
NEBRASKA																							
GRAND ISLAND	75	82	54	53	11.5	1.3	24	44	28	APR 30		5.7	114	107	144	90	8	48	18	35	34	159	5
LINCOLN U								52	NE	JUL 26	65	5.6	114	112	139	101	4			19	35	133	5

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Snow, Sleet: Total	Snow, Sleet: Greatest in 24 hours	Snow, Sleet: Date (s)	Relative humidity: 1 00am E S T	Relative humidity: 7 00am E S T	Relative humidity: 1 00p.m E S T	Relative humidity: 7 00p.m. E S T	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-03	Number of days: Sunrise to sunset: Partly cloudy, 04-07	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation .01 inch or more	Number of days: Snow, Sleet 1.0 inch or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp: 90 °F and above	Number of days: Max temp: 32 °F and below	Number of days: Min temp: 32 °F and below	Number of days: Min temp: 0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	in		%	%	%	%	M.p h	M.p h		M.p h			%	Tenths											
NEBRASKA																																					
NORFOLK	59.7	35.6	47.7	103	MAY 25	-22	DEC 31	6917	22.27	2.71	JUN 4-5	12.7	4.2	JAN 6-7		76	51	50								5.8	109	109	147	77	4			21	44	166	17
NORTH PLATTE	61.6	33.0	47.3	98	JUL 22	-25	DEC 31	6813	17.45	2.10	JUL 7-8	25.2	4.3	JAN 6	71	78	52	49	9.8	0.7	3	51	NW	JUN 14	64	5.8	106	118	141	69	8	43	14	18	33	184	10
OMAHA	62.7	39.4	51.1	97	MAY 25	-11	DEC 31	5881	30.48	2.20	JUN 4-5	17.2	4.5	DEC 26-27	73	77	58	56	10.3	0.4	17	56	NW	JUL 9+	63	5.9	108	111	146	102	7	44	10	20	30	131	7
SCOTTSBLUFF	62.3	34.1	48.2	98	JUL 21	-19	DEC 31	6579	16.54	1.10	MAY 29	31.0	3.3	APR 22-23	71	79	50	46	11.9	2.3	33	52	5	JUL 4		5.5	113	117	135	96	13	39	6	30	27	170	10
VALENTINE	60.4	33.1	46.8	102	JUL 22	-27	DEC 31	7140	14.93	1.66	JUN 14-15	12.5	2.0	MAR 14								56	SW	AUG 21	64	5.9	105	117	143	76	5			32	43	177	17
NEVADA																																					
ELKO	63.2	33.1	48.2	102	AUG 16+	-11	DEC 13	6785	8.62	.97	MAR 11-12	64.1	13.8	MAR 11-12	62	72	50	40	5.1	1.6	23	36	26	NOV 9		5.9	104	107	154	79	20	23	9	66	27	188	7
ELY	59.6	28.5	44.1	92	AUG 17	-12	DEC 21+	7760	14.73	1.45	JUN 12-13	73.0	12.1	DEC 30-1	63	71	46	41	9.4	4.4	20	45	SE	DEC 18	64	5.6	105	134	126	92	19	49	3	15	24	209	20
LAS VEGAS	79.0	53.1	66.1	114	JUL 3	25	DEC 21	2456	5.54	1.06	NOV 21-22	2.0	2.0	DEC 15	36	43	30	23	8.0	3.0	22	48	NW	AUG 8	87	3.7	201	99	65	32	1	21	1	127	0	40	0
RENO	67.1	32.5	49.8	101	JUL 2	0	DEC 15	5840	9.47	.86	JAN 21-22	38.2	11.2	JAN 24	55	69	47	32	6.1	1.5	27	70	SE	JAN 20	82	5.2	143	87	135	63	10	23	4	61	7	188	1
WINNEMUCCA	65.4	32.6	49.0	101	JUL 1	- 1	DEC 19	6334	7.70	.67	JUN 12-13	31.7	5.8	MAR 30-31	55	66	45	36	6.8	1.3	24	38	SW	DEC 4	53	5.9	107	97	161	63	10	18	2	65	9	194	2
NEW HAMPSHIRE																																					
CONCORD	56.1	32.5	44.3	92	JUN 16	-23	FEB 13	7805	34.19	2.16	JUL 4-5	96.5	10.4	MAR 7	81	82	56	68	6.3	2.1	30	36	W	APR 10+	57	6.5	87	103	175	127	24	17	57	1	49	184	27
MT WASHINGTON OBS	32.5	18.8	25.7	62	JUL 22+	-41	FEB 12	14229	82.00	4.60	MAY 25-26	282.5	22.2	MAY 25-26	84	84	83	85	31.5			140Y	E	MAY 8	32	8.2	35	68	262	222	81	9	315	0	190	245	76
NEW JERSEY																																					
ATLANTIC CITY	61.7	40.6	51.2	92	JUN 25+	- 7	FEB 13	5613	43.81	5.81	AUG 3-4	50.1	13.1	FEB 9-10	84	83	57	73	9.7	2.3	27	35	29	FEB 21+	51	6.3	98	97	170	120	10	33	48	9	18	126	3
NEWARK	60.7	44.6	52.7	95	JUN 16	4	FEB 13	5302	44.01	2.33	JUL 10-11	51.7	12.6	FEB 7	72	73	56	63	10.6	3.0	28	35	25	JUL 23		6.3	92	104	169	131	12	24	12	7	17	89	0
TRENTON U	61.3	45.2	53.3	93	JUN 16+	6	FEB 13	5137	46.27	2.34	JUL 21-22	49.8	12.7	FEB 7								42	SW	FEB 16	52	6.2	91	120	154	122	15			12	20	84	0
NEW MEXICO																																					
ALBUQUERQUE	70.2	42.7	56.5	99	JUL 1	1	JAN 8	4171	8.04	1.22	AUG 11-12	6.1	1.4	DEC 15-16	38	48	32	24	9.5	0.7	18	57	E	DEC 13	78	4.4	157	123	85	58	5	47	5	46	8	115	0
CLAYTON	67.6	38.4	53.0	95	JUL 31+	4	JAN 7	4876	13.84	2.08	MAY 27-28	13.0	4.5	DEC 12-13		66	36	36								5.1	139	106	120	72	4			21	11	146	0
RATON	64.9	32.5	48.7	91	JUL 9	-12	JAN 8	6067	14.62	2.27	JUL 9-10	21.7	4.4	JAN 16-17												5.5	116	125	124	81	8			1	20	178	12
ROSWELL	77.3	42.3	59.8	103	JUL 31	- 2	JAN 9	3311	11.06	1.94	AUG 10	9.8	4.7	DEC 14-15	50	64	37	29	9.2	1.5	19	45	NW	FEB 9	74	4.9	139	108	118	53	3	45	9	88	3	118	1
SILVER CITY	71.0	43.0	57.0	96	JUL 1	6	JAN 8	3720	10.25	1.06	AUG 4	13.0	7.0	DEC 15-16												4.2	157	132	76	54	5			21	3	98	0
NEW YORK																																					
ALBANY	56.9	35.5	46.2	96	JUN 16	-14	FEB 8	7301	33.28	1.76	OCT 25-26	78.3	12.2	DEC 28-29	77	76	57	66	9.4	2.9	26	45	NW	APR 23+	51	7.2	50	99	216	139	20	24	21	3	43	168	14
BINGHAMTON	52.9	37.0	45.0	87	JUN 16+	- 8	FEB 13	7509	37.72	2.10	NOV 2	96.9	6.5	MAR 15-16	81	84	66	71	9.8	3.3	25	45	NW	JUN 15	50	7.6	43	91	231	169	25	32	61	0	68	152	8
BUFFALO	55.8	39.3	47.6	91	JUN 21	- 7	FEB 8	6834	34.60	3.63	SEP 27-28	74.1	8.3	NOV 6-7	76	76	62	69	11.5	2.4	28	46	25	FEB 16		6.3	86	111	168	133	13	16	35	0	22	98	1
J.F. KENNEDY	57.4	43.6	50.5	89	JUL 12	0	FEB 13	5792	45.11	2.03	MAR 7	44.6	9.3	FEB 7	68	71	55	61	8.9	2.0	30	42	NE	APR 27	55					126	13	27		9	20	86	0
NEW YORK U	60.6	45.3	53.0	96	JUN 16	4	FEB 13	5282	49.12	3.18	JUN 18-19	51.1	12.5	FEB 7	77	78	63	69	12.1	5.5	24	62	SW	FEB 16	50	7.4	47	95	223	179	27	32	14	2	56	132	7
NEW YORK LA GUARDIA	59.8	46.3	53.1	95	JUN 16	8	FEB 13+	5182	43.06	2.35	MAR 6-7	41.4	10.6	FEB 7	67	69	55	60	11.8	2.7	30	48	NW	APR 3		6.5	87	97	181	128	12	26	17	6	18	77	0
ROCHESTER	56.4	38.4	47.4	91	JUN 16	- 7	FEB 13+	6784	29.84	1.76	SEP 27-28	73.5	7.3	FEB 25	75	76	59	66	9.2	4.0	25	57	SW	FEB 16	52	7.2	56	104	205	152	24	32	13	1	43	134	6
SYRACUSE	56.1	37.7	46.9	88	JUN 16+	-22	FEB 13	6852	36.02	2.09	NOV 2-3	78.8	5.7	FEB 24-25+	77	77	59	68	10.9	3.0	26	62	W	FEB 16	49	7.0	64	99	202	159	29	33	9	0	40	130	13
NORTH CAROLINA																																					
ASHEVILLE	65.7	41.4	53.6	88	APR 6	- 2	FEB 25	4462	52.11	4.12	AUG 22-23	7.6	2.2	FEB 9	88	91	58	69	7.4	1.8	35	40	32	MAY 30+	63	6.0	95	114	156	118	4	45	77	0	3	117	1
CAPE HATTERAS R	67.9	52.8	60.4	89	AUG 23+	19	MAR 2+	2777	52.95	5.53	JUL 7-8	T	T	DEC 23	82	81	66	79	12.3	2.4	32	42	SW	DEC 28	54	6.1	97	100	168	123	0	51	15	0	1	20	0

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature – Averages – Daily maximum	Temperature – Averages – Daily minimum	Temperature – Averages – Annual	Temperature – Extremes – Highest	Temperature – Extremes – Date	Temperature – Extremes – Lowest	Temperature – Extremes – Date	Heating degree days	Precipitation – Total	Precipitation – Greatest in 24 hours	Precipitation – Date (s)	Snow, Sleet – Total	Snow, Sleet – Greatest in 24 hours	Snow, Sleet – Date (s)	Relative humidity – 100am EST	Relative humidity – 700am EST	Relative humidity – 100pm EST	Relative humidity – 700pm EST	Wind – Average speed	Wind – Resultant speed	Wind – Resultant direction	Wind – Fastest mile – Speed	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days – Sunrise to sunset – Clear, 0-0.3	Number of days – Sunrise to sunset – Partly cloudy, 0.4-0.7	Number of days – Sunrise to sunset – Cloudy, 0.8-1.0	Number of days – Precipitation .01 inch or more	Number of days – Snow, Sleet 1.0 inch or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp – 90 °F and above	Number of days – Max temp – 32 °F and below	Number of days – Min temp – 32 °F and below	Number of days – Min temp – 0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In		In	In		%	%	%	%	M.p.h.	M.p.h.		M.p.h.			%	Tenths											
NORTH CAROLINA																																					
CHARLOTTE	69.6	48.6	59.1	92	MAY 28	7	FEB 26+	3264	43.21	4.40	AUG 21-22	5.4	5.4	FEB 9	77	84	54	61	6.9	[illegible]	26	35	SW	MAR 7	71	5.8	103	112	152	110	1	32	30	8	1	71	0
GREENSBORO	70.0	47.5	58.8	96	JUN 24	6	FEB 25	3465	33.88	1.96	AUG 7	3.5	2.7	FEB 9	83	88	56	66	[illegible]	1.3	25	61	NW	MAY 29	58	6.0	114	89	162	106	1	33	31	21	1	76	0
RALEIGH	70.3	47.9	59.1	93	JUL 11+	8	FEB 25	3323	39.58	3.44	JUN 17-18	11.0	9.1	FEB 9	79	85	53	66	8.5	1.0	26	44	32	MAR 15	59	5.7	115	102	148	105	2	37	34	17	1	73	0
WILMINGTON	75.1	53.6	64.4	97	MAY 28	18	FEB 25	2136	42.16	2.98	AUG 10-11	T	T	DEC 23 +	78	78	51	68	8.3	0.7	28	45	W	NOV 24	69	5.8	106	117	140	108	0	35	30	48	1	36	0
NORTH DAKOTA																																					
BISMARCK	52.7	27.3	40.0	102	JUL 31	-43	DEC 31	9363	13.54	1.22	MAY 30-1	69.4	11.0	MAY 30-1	71	77	[illegible]	54	11.0	1.8	31	52	NW	MAY 7	63	6.4	82	112	171	93	27	15	9	22	92	199	52
FARGO	50.9	28.1	39.5	94	AUG 24	-32	DEC 31	9522	13.04	1.36	APR 16-17	39.3	8.0	DEC 20-21	72	77	58	57	12.5	0.9	29	56	N	JAN 16	60	6.3	95	91	177	91	21	17	9	11	94	196	52
WILLISTON	53.3	28.0	40.7	100	JUL 29	-34	JAN 17	9258	12.68	2.04	APR 20-21	58.5	5.6	APR 29		78	56	54				52	NW	MAR 31	68	5.9	104	112	149	99	21			29	81	196	51
OHIO																																					
AKRON	59.2	40.0	49.6	93	JUN 16+	-3	FEB 8	6099	31.88	2.33	SEP 27-28	52.4	6.3	FEB 5-6	78	82	61	67	9.8	3.0	24	46	32	MAY 27		7.1	58	99	208	149	16	39	17	7	30	121	3
CINCINNATI OBS	63.5	43.8	53.7	94	JUL 25+	-3	FEB 25	4988	32.48	1.90	MAY 6-7	18.6	9.0	MAR 6-7								47	SW	FEB 15	52					130	6			17	23	101	1
CLEVELAND	58.4	41.0	49.7	93	JUN 16+	-7	FEB 8	6062	26.79	1.10	MAY 7	39.9	4.3	FEB 5-6	74	76	60	64	10.4	3.5	23	53	W	FEB 16+	49	7.2	61	96	208	156	13	33	11	8	37	135	1
COLUMBUS	59.8	40.8	50.3	92	JUN 15+	-2	MAR 1+	5846	33.96	1.59	SEP 27-28	41.5	6.6	MAR 6-7	80	82	62	66	9.9	2.2	24	54	W	FEB 16	52	7.0	62	116	187	137	12	38	9	5	29	114	4
DAYTON	60.9	42.0	51.5	95	JUN 15	-4	FEB 25	5707	33.43	2.51	JUN 28	30.5	4.2	NOV 30	74	78	60	65	9.8	2.9	23	60	SW	FEB 16	54	6.9	73	95	197	138	11	28	23	8	31	115	4
MANSFIELD	57.9	39.7	48.8	92	JUN 14	-3	FEB 8	6337	29.89	2.16	SEP 20-21	37.1	6.2	FEB 5	75	78	60	66	10.3	4.2	23	44	24	FEB 15		7.0	69	99	197	134	14	38	30	4	45	124	4
TOLEDO	57.6	37.4	47.5	95	JUN 15	-14	FEB 8	6747	31.73	3.53	DEC 21	36.1	7.4	FEB 5-6	77	81	58	66	9.6	3.0	25	56	SW	FEB 16	53	6.9	57	115	193	144	12	37	13	6	47	151	5
YOUNGSTOWN	56.3	37.7	47.0	92	JUN 15+	-5	FEB 8	6863	34.87	3.82	JUL 2	68.4	5.7	FEB 27-28	80	83	64	69	9.7	2.7	24	43	27	FEB 15		7.3	57	98	210	151	25	31	27	4	57	137	2
OKLAHOMA																																					
OKLAHOMA CITY	72.2	49.6	60.9	103	AUG 2+	9	MAR 8	3234	25.81	3.11	APR 12	2.9	1.2	NOV 2-3	69	76	52	51	11.1	2.6	15	45	NW	DEC 2	67	5.8	115	98	152	80	1	46	13	54	2	70	0
TULSA	70.9	47.7	59.3	100	AUG 8	5	MAR 8	3563	36.91	2.55	JUL 16	5.2	1.6	DEC 30	74	81	55	55	11.1	2.9	18	42	SW	DEC 18	61	5.7	109	113	143	90	2	53	9	44	6	81	0
OREGON																																					
ASTORIA	58.5	43.1	50.8	89	SEP 14	23	DEC 13	5093	66.95	2.45	JAN 18-19	1.5	.7	MAR 10-11	91	93	83	77	8.5	2.3	23	37	19	JAN 19		7.4	56	77	232	196	0	12	49	0	0	45	0
BURNS U	60.8	34.1	47.5	98	JUL 12	-8	DEC 19	6845	11.28	1.00	OCT 2	67.6	11.0	MAR 10-11	62	71	56	41	7.0	2.7	30					5.5	128	107	130	91	18			39	18	200	3
EUGENE	65.2	43.2	54.2	99	AUG 15	24	DEC 14+	4313	36.81	2.54	JAN 19-20	1.8	1.1	DEC 18	80	88	73	57	7.3	1.6	21	41	18	OCT 2		6.4	90	96	179	116	1	2	53	30	0	26	0
MEACHAM	53.3	36.3	44.8	97	AUG 17	2	DEC 15	7628	29.91	1.77	OCT 27-28	159.9	12.8	FEB 15			60	54				35	19	OCT 2		6.7	96	60	209	131	46			12	48	175	0
MEDFORD	68.0	41.1	54.6	107	AUG 19+	14	DEC 14	4763	18.67	1.63	DEC 4-5	10.8	3.4	DEC 17-18	69	81	66	46	4.5	1.3	30	35	17	OCT 2		5.4	138	74	153	93	5	8	62	84	1	95	0
PENDLETON	66.5	43.7	55.1	105	AUG 17+	4	DEC 15	4688	6.77	.34	JAN 19-20	9.3	2.2	MAR 11	58	66	52	42	9.4	3.8	25	39	24	OCT 22		5.7	129	69	167	75	3	4	11	68	6	72	0
PORTLAND	64.1	44.4	54.3	102	AUG 28+	13	DEC 20	4378	29.24	1.46	MAR 14-15	5.7	3.3	DEC 21	77	86	73	57	8.2	1.0	23	70	S	OCT 2	54	6.9	76	81	208	142	2	11	44	21	1	35	0
SALEM	65.3	41.3	53.3	102	AUG 9	19	DEC 13	4569	32.44	2.30	JAN 27	1.0	.6	DEC 20	77	84	70	55	7.9	[illegible]	21	68	26	OCT 2		6.4	96	83	186	133	0	9	27	31	0	57	0
SEXTON SUMMIT R	56.9	40.0	48.5	93	AUG 15	14	DEC 14+	6381	20.78	1.16	OCT 2-3	108.5	10.7	FEB 13	71	73	70	58				58	15	JAN 19		4.9	162	56	147	113	27			7	31	126	0
PACIFIC AREA																																					
JOHNSTON	83.2	75.3	79.3	88	AUG 25+	65	DEC 31	0	39.45	3.83	OCT 21-22	.0	.0		77	80	79	71	14.8	12.8	9	41	W	DEC 17	62	5.7	106	137	122	179	0	10	0	0	0	0	0
KOROR R	87.3	75.7	81.5	92	SEP 23	71	AUG 27+	0	138.67	5.17	NOV 1-2	.0	.0		77	88	90	79	7.7	0.3	9	73	S	MAR 2	65	9.4	2	26	337	253	0	36	0	42	0	0	0
KWAJALEIN	86.5	76.7	81.6	90	JUL 30+	71	OCT 6	0	108.57	3.11	SEP 1	.0	.0		77	78	82	83	13.2	10.4	7	44	11	MAY 19		8.2	21	86	258	247	0	13	0	2	0	0	0
MAJURO	85.7	77.0	81.4	90	SEP 17	70	OCT 23	0	126.05	4.46	OCT 8-9	.0	.0		75	78	81	82	9.2	7.7	8	38	NE	JAN 13	55	8.1	22	95	248	256	0	13	0	1	0	0	0
MARCUS ISLAND	82.1	72.1	77.1	93	SEP 2	55	JAN 27	2	41.05	3.82	NOV 25	.0	.0		74	81	82	74				61	N	SEP 20	65					153	0			6	0	0	0

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
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State and Station	Temperature – Averages – Daily maximum	Temperature – Averages – Daily minimum	Temperature – Averages – Annual	Temperature – Extremes – Highest	Date	Temperature – Extremes – Lowest	Date	Heating degree days	Precipitation – Total	Precipitation – Greatest in 24 hours	Date (s)	Snow, Sleet – Total	Snow, Sleet – Greatest in 24 hours	Date (s)
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In	
PACIFIC AREA														
PAGO PAGO	85.1	73.4	79.3	91	APR 13+	65	AUG 5	0	140.63	7.50	OCT 9	.0	.0	
PONAPE R	87.3	73.6	80.5	92	OCT 7	69	SEP 20+	0	231.96	7.13	MAR 28-29	.0	.0	
TAGUAC GUAM R	84.3	71.9	78.1	91	JUL 13	61	DEC 21+	0	126.52	5.94	AUG 23-24	.0	.0	
TRUK MOEN ISLAND	86.2	75.6	80.9	91	JUN 14	71	JUL 10+	0	175.55	9.43	DEC 27-28	.0	.0	
WAKE	84.3	75.3	79.8	90	OCT 28	67	MAR 5+	0	62.36	5.15	SEP 16-17	.0	.0	
YAP R	86.4	75.1	80.8	92	OCT 11+	69	MAR 1	0	141.14	10.06	MAY 8-9	.0	.0	
PENNSYLVANIA														
ALLENTOWN	59.2	38.6	48.9	95	JUN 16	- 7	FEB 9	6386	43.79	3.55	JUN 18-19	55.0	10.7	FEB 7
ERIE	56.1	40.4	48.3	89	JUN 16+	- 1	FEB 8	6463	37.78	2.96	JUL 10-11	79.6	12.5	NOV 5
HARRISBURG	61.2	42.2	51.7	94	JUN 16	- 2	FEB 9+	5646	41.09	3.14	AUG 3-4	51.0	11.3	FEB 7
PHILADELPHIA	62.4	44.2	53.3	93	JUL 24+	4	FEB 13+	5193	44.82	2.53	JUN 22-23	36.0	9.8	FEB 7
PITTSBURGH	59.9	40.6	50.3	93	JUN 17	- 6	FEB 8	5923	36.38	1.57	MAR 5-6	64.7	13.6	MAR 6-7
PITTSBURG U	60.8	43.1	52.0	92	JUN 17+	2	FEB 25	5421	37.45	3.44	JUL 27-28	45.2	11.5	MAR 6-7
READING U	61.7	44.2	53.0	94	JUN 16	4	FEB 9	5252	39.38	2.17	MAR 6-7	40.6	12.9	FEB 7
SCRANTON	57.6	40.0	48.8	92	JUN 16+	- 6	FEB 8	6396	35.17	2.29	JUN 16	78.6	11.8	MAR 6-7
WILLIAMSPORT	59.1	39.4	49.3	92	JUN 13+	- 9	FEB 8	6263	43.86	2.08	OCT 25	73.0	13.9	MAR 6-7
RHODE ISLAND														
BLOCK ISLAND	54.3	43.0	48.7	82	JUL 10	2	FEB 13	6155	44.38	4.39	DEC 28-29	39.5	9.0	MAR 15-16
PROVIDENCE	58.1	40.1	49.1	93	JUN 16	- 5	FEB 13	6266	46.50	3.76	MAY 25-26	70.7	10.5	MAR 15-16
SOUTH CAROLINA														
CHARLESTON	75.9	52.8	64.4	97	AUG 8+	14	FEB 26	2007	43.65	6.23	MAY 22	T	T	FEB 13 +
COLUMBIA	73.2	48.8	61.0	95	JUN 24	9	FEB 26	2722	54.71	5.57	MAY 21-22	3.4	3.4	FEB 9
GNVLE-SPARTANBURG	70.7	48.7	59.7	97	JUN 25+	8	FEB 25	3036	48.14	4.49	AUG 22-23	2.0	1.5	FEB 9
SOUTH DAKOTA														
ABERDEEN	55.4	30.0	42.7	101	JUL 31	-39	DEC 31	8406	17.24	2.60	SEP 17-18	31.5	6.1	DEC 20-21
HURON	58.0	32.4	45.2	101	JUL 31	-25	FEB 18	7673	15.17	5.48	JUN 18-19	32.7	6.7	FEB 14-15
RAPID CITY	58.5	34.1	46.3	100	AUG 24	-19	DEC 31	7215	22.59	2.06	APR 30	47.4	13.6	APR 30
SIOUX FALLS	57.6	32.4	45.0	104	JUL 22	-22	JAN 18	7753	16.40	2.50	APR 1-2	22.3	5.7	JAN 6-7
TENNESSEE														
BRISTOL	65.7	42.6	54.2	88	JUN 17	- 1	FEB 25	4406	42.87	2.08	JUL 28-29	13.5	4.0	JAN 19
CHATTANOOGA	69.1	47.6	58.4	93	JUN 18	6	FEB 25	3397	51.93	3.19	JUL 5-6	1.8	1.8	FEB 6-7
KNOXVILLE	67.7	47.5	57.6	92	JUN 14	5	FEB 25	3564	55.66	2.99	JUL 28-29	7.9	3.3	FEB 7
MEMPHIS	70.9	51.1	61.0	94	JUN 21	13	JAN 18	3078	46.44	2.92	DEC 2	.9	.6	JAN 17
NASHVILLE	69.5	47.9	58.7	95	JUN 18	5	FEB 25	3516	45.22	3.65	MAR 6	9.6	4.9	DEC 31
OAK RIDGE R	67.6	46.0	56.8	91	JUN 17+	3	FEB 25	3781	68.77	4.91	JUL 5-6	12.6	6.0	FEB 6-7

State and Station	Relative humidity – 100am E S T	700am E S T	100pm E S T	700pm E S T	Wind – Average speed	Resultant speed	Resultant direction	Fastest mile – Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days – Sunrise to sunset – Clear, 0-03	Partly cloudy, 04-07	Cloudy, 08-10	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	Max temp – 90 °F and above	Max temp – 32 °F and below	Min temp – 32 °F and below	Min temp – 0 °F and below
	%	%	%	%	M p h	M.p h		M p h			%	Tenths											
PACIFIC AREA																							
PAGO PAGO	84	88	87	75	9.2	6.0	10	40	SE	AUG 10	57	7.5	35	136	194	270	0	24	0	13	0	0	0
PONAPE R	79	90	91	77	7.1	4.2	10	29	SW	NOV 11+	48	8.5	11	70	284	294	0	30	0	41	0	0	0
TAGUAC GUAM R								40	SW	NOV 13						270	0			1	0	0	0
TRUK MOEN ISLAND	78	85	87	78	9.4	4.1	7	38	NW	NOV 11	67	9.0	5	52	308	258	0	18	0	1	0	0	0
WAKE	69	74	80	80	14.7	11.0	8	104	N	SEP 16		6.4	73	135	153	199	0	9	0	1	0	0	0
YAP R	77	88	92	80	7.4	2.8	5	61	NE	NOV 1	55	9.3	2	45	318	274	0	18	0	18	0	0	0
PENNSYLVANIA																							
ALLENTOWN	77	79	55	64	8.9	2.8	28	39	26	FEB 16		6.4	88	101	176	116	15	30	21	5	27	140	4
ERIE	73	74	64	67	11.9	4.2	23	40	27	FEB 16		7.1	68	89	208	172	26	39	12	0	44	120	3
HARRISBURG	73	75	55	62	7.9	2.2	29	43	W	APR 22	59	6.7	74	104	187	128	11	36	13	14	23	112	2
PHILADELPHIA	75	76	55	63	9.2	2.3	29	40	NW	JUL 31+	55	6.5	84	94	187	116	9	31	27	12	14	99	0
PITTSBURGH	77	80	58	65	9.2	3.0	25	58	26	FEB 16	43	7.4	46	99	220	143	18	31	15	9	37	120	1
PITTSBURG U											42					134	15			5	30	104	0
READING U								56	E	MAY 7+	55	6.0	101	121	143	119	9			12	17	94	0
SCRANTON	77	81	60	65	8.0	2.1	25	41	SW	FEB 16	53	6.9	62	109	194	134	22	29	33	3	37	126	5
WILLIAMSPORT	86	86	61	69	8.0	1.9	28	40	26	FEB 16		7.0	57	120	188	141	21	37	41	6	35	134	4
RHODE ISLAND																							
BLOCK ISLAND												6.4	87	110	168	129	9			0	18	100	0
PROVIDENCE	76	75	57	68	10.7	2.8	28	46	22	FEB 16	51	6.3	103	83	179	134	16	24	26	1	22	128	2
SOUTH CAROLINA																							
CHARLESTON	83	84	52	69	8.9	0.6	24	60Y	N	MAY 31	61	5.9	95	126	144	105	0	39	37	56	0	40	0
COLUMBIA	86	90	53	68	6.8	0.8	28	35	35	NOV 24+	68	5.6	112	124	129	97	1	47	19	24	1	65	0
GNVLE-SPARTANBURG	77	80	53	62	7.5	1.0	30	44	SW	JAN 27	58	5.8	107	106	152	115	1	46	33	14	1	56	0
SOUTH DAKOTA																							
ABERDEEN	74	78	56	56	12.2	0.7	1	58	34	JAN 16		6.1	103	94	168	88	9	39	11	19	67	190	44
HURON	74	80	54	55	12.6	0.7	21	57	NW	JAN 16	67	6.1	102	94	169	96	10	42	7	29	50	177	31
RAPID CITY	66	68	50	50	11.6	3.6	33	65	SW	JAN 22	60	5.8	111	109	145	117	13	45	13	24	51	177	12
SIOUX FALLS	74	79	55	55	11.0	0.9	25	46	32	APR 17		6.0	108	96	161	91	8	43	13	20	54	183	33
TENNESSEE																							
BRISTOL	85	89	60	66	5.6	1.5	28	35	25	MAR 7		6.2	94	112	159	125	5	36	50	0	7	101	1
CHATTANOOGA	86	87	62	66	6.3	0.8	24	36	N	APR 24	52	6.2	99	97	169	127	1	55	52	7	3	75	0
KNOXVILLE	83	88	61	65	6.7	1.8	28	37	W	FEB 16	54	6.4	79	115	171	128	3	49	45	7	3	78	0
MEMPHIS	72	77	56	58	9.6	1.9	19	42	NE	AUG 3	62	6.1	98	103	164	99	0	47	20	30	4	67	0
NASHVILLE	77	82	56	60	8.8	2.4	22	36	SW	FEB 15	62	6.2	85	118	162	114	4	54	22	20	6	82	0
OAK RIDGE R								50Y		JAN 27		6.5	94	88	183	126	4			5	3	79	0

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature: Averages: Daily maximum (°F)	Temperature: Averages: Daily minimum (°F)	Temperature: Averages: Annual (°F)	Temperature: Extremes: Highest (°F)	Temperature: Extremes: Date	Temperature: Extremes: Lowest (°F)	Temperature: Extremes: Date	Heating degree days (Base 65 °F)	Precipitation: Total (In)	Precipitation: Greatest in 24 hours (In)	Precipitation: Date (s)	Snow, Sleet: Total (In)	Snow, Sleet: Greatest in 24 hours (In)	Snow, Sleet: Date (s)	Relative humidity: 1:00am E.S.T (%)	Relative humidity: 7:00am E.S.T (%)	Relative humidity: 1:00p.m. E.S.T (%)	Relative humidity: 7:00p.m. E.S.T (%)	Wind: Average speed (M.p.h)	Wind: Resultant speed (M.p.h)	Wind: Resultant direction	Wind: Fastest mile: Speed (M.p.h)	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Possible sunshine (%)	Average sky cover sunrise to sunset (Tenths)	Number of days: Sunrise to sunset: Clear, 0-0.3	Number of days: Sunrise to sunset: Partly cloudy, 0.4-0.7	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation .01 inch or more	Number of days: Snow, Sleet 1.0 inch or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp: 90 °F and above	Number of days: Max temp: 32 °F and below	Number of days: Min temp: 32 °F and below	Number of days: Min temp: 0 °F and below
TEXAS																																					
ABILENE	76.9	53.1	65.0	107	MAY 10	14	JAN 8	2341	23.34	2.14	JUN 11	4.0	2.0	DEC 14 +	63	71	52	46	11.5	4.5	18	42	N	JAN 6	71	5.4	128	105	132	62	2	34	5	93	1	55	0
AMARILLO	71.3	44.6	58.0	100	AUG 8	6	JAN 9	3741	16.85	1.84	JUL 18	9.7	3.2	DEC 14-15	61	71	44	39	14.4	4.3	21	54	NW	JAN 6	71	5.1	131	112	122	71	4	49	18	54	5	100	0
AUSTIN	79.6	57.6	68.6	102	JUL 31+	22	FEB 7	1622	33.54	3.37	NOV 9-10	2.0	2.0	FEB 6	73	81	53	49	9.4	2.4	16	47	NW	OCT 29	62	5.7	102	124	139	78	1	33	26	106	0	22	0
BROWNSVILLE	82.0	65.1	73.6	99	MAY 31	33	FEB 9+	608	35.67	12.19	SEP 19-20	T	T	JAN 9	85	68	61	70	12.3	6.5	14	69	NE	SEP 20	63	5.8	100	140	125	68	0	24	34	97	0	0	0
CORPUS CHRISTI	80.4	62.5	71.5	98	AUG 10+	25	JAN 4	947	38.22	8.76	SEP 21-22	1.0	1.0	JAN 9	85	89	63	68	12.9	7.1	13	72	E	SEP 20	53	6.3	82	122	161	68	1	23	42	80	0	6	0
DALLAS	77.2	56.6	66.9	105	JUL 31	23	JAN 8	2010	27.76	2.27	APR 20-21	T	T	DEC 27 +	65	75	52	47	11.1	4.2	15	53	SE	JUN 11	65	5.5	123	103	139	81	0	36	9	83	0	31	0
DEL RIO	81.5	58.4	70.0	103	JUL 31+	24	FEB 7	1441	13.96	3.76	SEP 2-3	.6	.6	FEB 6	59	73	53	40	10.0	5.7	12	46	33	OCT 29		5.6	101	126	138	58	0	23	16	130	0	19	0
EL PASO	76.9	49.3	63.1	101	JUN 23	9	JAN 9	2621	5.72	.97	SEP 19-20	5.6	3.9	DEC 14-15	38	47	32	25	8.5	1.6	24	61	W	APR 13	83	4.2	175	95	95	42	3	31	3	89	1	69	0
FORT WORTH	77.0	54.7	65.9	104	JUL 31	20	FEB 7+	2122	27.30	2.47	APR 20-21	T	T	DEC 27 +	69	78	53	50	9.9	3.2	18	39	18	APR 13		5.6	130	92	143	81	0	42	7	76	0	41	0
GALVESTON U	74.6	65.4	70.0	93	AUG 10	34	FEB 8+	1040	35.24	2.90	JUL 23	.0	.0									47	NW	OCT 30	58					81	0			2	0	0	0
HOUSTON	80.2	60.1	70.2	99	JUN 26	26	JAN 4	1140	36.45	3.12	SEP 4-5	T	T	JAN 9	82	85	58	62	10.2	3.2	14	35	29	DEC 2+	60	6.2	86	129	150	92	0	38	42	80	0	8	0
LUBBOCK	73.2	45.2	59.2	99	AUG 8+	3	JAN 9+	3401	20.64	5.70	JUN 1	3.9	1.4	DEC 14-15	59	71	44	38	12.3	3.1	20	44	8	JUN 1		5.3	121	118	126	59	1	47	15	47	4	98	0
MIDLAND	77.1	49.7	63.4	101	JUN 9+	7	JAN 9	2527	8.47	.93	MAR 22	1.2	1.0	DEC 14	58	71	42	33	11.6	3.8	17	44	32	MAY 20		5.0	137	114	114	58	1	32	9	90	2	68	0
PORT ARTHUR	78.7	58.8	68.8	99	JUL 10	27	FEB 8+	1344	40.67	3.63	APR 13	T	T	FEB 11	84	86	59	68	9.6	1.9	13	49	SW	MAY 29+	63	5.9	93	137	135	93	0	43	54	61	0	12	0
SAN ANGELO	79.4	53.6	66.5	106	MAY 10	14	JAN 19	2099	19.98	2.92	SEP 14-15	1.9	1.4	DEC 9-10	61	71	46	41	9.9	3.7	19	40	29	APR 12		5.2	128	121	116	62	1	31	4	118	0	56	0
SAN ANTONIO	80.1	57.9	69.0	102	JUL 31	21	JAN 4	1565	29.26	2.71	SEP 20-21	T	T	FEB 6 +	74	82	53	48	9.3	3.0	13	40	N	MAY 22+	61	5.9	95	123	147	74	0	22	23	104	0	32	0
VICTORIA	80.6	61.0	70.8	100	AUG 1[illegible]	26	JAN 4	1101	33.90	8.51	SEP 20-21	T	T	JAN 9	83	87	57	61	10.5	4.1	14	54Y	NNW	OCT 30		6.5	72	126	167	64	0	29	50	89	0	7	0
WACO	79.0	57.7	68.4	105	JUL 31+	20	FEB 7+	1821	32.97	3.42	APR 11	T	T	DEC 27 +	68	77	55	50	11.5	4.3	16	35	4	APR 10+		5.3	124	120	121	68	0	32	10	111	0	33	0
WICHITA FALLS	78.0	50.9	64.5	109	JUL 31	13	JAN 8	2516	26.82	4.09	APR 12-13	.6	.6	MAR 6	67	76	47	45	12.8	3.4	16	48	32	OCT 7+		5.9	106	105	154	66	0	49	8	113	1	64	0
UTAH																																					
MILFORD	64.6	33.0	48.8	100	JUL 28	-16	DEC 21	6612	11.67	1.24	SEP 22 +	57.9	9.1	JAN 23			43									5.2	135	111	119	73	15			60	28	182	19
SALT LAKE CITY	64.7	38.9	51.8	101	JUL 21	2	JAN 11	5750	16.52	.97	JUL 16-17	90.4	9.0	JAN 6-7	52	66	46	42	7.9	2.8	16	47	SW	APR 5	68	6.2	88	117	160	99	24	49	7	68	23	143	0
WENDOVER	62.4	42.3	52.4	98	JUL 21	10	DEC 24+	5678	6.69	.80	MAR 13-14	13.8	8.5	MAR 13-14		54	42													56	3			47	23	122	0
VERMONT																																					
BURLINGTON	52.7	33.8	43.3	91	JUN 4	-25	FEB 13	8205	32.22	2.05	JUL 21-22	73.9	11.4	DEC 28-29	76	74	59	65	8.7	1.6	23	40	SW	OCT 19	62	7.4	51	92	222	155	24	25	18	2	74	172	26
VIRGINIA																																					
LYNCHBURG	65.4	43.4	54.4	92	JUN 16	6	FEB 25	4515	41.51	4.47	AUG 23-24	23.3	5.3	FEB 6-7		78	52	62				34	NW	AUG 19	61	5.5	129	98	138	107	8			7	4	92	0
NORFOLK	66.4	48.6	57.5	94	JUL 12	16	FEB 25	3699	45.21	4.14	AUG 23-24	11.3	5.1	FEB 9-10	76	77	57	66	10.1	0.5	10	42	W	MAR 7	70	6.0	109	88	168	109	3	27	17	9	2	56	0
RICHMOND	68.2	44.2	56.2	94	AUG 19+	3	JAN 20	4208	37.64	2.39	AUG 23-24	29.0	6.4	FEB 9-10	84	85	54	69	7.3	0.7	24	38	SW	JUL 20	65	6.1	96	104	165	100	7	29	42	27	5	95	0
ROANOKE	66.2	44.0	55.1	91	JUN 16+	4	FEB 25	4316	37.83	2.57	MAR 6-7	33.9	9.5	DEC 28	70	73	49	56	8.4	2.3	29	52	32	MAR 15		5.7	115	115	135	117	7	29	21	9	5	89	0
WASHINGTON																																					
OLYMPIA	62.0	40.3	51.2	98	AUG 28	12	DEC 13	5136	46.02	2.75	JAN 18-19	12.3	5.3	DEC 19	86	92	78	63	7.6	3.8	21	35	18	SEP 10		7.1	72	78	215	154	4	1	67	18	2	81	0
QUILLAYUTE	57.1	42.3	49.7	91	AUG 9+	21	DEC 15	5517	120.02	5.21	DEC 21-22	4.5	2.7	MAR 9-10	73	95	83	76	7.0	1.4	20	36	SE	DEC 5	40	7.6	53	66	246	216	2	12	39	3	0	50	0
SEATTLE-TACOMA	60.7	45.7	[illegible]	98	AUG 16	25	DEC 14+	4553	35.58	2.41	JAN 18-19	9.5	5.3	JAN 4	76	86	76	63	7.1	2.4	[illegible]	43	[illegible]	MAR 23	52	7.1	73	74	221	146	3	3	44	6	0	24	0
SPOKANE	59.2	38.7	[illegible]	103	JUL 12	5	DEC 14	6374	13.89	.70	JUN 1-2	37.8	5.3	DEC 21-22	64	74	61	47	7.1	4.2	[illegible]	44	W	JAN 15	59	5.9	109	86	170	95	16	12	35	31	20	140	0
STAMPEDE PASS F	47.3	35.2	[illegible]	86	AUG 19+	8	DEC 11+	6697	102.74	4.17	OCT 27-28	453.9	47.1	JAN 18-19		88	79	75								7.3	72	60	233	202	47			0	75	184	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature								Precipitation						Relative humidity				Wind								Number of days											
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date	Heating degree days	Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00a.m. E.S.T	7:00a.m. E.S.T	1:00p.m. E.S.T	7:00p.m. E.S.T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In.		%	%	%	%	M.p.h	M.p.h		M.p.h.			%	Tenths											
WASHINGTON																																					
WALLA WALLA U	66.5	47.1	56.8	105	AUG 17+	13	DEC 21	4200	11.96	.83	MAR 28-29	12.6	2.0	MAR 28-29								34	W	OCT 22+	60	6.0	121	62	182	89	8			57	7	38	0
YAKIMA	66.0	38.3	52.2	102	AUG 18	9	DEC 16	5257	4.52	.52	JUN 21	7.7	2.0	NOV 27	63	73	52	40	7.5	3.7	28	48	28	FEB 17		5.3	144	75	146	50	3	2	7	50	6	142	0
WEST INDIES																																					
SAN JUAN P.R.	85.0	73.9	79.5	94	SEP 14+	64	DEC 25+	0	42.55	2.17	DEC 9-10	.0	.0		80	78	64	74	9.9	7.9	9	35	E	APR 2	68	5.6	52	245	68	204	0	30	0	22	0	0	0
SWAN ISLAND	85.3	76.1	80.7	90	JUL 5	69	NOV 11	0	45.62	3.68	NOV 11-12	.0	.0													6.0	101	127	137	152	0			1	0	0	0
WEST VIRGINIA																																					
BECKLEY	60.0	40.0	50.0	85	JUN 21+	- 5	FEB 25	5602	47.64	2.53	SEP 28	62.3	13.8	DEC 28-29	79	83	59	68	9.8	3.6	23	46	30	SEP 21		6.8	77	94	194	159	19	41	35	0	23	113	3
CHARLESTON	64.7	42.6	53.7	93	JUN 16+	0	FEB 8	4710	41.68	2.86	MAR 6-7	43.2	11.2	DEC 28-29	83	85	56	62	6.7	2.4	23	37	22	FEB 16		6.8	61	127	177	144	10	35	95	9	18	107	1
ELKINS	61.1	36.6	48.9	89	JUN 17+	- 4	FEB 25	6014	49.95	2.68	SEP 28	75.0	17.8	DEC 28	87	90	57	71	7.3	3.0	27	46	[illegible]	MAY 2+		7.4	43	108	214	155	20	45	69	0	22	139	5
HUNTINGTON	64.5	43.4	54.0	94	JUN 17	- 1	FEB 25	4690	41.92	3.43	MAR 5-6	31.8	6.7	DEC 31	81	86	59	62	6.6	2.0	22	47	29	MAY 8		6.8	58	126	181	136	10	41	45	9	19	103	1
PARKERSBURG U	63.6	43.6	53.6	93	JUN 17+	0	FEB 25+	4846	35.04	2.28	JUL 2	26.0	4.0	DEC 31 +								45	W	FEB 16	50					118	10			7	21	101	2
WISCONSIN																																					
GREEN BAY	52.5	33.0	42.8	90	JUL 22	-25	JAN 18	8322	30.57	1.83	JUN 9	37.6	5.7	JAN 6	81	83	63	67	7.4	2.3	27	49	SW	MAY 18	50	6.4	93	91	181	124	12	36	23	1	74	171	29
LA CROSSE	55.7	34.9	45.3	94	MAY 26	-31	JAN 18	7609	26.28	3.94	JUN 15-16	41.9	5.9	MAR 19-20	76	81	58	60	9.0	0.9	23	52	36	JUN 8		6.5	91	96	178	86	12	31	16	17	59	155	23
MADISON	54.6	32.8	43.7	90	JUL 23+	-21	JAN 18	7927	33.99	1.92	JUN 9-10	31.8	4.1	FEB 5	78	81	61	64	9.1	1.9	26	42	SW	APR 14	55	6.6	74	106	185	117	10	54	24	2	61	180	20
MILWAUKEE	54.2	36.9	45.6	91	JUL 22+	-16	JAN 18	7376	25.85	2.02	JUN 10	50.0	10.3	FEB 5	77	79	64	68	[illegible]	2.2	26	45	NW	JUL 23+	55	6.5	90	97	178	131	14	37	26	5	58	146	13
WYOMING																																					
CASPER	57.9	31.6	44.8	95	AUG 24+	-19	DEC 30	7619	15.32	1.54	JUN 22-23	81.5	5.7	MAY 12-13	63	67	46	45	13.4	6.7	24	54	25	APR 5		6.0	102	116	147	129	35	49	11	19	57	186	19
CHEYENNE	58.3	33.5	45.9	92	AUG 24	-15	DEC 20	7053	15.39	1.63	APR 12-13	52.5	12.7	APR 13	62	63	42	44	13.1	6.4	29	69	NW	MAY 1	60	5.7	112	123	130	120	10	44	30	1	29	168	6
LANDER	56.5	31.8	44.2	90	JUL 22+	-15	DEC 21	7806	18.98	1.22	APR 29	154.6	21.9	APR 29	62	68	52	48	7.1	2.6	25	73	SW	JAN 22	66	6.2	80	127	158	107	32	51	3	2	56	183	17
SHERIDAN	57.4	30.1	43.8	95	AUG 23	-25	DEC 31+	7845	18.20	1.43	JUN 14-15	111.8	15.9	APR 29-30	64	66	48	48	7.3	3.1	30	57	NW	JAN 15	59	6.5	74	123	168	125	31	36	5	11	50	200	22

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

\+ And also on an earlier date or dates.

B Number of days maximum 70°F. or above for Alaskan Stations.

Y Peak gust.

V Sun below horizon November 19 - January 23, inclusive.

X Sun below horizon November 24 - January 17, inclusive.

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature – Averages – Daily maximum (°C)	Daily minimum (°C)	Annual (°C.)	Extremes – Highest (°C)	Date	Lowest (°C)	Date	Heating degree days (Base 18.3°C)	Precipitation – Total (Mm)	Greatest in 24 hours (Mm)	Date (s)	Snow, Sleet – Total (Mm)	Greatest in 24 hours (Mm.)	Date (s)
ALABAMA														
BIRMINGHAM	22.4	9.7	16.1	34.4	JUN 20+	- 11.1	FEB 25	1588	1698	118	DEC 14-15	20	20	FEB 9
HUNTSVILLE	21.8	9.8	15.8	36.1	JUN 18	- 13.9	FEB 25	1723	1652	139	DEC 17-18	61	36	DEC 27
MOBILE	25.9	14.6	20.2	37.8	JUN 26	- 3.9	FEB 26+	767	1558	167	SEP 6	T	T	FEB 9
MONTGOMERY	23.9	12.3	18.2	36.1	JUN 20	- 6.7	FEB 26	1141	1230	66	MAY 4	T	T	FEB 22 +
ALASKA														
ANCHORAGE	6.2	- 1.9	2.2	25.6	JUL 11	- 27.8	FEB 14	5845	487	20	SEP 5-6	2022	211	DEC 7-8
ANNETTE	11.7	4.7	8.2	28.3	AUG 28	- 10.0	DEC 21	3650	2830	88	OCT 8-9	1974	226	DEC 4-5
BARROW	- 8.9	-14.9	-11.9	16.1	AUG 17	- 38.9	JAN 3	11013	119	9	JUL 14	955	66	DEC 30
BARTER ISLAND	- 8.3	-15.5	-11.9	23.9	JUL 13	- 41.7	FEB 14	10985	244	16	JUL 31	1311	140	MAR 13-14
BETHEL	3.8	- 4.3	- .3	27.8	JUL 12	- 34.4	JAN 3	6737	377	25	NOV 11-12	1069	124	JAN 18
COLD BAY	6.8	1.4	4.2	19.4	AUG 15+	- 15.0	FEB 1	5125	965	46	NOV 11-12	1367	81	FEB 16-17
FAIRBANKS	2.6	- 8.1	- 2.7	32.8	JUN 18	- 42.2	JAN 29+	7687	440	87	AUG 12	2405	193	MAR 30-31
JUNEAU	8.3	.2	4.3	26.7	JUN 17	- 20.0	MAR 26	5069	1272	49	SEP 17-18	2804	229	FEB 24
KING SALMON	5.2	- 3.2	1.0	26.7	JUL 12+	- 33.9	JAN 3	6278	528	23	AUG 15-16	767	84	MAR 26-27
KOTZEBUE	- .9	- 8.3	- 4.6	26.7	JUN 18	- 37.2	FEB 14+	8322	185	19	AUG 15-16	1681	94	JAN 4-5
MC GRATH	2.6	- 7.6	- 2.4	30.6	JUL 13	- 41.7	JAN 15+	7540	479	27	NOV 11-12	2814	168	APR 31-1
NOME	1.4	- 6.7	- 2.6	26.1	AUG 7	- 36.1	FEB 13	7573	320	36	AUG 11-12	1049	112	APR 4-5
ST. PAUL ISLAND	5.3	1.2	3.3	14.4	AUG 7	- 12.8	FEB 1	5429	608	16	APR 15-16	1702	94	NOV 21-22
SHEMYA	5.6	1.6	3.6	15.0	AUG 2	- 8.3	FEB 5+	5323	937	51	SEP 3-4	1262	145	FEB 16-17
YAKUTAT	6.6	- 1.3	2.7	22.8	JUN 17	- 23.3	JAN 28+	5657	3221	94	DEC 13	6335	467	FEB 31-1
ARIZONA														
FLAGSTAFF	16.1	- .9	7.6	32.2	JUL 1	- 21.1	DEC 21	3917	566	67	DEC 18-19	3289	693	DEC 13-14
PHOENIX	29.2	13.1	21.2	43.3	AUG 26+	- 6.1	JAN 7	827	212	48	DEC 14-15	T	T	DEC 13
TUCSON	27.8	12.3	20.1	41.7	JUL 2	- 6.7	JAN 7	847	328	39	DEC 14-15	41	41	DEC 17
WINSLOW	21.3	3.2	12.3	38.3	JUL 3+	- 24.4	DEC 22	2776	260	38	DEC 13-14	1026	432	DEC 13-14
YUMA	29.9	15.2	22.6	44.4	AUG 27	.0	JAN 1	541	121	48	SEP 1-2	T	T	DEC 16 +
ARKANSAS														
FORT SMITH	22.8	9.1	15.9	37.2	AUG 7	- 12.2	JAN 9	1774	953	83	OCT 29-30	155	102	MAR 6
LITTLE ROCK	22.1	10.0	16.1	35.0	AUG 9+	- 11.7	JAN 18	1712	1289	103	SEP 7	69	41	JAN 17
TEXARKANA	23.8	12.0	17.9	36.7	AUG 30+	- 8.3	JAN 19	1298	1150	90	DEC 9-10	51	51	DEC 27
CALIFORNIA														
BAKERSFIELD	24.7	12.1	18.4	43.9	AUG 31	- 3.9	DEC 14+	1345	179	21	JAN 22	T	T	DEC 15
BISHOP	23.1	3.6	13.3	40.6	JUL 1	- 20.0	DEC 21	2387	111	14	JAN 22	597	193	JAN 24
BLUE CANYON	14.5	6.1	10.3	30.6	AUG 14	- 12.8	DEC 14	3189	1848	184	JAN 20-21	7308	424	DEC 17-18
EUREKA U	14.1	7.9	11.0	23.3	OCT 17	- 1.1	DEC 15+	2625	943	55	NOV 13-14	T	T	DEC 18

State and Station	Relative humidity – 1:00am EST (%)	7:00am EST (%)	1:00pm EST (%)	7:00pm EST (%)	Wind – Average speed (M.p.s)	Resultant speed (M.p.s)	Resultant direction	Fastest mile (1.6 kilometers) – Speed (M.p.s.)	Direction	Date	Possible sunshine (%)	Average sky cover sunrise to sunset (Tenths)	Number of days – Sunrise to sunset – Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max temp. 32.2°C and above	Max temp. 0°C and below	Min temp. 0°C and below	Min temp. -17.8°C and below
ALABAMA																							
BIRMINGHAM	83	87	58	66	3.0	.1	23	18.3	SW	MAR 6	56	6.1	108	79	178	119	0	53	3	19	2	63	0
HUNTSVILLE	75	79	58	60	3.4	.4	16	19.7	18	DEC 21		6.1	111	91	163	114	2	59	14	18	4	66	0
MOBILE	82	85	57	68	3.6	.3	12	12.5	14	OCT 30+		5.8	100	124	141	110	0	60	53	74	0	12	0
MONTGOMERY	81	86	56	61	3.0	.1	22	15.6	W	MAR 6	56	6.0	96	111	158	104	0	55	23	46	0	26	0
ALASKA																							
ANCHORAGE	64	69	67	59	3.0	.3	14	19.7	4	JAN 28	45	7.1	79	60	226	131	21	1	27	8 13	106	192	43
ANNETTE	81	83	77	70	4.4	1.7	14	20.6	14	DEC 2		7.9	49	57	259	232	21	1	15	35	7	78	0
BARROW	83	83	83	82	5.0	1.3	9	19.2	24	MAR 12			V46	V41	V217	108	6	0	52	0	261	332	161
BARTER ISLAND	76	77	76	74	5.9	.2	19	28.6	27	MAR 12			X50	X53	X207	97	17	0	72	1	243	331	164
BETHEL	81	88	87	75	5.6	.3	15	20.6	15	FEB 6		7.8	48	56	261	135	18	1	49	11	126	216	56
COLD BAY	83	86	85	77	7.8	1.5	21	32.6	16	FEB 19		8.5	14	70	281	231	24	0	17	0	43	151	0
FAIRBANKS	65	74	70	58	2.3	.4	30	16.1	25	MAR 12		7.4	60	69	236	140	39	5	9	44	156	230	112
JUNEAU	85	91	85	75	4.1	2.5	11	21.5	12	SEP 18	35	8.0	50	43	272	218	37	0	23	17	62	177	5
KING SALMON	72	78	76	65	5.0	.7	13	21.5	14	NOV 12		7.4	62	65	238	152	11	1	49	8	101	193	50
KOTZEBUE	79	80	80	76	6.0	1.7	10	28.2	12	JAN 4		6.9	74	85	206	111	24	0	12	5	188	247	104
MC GRATH	67	78	74	61	2.8	.4	25	15.6	19	NOV 12		7.5	56	70	239	124	38	5	13	23	140	220	98
NOME	71	75	72	67	4.6	1.1	7	24.1	9	JAN 4	31	7.3	68	68	229	134	13	0	47	3	181	256	59
ST. PAUL ISLAND	85	86	86	82	8.3	.8	16	28.2	3	NOV 22		8.8	6	71	288	253	22	0	66	0	33	152	0
SHEMYA	88	90	90	84	8.7	1.8	24	40.2	19	JAN 3		8.7	7	86	272	238	13	0	106	0	31	150	0
YAKUTAT	89	92	87	79	2.8	1.3	11	17.4	12	DEC 14		8.2	46	37	282	225	48	2	53	1	63	197	20
ARIZONA																							
FLAGSTAFF	64	71	39	39	3.5	1.1	21	13.0	1	MAY 19+		4.8	138	117	110	76	18	63	7	1	15	211	8
PHOENIX	42	55	31	23	3.1	.5	13	21.0Y	5	DEC 19	86	3.8	199	81	85	36	0	26	2	155	0	18	0
TUCSON	41	51	30	24	4.1	1.1	17	17.9	W	JUL 31	85	4.1	183	90	92	60	1	43	0	125	0	16	0
WINSLOW	44	53	34	27	4.0	1.7	21	23.2	18	APR 12		4.2	181	91	93	51	5	45	4	57	20	156	14
YUMA	41	52	32	22	3.4	.4	26	21.9	E	AUG 31	87	3.2	223	72	70	18	0	7	0	160	0	1	0
ARKANSAS																							
FORT SMITH	76	82	52	53	3.3	.4	7	19.7	W	JUN 21	60	6.2	90	111	164	99	2	50	13	50	3	82	0
LITTLE ROCK	77	82	58	60	4.0	.4	20	16.1	SW	FEB 15	66	6.0	101	109	155	105	2	55	19	44	5	73	0
TEXARKANA	74	83	57	58	3.5	1.3	18					5.7	115	105	145	96	1	49	14	52	1	45	0
CALIFORNIA																							
BAKERSFIELD	56	66	52	38	2.6	1.0	34	11.2	32	APR 15		4.1	178	97	90	41	0	8	28	114	0	13	[illegible]
BISHOP			31													36	5			86	2	140	2
BLUE CANYON			49					20.6	18	JAN 21		4.7	173	60	132	109	48			0	31	109	0
EUREKA U								20.1	SE	OCT 2	51	7.0	59	109	197	102	0			0	0	5	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Snow, Sleet: Total	Snow, Sleet: Greatest in 24 hours	Snow, Sleet: Date (s)	Relative humidity: 1:00 a.m. E S T	Relative humidity: 7:00 a.m. E S T	Relative humidity: 1:00 p.m. E S T	Relative humidity: 7:00 p.m. E S T	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max. temp.: 32.2 °C and above	Max. temp.: 0 °C and below	Min. temp: 0 °C and below	Min. temp: -17.8 °C and below
	°C	°C	°C.	°C		°C		Base 18.3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps.			%	Tenths											
CALIFORNIA																																					
FRESNO	24.6	9.8	17.2	42.2	AUG 15+	-6.1	DEC 14	1519	330	31	APR 18	T	T	DEC 12	69	82	61	43	2.6	.8	30	13.0	NW	MAY 31+	75	4.3	177	82	106	50	0	11	51	119	0	27	0
LONG BEACH	23.9	12.6	18.3	40.6	AUG 30	.6	DEC 14	821	351	80	NOV 20-21	0	0		70	75	57	50	2.9	.9	24	12.5	34	MAR 29		4.6	140	139	86	24	0	7	49	38	0	0	0
LOS ANGELES	21.3	13.4	17.4	36.1	OCT 15	3.3	DEC 21+	748	404	142	NOV 21	0	0		74	76	60	63	3.8	1.7	26	17.0Y	W	APR 11		4.8	139	131	95	37	0	8	43	8	0	0	0
LOS ANGELES U	24.2	14.1	19.2	39.4	AUG 31	3.3	DEC 21+	578	601	94	JAN 22	0	0									13.0	N	MAR 29	73	4.0	181	112	72	36	0			30	0	0	0
MT SHASTA R	17.0	2.8	9.9	36.7	AUG 18	-13.9	DEC 19	3293	946	73	MAR 15-16	5555	572	APR 17																92	35			40	7	144	0
OAKLAND	17.9	10.6	14.3	32.2	SEP 20	2.2	DEC 31+	1512	609	86	JAN 20-21	0	0		75	78	72	66	3.5	1.7	28	15.6	2	DEC 13		4.8	156	94	115	66	0	5	10	1	0	0	0
RED BLUFF	24.1	10.1	17.1	43.3	AUG 14	-5.6	DEC 16	1549	485	54	JAN 20-21	T	T	DEC 19 +	60	68	52	38	3.6	.2	30	25.0	SE	DEC 17	74	4.5	172	76	117	74	0	12	23	108	0	24	0
SACRAMENTO	23.1	8.7	15.9	41.7	AUG 18	-3.9	DEC 16	1668	498	87	JAN 20-21	0	0		75	84	66	48	3.0	1.3	21	25.9	SE	JAN 24	80	4.4	174	83	108	60	0	10	37	97	0	25	0
SANDBERG R	17.1	7.4	12.3	36.7	AUG 14	-11.1	DEC 13	2706	449	71	NOV 19-20	991	224	MAR 31	55	58	45	46				24.6	34	JAN 5		4.0	193	76	96	40	12			25	12	86	0
SAN DIEGO	21.2	13.4	17.3	32.8	OCT 16+	3.3	DEC 14+	767	285	40	JAN 22-23	T	T	DEC 13	74	77	62	62	3.0	1.2	28	14.3	S	DEC 18	69	4.7	157	109	99	45	0	4	31	2	0	0	0
SAN FRANCISCO	18.4	9.2	13.8	33.3	SEP 20+	-.6	DEC 15	1667	693	116	JAN 20-21	0	0		75	81	67	59	5.0	3.0	29	21.9	NNW	DEC 13		4.7	163	92	110	70	0	2	10	3	0	1	0
SAN FRANCISCO U	16.9	10.8	13.9	30.6	SEP 20+	2.8	DEC 14	1654	616	73	JAN 20-21	0	0									17.9	SW	JAN 21	73					72	0			0	0	0	0
SANTA CATALINA	19.9	12.7	16.3	39.4	AUG 29	1.1	DEC 14	1266	338	107	NOV 20-21	0	0																	41	0			16	0	0	0
SANTA MARIA	20.2	7.3	13.8	34.4	MAY 16	-6.1	DEC 14	1661	352	49	JAN 23-24	0	0				65	64								4.2	171	111	83	60	0			4	0	19	0
STOCKTON	23.1	9.4	16.3	41.7	AUG 18	-2.8	DEC 16+	1650	402	76	JAN 21	0	0		68	77	62	45	3.7	1.4	30	20.6	14	JAN 24		4.5	167	86	112	65	0	4	53	99	0	26	0
COLORADO																																					
ALAMOSA	14.7	-4.5	5.1	30.0	JUL 1	-34.4	DEC 22	4783	276	22	MAY 26	1461	401	DEC 13		78	44	39								4.8	137	141	87	87	14			0	36	224	48
COLORADO SPRINGS	16.6	2.1	9.3	32.8	AUG 25	-17.8	DEC 21	3397	490	51	JUL 11	978	353	APR 13	59	64	39	40	4.4	.7	3	18.3	17	MAY 25		5.6	103	134	128	91	10	61	16	4	24	156	1
DENVER	17.8	1.4	9.7	33.9	AUG 24+	-24.4	DEC 31	3288	592	83	APR 13	1313	157	NOV 2	66	72	42	43	3.8	.5	20	18.8	NW	DEC 6+	67	5.6	104	127	134	107	18	46	22	4	15	172	6
GRAND JUNCTION	18.4	3.8	11.1	36.7	AUG 25	-20.0	DEC 24+	3169	195	15	JUL 17	523	152	DEC 13-14	49	57	38	33	3.4	.7	13	25.0	W	FEB 14	68	5.3	131	111	123	72	8	33	7	59	42	140	9
PUEBLO	19.3	2.8	11.1	36.1	JUL 30	-22.2	DEC 22	3019	333	52	APR 12-13	584	173	DEC 12	53	61	38	33	4.3	.4	36	26.4	N	MAY 19	75	5.2	122	132	111	71	7	42	5	33	17	146	5
CONNECTICUT																																					
BRIDGEPORT	14.4	5.8	10.1	32.2	JUL 12+	-18.9	FEB 13	3324	1060	60	MAR 6-7	1519	282	MAR 22	78	78	63	69	5.5	1.5	30	23.2	27	FEB 16		6.4	89	100	176	124	14	15	39	2	20	115	1
HARTFORD	15.1	4.2	9.7	35.6	JUN 16+	-25.0	FEB 8	3506	1144	69	MAY 25-26	2240	345	DEC 28-29	75	76	54	63	4.2	1.0	31	23.7	SW	FEB 16	56	7.0	63	94	208	126	18	26	34	9	29	131	4
NEW HAVEN	14.3	5.2	9.7	30.0	JUL 12+	-19.4	FEB 13	3381	1032	57	MAR 6-7	1623	257	FEB 7		82	64					18.3	W	FEB 16	61	6.3	87	105	173	133	18			0	17	123	1
DELAWARE																																					
WILMINGTON	16.4	6.2	11.3	33.3	JUN 16	-17.2	FEB 9	2980	1134	78	AUG 9-10	833	251	FEB 6-7	81	82	59	69	4.0	1.0	29	18.8	24	FEB 16		6.4	86	103	176	120	7	38	43	1	15	106	0
DIST.OF COLUMBIA																																					
WASH NATL AP	19.0	8.1	13.6	35.0	JUN 13	-11.7	FEB 25+	2374	969	92	AUG 24-25	869	262	FEB 6-7	72	74	53	59	4.0	.6	27	18.8	NW	MAR 16	56	6.4	93	93	179	98	9	24	15	24	5	77	0
FLORIDA																																					
APALACHICOLA U	24.1	16.1	20.1	33.3	JUN 19+	-3.3	FEB 26	656	1325	104	DEC 10-11	0	0									15.2	E	SEP 3	61	5.3	140	100	125	106	0	60	34	11	0	3	0
DAYTONA BEACH	26.7	16.1	21.4	36.7	MAY 12	-2.2	FEB 26	327	878	99	JUL 17-18	0	0		85	87	59	75	4.2	.5	6	16.5	27	JAN 27		6.0	86	145	134	88	0	73	33	31	0	2	0
FORT MYERS	28.7	18.5	23.6	35.0	JUN 1+	.0	FEB 26	110	1255	171	AUG 10-11	0	0		84	88	56	72	3.8	.8	7	15.6	33	DEC 23		5.2	98	189	78	102	0	98	32	88	0	1	0
JACKSONVILLE	26.7	15.2	21.0	37.8	MAY 13	-5.6	FEB 26	563	1262	93	AUG 21-22	0	0		82	85	53	69	3.9	.3	34	34.0	NE	JUN 30	57	5.8	102	135	128	102	0	48	36	77	0	5	0
KEY WEST	28.6	23.8	26.2	33.9	JUL 16	9.4	FEB 26	11	886	79	DEC 11-12	0	0		77	78	67	72	4.9	2.8	9	16.1	N	DEC 23+	75	5.6	94	152	119	105	0	64	0	63	0	0	0
LAKELAND U	27.7	17.1	22.4	35.6	JUN 1+	-2.2	FEB 26	237	960	73	AUG 12-13	0	0												70	5.3	104	169	92	101	0			69	0	1	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature – Averages – Daily maximum	Temperature – Averages – Daily minimum	Temperature – Averages – Annual	Temperature – Extremes – Highest	Temperature – Extremes – Date	Temperature – Extremes – Lowest	Temperature – Extremes – Date	Heating degree days	Precipitation – Total	Precipitation – Greatest in 24 hours	Precipitation – Date (s)	Snow, Sleet – Total	Snow, Sleet – Greatest in 24 hours	Snow, Sleet – Date (s)	Relative humidity – 1 00 am E S T	Relative humidity – 7 00 am E S T	Relative humidity – 1 00 pm E S T	Relative humidity – 7 00 pm E S T	Wind – Average speed	Wind – Resultant speed	Wind – Resultant direction	Wind – Fastest mile (1 6 kilometers) – Speed	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days – Sunrise to sunset – Clear, 0-0 3	Number of days – Sunrise to sunset – Partly cloudy, 0 4-0 7	Number of days – Sunrise to sunset – Cloudy, 0 8-1 0	Number of days – Precipitation 25mm or more	Number of days – Snow, Sleet 25 4mm or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp – 32 2 °C and above	Number of days – Max temp – 0 °C and below	Number of days – Min temp – 0 °C and below	Number of days – Min temp – -17 8 °C and below
	°C.	°C	°C.	°C.		°C		Base 18 3°C	Mm.	Mm		Mm.	Mm.		%	%	%	%	M.p s	M.p s.		M.p s.			%	Tenths											
FLORIDA																																					
MIAMI	28.2	20.4	24.3	34.4	JUN 22	2.2	FEB 26	52	1682	120	JUN 12	0	0		81	85	61	71	4.3	1.7	10	17.0	32	DEC 23		6.2	57	171	137	132	0	67	4	33	0	0	0
ORLANDO	28.6	16.9	22.8	36.1	JUL 12+	- 2.2	FEB 26	228	1039	58	FEB 12-13	0	0		85	89	54	68	4.0	.4	5	17.9	32	JUN 5+		5.7	98	148	119	104	0	76	29	113	0	2	0
PENSACOLA	24.6	14.4	19.6	33.9	JUN 25+	- 3.9	FEB 8	804	1616	255	SEP 6-7	T	T	FEB 9	84	86	62	72	3.6	.4	10	26.4	SW	AUG 1	63	5.7	106	117	142	109	0			29	0	8	0
TALLAHASSEE	27.1	12.9	20.0	37.8	JUN 20	- 6.1	FEB 26	736	1446	82	DEC 10-11	0	0		89	91	53	67	2.8	.2	4	13.0	30	JUN 21		5.5	107	134	124	110	0	70	58	90	0	29	0
TAMPA	27.8	16.6	22.2	35.6	JUN 1+	- 2.8	FEB 26	273	1000	130	AUG 12-13	0	0		85	89	58	71	3.8	.6	6	13.0	14	JUN 15	63	5.5	109	137	119	80	0	74	27	66	0	3	0
WEST PALM BEACH	28.4	18.8	23.7	35.6	MAY 9	1.7	FEB 26	91	1309	122	OCT 4-5	0	0		81	83	60	73	4.2	1.6	10	15.6	26	OCT 17+		6.1	66	165	134	111	0	86	10	55	0	0	0
GEORGIA																																					
ATHENS	21.8	9.6	15.7	34.4	JUN 19	- 13.3	FEB 25	1598	1680	252	JUN 4	76	64	FEB 9	80	85	57	64	3.0	.6	30	12.5	27	MAR 6		5.8	105	115	145	115	1	56	45	15	0	56	0
ATLANTA	20.9	9.8	15.4	32.2	JUL 25+	- 12.8	FEB 25	1659	1393	84	AUG 23-24	51	51	FEB 9	78	83	58	63	3.5	.5	29	17.0	NW	JUL 26	62	5.9	100	110	155	125	1	47	30	2	1	51	0
AUGUSTA	24.1	9.6	16.8	34.4	JUN 25+	- 11.1	FEB 26	1344	1358	135	MAR 10	84	84	FEB 9	82	85	50	66	3.0	.4	26	21.5	28	MAY 8		5.8	107	120	138	109	1	51	30	34	0	60	0
COLUMBUS	24.2	11.6	17.9	36.7	JUN 20+	- 8.3	FEB 25	1173	1276	84	JUN 29-30	T	T	NOV 28 +	84	87	55	63	2.5	.3	34	15.6	16	MAY 29		5.8	109	102	154	111	0			34	0	41	0
MACON	24.2	10.0	17.1	37.2	MAY 28	- 10.0	FEB 25	1288	881	54	JUN 2	25	25	FEB 9	78	81	53	61	2.9	.3	32	22.4	NW	DEC 22	63	5.8	110	110	145	106	1	38	18	50	0	53	0
ROME	21.8	8.0	14.9	35.0	JUN 18	- 13.3	FEB 25	1823	1493	121	AUG 24-25	3	25	FEB 27																128	0			18	1	82	0
SAVANNAH	25.3	12.2	18.7	36.7	MAY 14	- 8.9	FEB 26	949	1048	71	JAN 1-2	0	0		84	86	51	68	3.1	.2	20	13.9	N	NOV 27+		5.8	108	111	146	112	0	55	42	62	0	33	0
HAWAII																																					
HILO	28.3	20.1	24.2	32.8	MAY 18	12.8	FEB 21	0	3912	238	AUG 7-8	0	0		81	82	76	69	3.2	.5	19	13.0	SE	DEC 16	37	7.3	42	118	205	266	0	21	0	2	0	0	0
HONOLULU	29.2	21.4	25.3	33.3	OCT 3+	15.0	DEC 28+	0	872	110	DEC 17-18	0	0		70	75	71	58	4.5	3.4	6	15.2	NE	JAN 10	58	6.0	81	160	124	138	0	14	0	49	0	0	0
KAHULUI	28.2	19.4	23.8	32.8	JUL 30+	12.8	DEC 28	0	831	138	MAR 23-24	0	0		77	83	80	61	5.1	3.7	5	15.2	N	DEC 13	67	5.8	94	146	125	111	0	10	0	8	0	0	0
LIHUE	26.8	20.6	23.7	31.1	MAY 17	13.3	DEC 29+	0	1353	129	DEC 8	0	0		80	84	80	70	5.1	3.5	6	15.2	SW	DEC 23	58	6.9	33	165	167	212	0	16	0	0	0	0	0
IDAHO																																					
BOISE	17.8	4.7	11.3	41.7	JUL 12	- 16.7	DEC 16+	3151	195	16	APR 19	452	152	APR 19	63	71	53	42	3.8	.4	17	15.2	W	JUN 21+	70	5.7	130	74	161	85	6	17	15	69	14	135	0
LEWISTON	18.5	6.1	12.3	43.3	JUL 12	- 14.4	DEC 15	2777	281	32	JUN 21	310	81	DEC 31		74	59	47								6.4	106	68	191	98	5			60	8	80	0
POCATELLO	15.5	.8	8.2	36.1	AUG 23+	- 24.4	DEC 13	3913	290	23	MAY 9-10	1143	185	APR 29-30	61	73	51	44	4.4	2.5	22	21.5	SW	NOV 24	62	6.3	96	89	180	94	14	29	10	49	33	175	6
ILLINOIS																																					
CAIRO U	19.4	10.0	14.7	35.0	JUN 14	- 14.4	DEC 31	2063	1314	156	MAY 14-15	394	203	MAR 6								21.0	SW	FEB 15	59	6.0	105	100	160	107	3			21	12	71	0
CHICAGO MIDWAY	14.2	5.2	9.7	33.9	MAY 26	- 23.3	DEC 31+	3477	1044	75	JUN 10-11	1740	503	JAN 26-27	71	75	60	62	5.1	1.1	22	22.8	SW	FEB 15	52	6.6	73	117	175	133	16	35	10	4	46	108	6
MOLINE	14.6	3.7	9.1	34.4	MAY 25	- 27.2	DEC 31	3674	1076	128	JUN 6-7	1041	297	JAN 26	78	82	62	66	4.4	.9	23	22.4	NW	MAY 18	51	6.5	90	96	179	120	10	47	22	8	52	135	13
PEORIA	14.9	4.5	9.7	33.3	JUN 15	- 25.6	DEC 31	3479	913	60	APR 31-1	615	229	JAN 26-27	76	80	63	65	4.8	.8	22	20.6	NW	FEB 23+	54	6.6	85	98	182	128	6	50	21	8	51	123	6
ROCKFORD	13.3	2.8	8.1	32.8	JUL 24+	- 26.7	JAN 18	3957	992	84	JUN 10	886	160	MAR 19-20	80	83	62	65	4.8	.8	25	20.6	27	MAY 18		6.4	83	107	175	119	12	48	26	4	53	144	14
SPRINGFIELD	15.9	5.8	10.9	35.0	MAY 25	- 22.8	DEC 31	3145	922	60	DEC 20-21	556	147	JAN 26-27	79	81	63	66	5.2	1.0	21	22.8	SW	JAN 6	59	6.3	91	101	173	125	10	51	18	10	37	116	3
INDIANA																																					
EVANSVILLE	18.7	6.7	12.7	34.4	JUN 14	- 19.4	FEB 25	2531	1097	93	JUL 9-10	338	170	MAR 6	78	80	61	62	3.6	.8	23	17.4	W	FEB 15	58	6.3	91	97	177	112	2	52	18	13	16	99	2
FORT WAYNE	14.2	3.4	8.8	33.3	JUN 16+	- 25.0	FEB 8	3717	833	41	DEC 2-3 +	899	127	FEB 5	76	79	61	64	4.7	1.4	24	27.3	W	FEB 15	55	7.0	66	102	197	151	13	34	14	6	55	137	9
INDIANAPOLIS	16.8	6.0	11.4	33.9	JUL 11+	- 22.8	DEC 31	3006	883	50	OCT 16-17	592	104	FEB 27	78	82	60	63	3.5	.9	24	21.9	W	FEB 15	50	6.7	73	106	186	126	9	39	15	9	28	109	4
SOUTH BEND	13.5	4.5	9.0	32.2	JUN 16	- 23.3	DEC 31	3656	1003	66	JAN 26-27	2558	396	JAN 26-27	77	80	64	66	4.6	1.3	24	18.3	26	FEB 15		7.1	60	101	204	158	33	39	20	1	54	125	9

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature: Averages: Daily maximum	Daily minimum	Annual	Extremes: Highest	Date	Lowest	Date	Heating degree days
	°C	°C	°C.	°C.		°C.		Base 18.3°C
IOWA								
BURLINGTON	15.0	4.6	9.8	35.0	JUL 23	- 23.3	DEC 31+	3447
DES MOINES	15.0	3.6	9.3	36.7	MAY 25	- 25.0	JAN 18	3627
DUBUQUE	12.7	2.3	7.5	33.9	JUL 26	- 30.6	JAN 18	4142
SIOUX CITY	15.0	2.5	8.8	38.9	MAY 25	- 28.3	JAN 18	3829
WATERLOO	13.1	1.2	7.2	34.4	MAY 26	- 32.2	JAN 18	4246
KANSAS								
CONCORDIA	17.7	4.9	11.3	37.2	JUL 23+	- 20.6	DEC 31+	3022
DODGE CITY	19.8	5.7	12.7	38.9	MAY 24	- 18.3	DEC 31+	2630
GOODLAND	18.4	2.2	10.3	37.2	JUL 22	- 21.7	DEC 31	3218
TOPEKA	17.9	6.0	11.9	35.6	JUL 23+	- 21.1	DEC 31	2817
WICHITA	19.8	7.0	13.4	39.4	AUG 29	- 17.8	MAR 8	2467
KENTUCKY								
COVINGTON	17.2	6.4	11.8	33.9	JUN 16+	- 21.7	FEB 25	2813
LEXINGTON	17.8	7.2	12.5	33.3	JUN 14	- 19.4	FEB 25	2538
LOUISVILLE	18.6	7.4	13.0	33.9	JUL 25	- 17.8	FEB 25	2456
LOUISIANA								
ALEXANDRIA	24.5	11.6	18.1	35.6	AUG 10	- 5.6	FEB 25+	1206
BATON ROUGE	25.7	13.4	19.6	35.6	JUN 19	- 5.0	DEC 29	876
LAKE CHARLES	25.8	15.0	20.4	35.0	JUL 10+	- 2.2	FEB 8	737
NEW ORLEANS	25.6	14.4	20.0	36.7	JUN 27	- 1.1	DEC 24+	781
SHREVEPORT	24.7	12.5	18.6	37.8	AUG 9	- 6.1	JAN 19	1145
MAINE								
CARIBOU	8.9	- 2.0	3.4	31.1	JUN 4	- 33.9	FEB 20	5462
PORTLAND	12.0	1.2	6.6	33.3	JUN 16	- 30.0	FEB 13	4343
MARYLAND								
BALTIMORE	17.6	6.3	11.9	35.6	JUN 16	- 18.3	FEB 8	2801
MASSACHUSETTS								
BLUE HILL OBS R	13.2	4.1	8.7	33.3	JUN 16+	- 23.3	FEB 13	3761
BOSTON	13.7	5.7	9.7	34.4	JUN 16	- 19.4	FEB 13	3418
NANTUCKET	12.6	4.7	8.7	27.8	JUL 10	- 15.0	FEB 13	3536
PITTSFIELD	12.5	.7	6.6	31.7	JUN 16+	- 26.7	FEB 13	4368
WORCESTER	12.4	2.9	7.7	32.2	JUN 16	- 24.4	FEB 13	4064
MICHIGAN								
ALPENA	11.2	- 1.1	5.1	31.1	JUN 14	- 28.9	MAR 8	4846
DETROIT	13.9	5.3	9.6	34.4	JUN 16	- 17.8	FEB 12+	3503

State and Station	Precipitation: Total	Greatest in 24 hours	Date (s)	Snow, Sleet: Total	Greatest in 24 hours	Date (s)	Relative humidity: 1:00am EST	7:00am EST	1:00pm EST	7:00pm EST
	Mm	Mm		Mm	Mm.		%	%	%	%
IOWA										
BURLINGTON	995			564			78	81	65	66
DES MOINES	554	56	JUN 9-10	340	61	OCT 26	75	82	61	59
DUBUQUE	1345	225	SEP 14	909	236	MAR 19-20		82	62	66
SIOUX CITY	570	53	MAY 29-30	264	71	JAN 6-7	74	80	60	57
WATERLOO	728	54	JUN 7	475	79	MAR 19-20	81	85	63	64
KANSAS										
CONCORDIA	971	139	JUN 9-10	310	81	DEC 26-27	76	84	59	59
DODGE CITY	541	54	AUG 31-1	221	56	JAN 25-26	66	75	48	46
GOODLAND	399	52	SEP 18-19	546	84	DEC 26-27	72	81	49	46
TOPEKA	1286	140	JUN 20-25	437	104	DEC 21	74	79	59	59
WICHITA	595	55	OCT 6-7 +	373	114	DEC 21	68	74	51	50
KENTUCKY										
COVINGTON	895	45	JUL 27-28	612	196	MAR 6-7	75	80	58	62
LEXINGTON	1158	65	MAR 5-6	701	198	DEC 31	76	82	60	63
LOUISVILLE	1116	61	AUG 9	513	236	MAR 6-7	75	80	58	61
LOUISIANA										
ALEXANDRIA	1414	146	DEC 14-15	T	T	DEC 30 +	90	92	59	67
BATON ROUGE	1470	307	APR 14-15	0	0		80	84	59	63
LAKE CHARLES	1390	150	DEC 9	0	0		89	90	61	70
NEW ORLEANS	1357	142	FEB 5-6	0	0		83	86	62	69
SHREVEPORT	969	112	MAY 30-31	18	18	DEC 27	78	87	58	59
MAINE										
CARIBOU	940	55	AUG 28-29	2997	307	DEC 29		79	63	70
PORTLAND	1122	142	JUN 20-21	2896	434	FEB 23	80	78	61	72
MARYLAND										
BALTIMORE	938	74	JUL 2-3	914	269	FEB 6-7	74	79	55	61
MASSACHUSETTS										
BLUE HILL OBS R	1373	98	MAY 25-26	3160	452	MAR 15-16	73	80	62	73
BOSTON	1209	92	MAY 25-26	1704	274	MAR 6-7	71	72	60	66
NANTUCKET	1453	166	MAY 24-25	1486	224	FEB 10	86	84	73	85
PITTSFIELD	1017	44	JUN 22-23	2644	340	MAR 6-7				
WORCESTER	1289	77	MAY 25	2842	373	DEC 28-29	75	76	58	67
MICHIGAN										
ALPENA	893	51	JUN 12-13	2469	325	JAN 27-28	79	80	58	67
DETROIT							72	75	59	61

State and Station	Wind: Average speed	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max temp: 32.2°C and above	0°C and below	Min temp: 0°C and below	-17.8°C and below
	Mps	Mps		M.p.s.			%	Tenths											
IOWA																			
BURLINGTON	4.6	.7	25	23.2	36	JUL 30		6.2	100	97	168	106	5	50	24	2	41	125	6
DES MOINES	4.8	.3	27	22.4	NW	APR 17	60	6.4	91	101	173	96	4	45	19	12	42	141	9
DUBUQUE								6.7	81	96	188	113	13			4	66	148	18
SIOUX CITY	4.9	.2	24	29.5	NW	JUL 9	68	6.0	99	109	157	97	3	45	11	14	48	157	19
WATERLOO	4.5	.5	25	20.6	21	AUG 1		6.5	88	100	177	101	8	37	19	6	54	165	24
KANSAS																			
CONCORDIA	5.2	.8	17	30.0	NE	JUN 9	65	5.4	128	99	138	104	5	67	9	26	28	132	3
DODGE CITY	5.9	1.1	18	24.1	S	JUN 28	72	5.5	125	101	139	86	2	57	10	47	18	122	2
GOODLAND	5.5	.9	23	22.8	34	SEP 12		5.2	131	120	114	87	10	47	32	27	18	169	3
TOPEKA	4.1	.5	21	21.9	S	MAY 27	59	6.2	97	100	168	101	7	61	14	17	21	114	2
WICHITA	5.7	1.1	17	22.8	NW	JUN 29	61	5.7	115	99	151	79	6	54	6	42	19	104	1
KENTUCKY																			
COVINGTON	4.3	1.2	24	17.9	29	FEB 15		6.9	64	110	191	131	8	34	18	10	23	101	3
LEXINGTON	4.1	1.4	20	13.9	28	FEB 15		6.5	87	98	180	134	8	39	14	5	17	89	2
LOUISVILLE	3.8	.8	23	27.3	NW	FEB 15	58	6.4	87	113	165	132	5	50	9	13	18	88	1
LOUISIANA																			
ALEXANDRIA	2.9	.3	15	20.6	30	MAY 1		6.1	94	104	167	89	0	47	59	53	1	47	0
BATON ROUGE	3.3	.5	13	21.5	17	MAY 1		5.9	92	130	143	94	0	44	45	64	0	24	0
LAKE CHARLES	3.7	1.0	13	15.6	15	APR 13		5.9	92	130	143	85	0	57	61	59	0	10	0
NEW ORLEANS	3.6	.5	9	13.4	17	DEC 18+		5.4	124	115	126	100	0	41	43	56	0	14	0
SHREVEPORT	3.7	1.1	16	16.5	22	JAN 26	62	5.9	99	121	145	87	0	35	20	67	1	39	0
MAINE																			
CARIBOU								7.3	55	86	224	147	30			0	105	197	51
PORTLAND	3.2	.7	27	18.3	W	FEB 16	52	6.5	91	87	187	127	31	18	64	2	52	170	17
MARYLAND																			
BALTIMORE	4.3	1.2	28	21.9	W	FEB 16	58	6.0	100	112	153	105	9	26	37	17	10	103	1
MASSACHUSETTS																			
BLUE HILL OBS R				26.8	NE	MAY 25	52					138	22			2	42	133	3
BOSTON	6.3	1.6	28	22.4	NE	MAY 25+	57	6.3	95	92	178	135	14	20	19	3	22	103	1
NANTUCKET	5.9	1.0	28	28.2	N	APR 28	53	6.9	74	87	204	133	14	19	114	0	14	116	0
PITTSFIELD												147	35			0	57	178	15
WORCESTER	4.6	2.0	28	20.6	29	FEB 21		6.4	92	96	177	137	21	22	95	1	61	153	5
MICHIGAN																			
ALPENA	3.1	.6	24	15.6	NE	JAN 27	53	6.7	78	101	186	157	22	31	38	0	70	195	34
DETROIT	4.3	1.4	26	16.5	29	APR 22								33	16	5	44	119	2

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature: Averages: Daily maximum (°C.)	Averages: Daily minimum (°C.)	Averages: Annual (°C.)	Extremes: Highest (°C)	Date	Extremes: Lowest (°C)	Date	Heating degree days (Base 18.3°C.)	Precipitation: Total (Mm.)	Greatest in 24 hours (Mm.)	Date (s)	Snow, Sleet: Total (Mm.)	Snow, Sleet: Greatest in 24 hours (Mm.)	Date (s)
MICHIGAN														
DETROIT M WAYNE CO	13.9	3.6	8.7	33.9	JUN 16+	- 20.6	DEC 31	3703	859	55	DEC 21	757	102	JAN 26-27
DETROIT WILLOW RUN	13.5	2.9	8.2	35.0	JUN 16	- 20.6	FEB 8	3869	687	60	DEC 21	749	102	JAN 26-27
FLINT	12.6	2.4	7.5	31.1	JUN 16+	- 30.0	FEB 12	4075	769	51	APR 16-17	1593	503	JAN 26-27
GRAND RAPIDS	13.4	2.9	8.2	32.8	JUL 22	- 26.7	FEB 12	3897	1035	64	JUN 7-8	2200	320	JAN 26-27
HOUGHTON LAKE	11.2	- .3	5.4	30.0	JUL 22	- 31.1	FEB 12	4746	749	33	JUN 7-8	1958	155	JAN 6-7
LANSING	13.3	2.2	7.8	33.3	JUN 16+	- 31.1	FEB 12	4049	816	53	AUG 26	1786	518	JAN 26-27
MARQUETTE U	9.5	.8	5.2	33.3	JUL 21	- 24.4	FEB 12+	4854	689	38	OCT 24-25	2530	221	JAN 6-7
MUSKEGON	13.1	3.8	8.5	31.1	JUN 3	- 21.1	FEB 7	3784	899	81	JUN 7-8	2827	236	JAN 26-27
SAULT STE MARIE	9.1	- 2.1	3.5	30.0	JUN 3	- 31.7	FEB 12+	5382	824	45	AUG 7	2990	246	FEB 15-16
MINNESOTA														
DULUTH	8.4	- 2.6	2.9	30.6	JUL 21+	- 34.4	JAN 18	5606	544	47	JUN 13-14	1486	330	JAN 6
INTERNATIONAL FALLS	7.8	- 4.7	1.6	33.3	JUL 20	- 39.4	DEC 31+	6119	554	29	JUN 8	1443	183	DEC 20-21
MINNEAPOLIS	11.4	.4	5.9	32.8	JUL 22+	- 35.0	JAN 18	4695	646	37	APR 1-2	1666	216	FEB 15
ROCHESTER	11.2	.1	5.7	31.1	JUL 20+	- 35.0	JAN 18	4707	668	61	JUN 14-15	836	140	MAR 19-20
ST CLOUD	10.8	- 1.2	4.8	33.3	JUL 22	- 35.6	JAN 18	5056	537	107	AUG 25-26	1148	193	JAN 5-6
MISSISSIPPI														
JACKSON	24.0	10.5	17.3	35.6	JUN 19	- 8.3	FEB 8	1326	1161	83	MAY 21-22	T	T	DEC 28 +
MERIDIAN	24.4	10.6	17.5	36.7	JUN 20	- 7.8	FEB 8	1287	1206	83	AUG 9	T	T	DEC 27 +
MISSOURI														
COLUMBIA	17.9	6.8	12.4	36.1	JUL 23	- 19.4	DEC 31	2714	851	65	MAY 30	368	79	JAN 26-27
KANSAS CITY	18.5	7.7	13.1	37.2	JUL 24	- 17.2	DEC 31	2566	1237	84	SEP 13-14	427	191	JAN 25-26
ST JOSEPH	18.5	5.2	11.9	36.7	MAY 25	- 20.6	MAR 8	2847	950	50	JUN 5	396	152	JAN 26
ST LOUIS	18.0	7.2	12.6	35.0	JUL 23	- 20.6	DEC 31	2674	1049	55	JAN 25-26	236	43	DEC 2
SPRINGFIELD	19.6	6.3	13.0	35.6	AUG 29	- 16.1	JAN 18	2472	1111	87	OCT 29-30	246	61	DEC 30-31
MONTANA														
BILLINGS	14.3	2.3	8.3	35.6	AUG 23	- 24.4	DEC 30	3903	377	43	JUN 6-7	1504	229	APR 29-30
GLASGOW	11.7	- 1.4	5.1	36.7	JUL 17	- 36.7	JAN 17	5027	252	34	JUN 12-13	1359	132	APR 28-29
GREAT FALLS	13.9	1.4	7.7	36.7	SEP 5	- 32.8	DEC 21	4164	474	34	SEP 11-12	2449	254	MAR 29-30
HAVRE	13.1	- 1.1	6.0	38.3	SEP 5+	- 30.6	DEC 21	4721	210	30	APR 20-21	1689	411	APR 20-21
HELENA	14.4	.4	7.4	37.2	SEP 5	- 32.2	DEC 21	4192	366	28	MAY 10	2324	318	MAY 10
KALISPELL	13.6	.0	6.8	37.2	SEP 1	- 18.9	DEC 20	4248	285	25	JUN 21-22	1351	122	DEC 30-31
MILES CITY	14.3	.8	7.6	38.9	AUG 23	- 33.3	DEC 31	4287	445			1684		
MISSOULA	14.6	1.2	7.9	37.8	JUL 12	- 22.2	NOV 27	3976	315	14	JUN 6	1138	109	APR 28-29
NEBRASKA														
GRAND ISLAND	17.0	2.9	10.0	38.9	JUL 22	- 27.2	DEC 31	3448	619	115	JUN 13-14	528	109	MAY 3
LINCOLN U	16.5	4.9	10.7	37.8	MAY 24	- 21.7	DEC 31	3240	821	84	JUN 6-7	371	94	APR 23

State and Station	Relative humidity: 1:00 am EST (%)	7:00 am EST (%)	1:00 pm EST (%)	7:00 pm EST (%)	Wind: Average speed (M.p.s.)	Resultant speed (M.p.s)	Resultant direction	Fastest mile (1.6 kilometers): Speed (M.p.s.)	Direction	Date	Possible sunshine (%)	Average sky cover sunrise to sunset (Tenths)	Number of days: Sunrise to sunset: Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max temp: 32.2°C and above	Max temp: 0°C and below	Min. temp: 0°C and below	Min. temp: -17.8°C and below
MICHIGAN																							
DETROIT M WAYNE CO	78	80	60	66	4.7	1.3	25	23.2	SW	FEB 16	54	6.7	76	99	190	133	10	29	23	6	38	132	3
DETROIT WILLOW RUN	70	75	56	60	5.1	1.6	25	19.7	27	APR 17+		6.8	73	100	192	119	10	33	26	4	49	144	6
FLINT	75	76	61	64	4.6	1.6	24	20.6	25	JUN 10		7.1	59	109	197	137	17	30	15	0	53	140	14
GRAND RAPIDS	78	81	64	68	4.4	1.1	23	24.1	N	APR 16	47	7.1	62	94	209	160	31	38	25	1	52	147	8
HOUGHTON LAKE	83	84	62	68	4.1	1.1	26	13.9	27	DEC 22		6.8	74	102	189	152	30	37	31	0	79	180	31
LANSING	79	81	61	67	4.6	1.6	25	25.0	W	FEB 16	55	6.9	61	113	191	142	14	31	21	7	59	150	16
MARQUETTE U								18.3	S	MAR 30	55	6.9	74	92	199	163	32			1	87	173	15
MUSKEGON	75	78	62	66	5.0	1.0	25	17.9	20	JAN 24		7.1	64	98	203	162	35	43	22	0	51	141	4
SAULT STE MARIE	83	82	66	72	4.1	.4	30	15.6	NW	JAN 17	50	7.0	77	87	201	171	42	23	63	0	100	203	36
MINNESOTA																							
DULUTH	72	75	60	61	4.7	.7	28	28.2	E	APR 30	53	6.7	80	98	187	128	13	27	48	0	106	203	50
INTERNATIONAL FALLS	74	77	60	58	4.2	.7	25	15.6	16	MAR 1		6.5	74	112	179	126	22	26	15	1	120	210	77
MINNEAPOLIS	75	80	60	60	4.8	.4	27	28.2	N	AUG 6	59	6.3	95	99	171	108	19	33	6	2	77	170	36
ROCHESTER	79	82	63	65	5.9	1.3	24	18.3	21	AUG 1+		6.3	93	99	173	100	11	36	27	0	78	177	33
ST CLOUD	75	79	55	58								6.3	93	107	165	104	13			4	91	179	51
MISSISSIPPI																							
JACKSON	89	94	60	69	3.7	.7	16	17.9	NW	MAY 31	62	5.9	113	93	159	93	0	41	30	46	0	58	0
MERIDIAN	83	85	53	62	2.8	.3	22	15.6	17	MAY 1		6.0	100	110	155	85	0	38	32	49	0	57	0
MISSOURI																							
COLUMBIA	73	80	55	58	4.7	.6	21	23.2	SW	JAN 24	65	6.1	99	101	165	110	5	63	14	19	24	104	2
KANSAS CITY	73	80	58	58	4.3	.6	20	18.3	NW	JUN 7+	56	6.2	100	100	165	92	5	54	9	28	18	95	0
ST JOSEPH	81	85	62	61	4.2	.4	21	17.9	3	JUL 24+		5.6	124	96	145	97	5	52	22	26	22	118	4
ST LOUIS	78	84	60	61	4.4	.8	23	21.5	SW	OCT 24	61	6.3	84	122	159	114	5	48	9	17	21	95	1
SPRINGFIELD	76	80	55	59	4.2	1.1	18	21.0	N	APR 23	58	5.9	110	96	159	110	4	60	18	22	13	101	0
MONTANA																							
BILLINGS	59	67	51	46	5.1	1.9	27	25.0	NW	OCT 19	62	6.2	96	96	173	103	20	28	17	29	42	153	9
GLASGOW	66	73	56	51								6.3	91	105	169	100	18			25	83	185	40
GREAT FALLS	55	60	48	44	5.1	2.9	24	25.0	SW	OCT 19	58	6.4	85	98	182	109	26	21	17	34	45	151	20
HAVRE		75	56	51				22.4	NW	JUN 3	64	6.2	100	104	161	75	18			36	67	188	35
HELENA	61	69	52	47	3.6	1.9	28	24.1	W	JAN 15	60	6.2	100	87	178	111	21	27	4	31	33	177	15
KALISPELL	74	81	61	52	3.6	.5	18	14.3	31	JAN 15		6.5	92	87	186	125	22	19	15	29	38	188	3
MILES CITY	66	74	54	50	4.4	1.0	31									113	26	24	14	39	58	177	29
MISSOULA	67	77	58	49	2.8	.6	30	17.0	SW	JAN 15	57	6.5	89	85	191	126	16	20	26	38	31	182	5
NEBRASKA																							
GRAND ISLAND	75	82	54	53	5.1	.6	24	19.7	28	APR 30		5.7	114	107	144	90	8	48	18	35	34	159	5
LINCOLN U								23.2	NE	JUL 26	65	5.6	114	112	139	101	4			19	35	133	5

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature – Averages – Daily maximum (°C)	Temperature – Averages – Daily minimum (°C)	Temperature – Averages – Annual (°C)	Temperature – Extremes – Highest (°C)	Temperature – Extremes – Date	Temperature – Extremes – Lowest (°C)	Temperature – Extremes – Date	Heating degree days (Base 18.3°C)	Precipitation – Total (Mm)	Precipitation – Greatest in 24 hours (Mm)	Precipitation – Date (s)	Snow, Sleet – Total (Mm)	Snow, Sleet – Greatest in 24 hours (Mm)	Snow, Sleet – Date (s)	Relative humidity – 1:00 am EST (%)	Relative humidity – 7:00 am EST (%)	Relative humidity – 1:00 pm EST (%)	Relative humidity – 7:00 pm EST (%)
NEBRASKA																		
NORFOLK	15.4	2.0	8.7	39.4	MAY 25	- 30.0	DEC 31	3843	566	69	JUN 4-5	323	107	JAN 6-7		76	51	50
NORTH PLATTE	16.4	.6	8.5	36.7	JUL 22	- 31.7	DEC 31	3785	443	53	JUL 7-8	640	109	JAN 6	71	78	52	49
OMAHA	17.1	4.1	10.6	36.1	MAY 25	- 23.9	DEC 31	3267	774	56	JUN 4-5	437	114	DEC 26-27	73	77	58	56
SCOTTSBLUFF	16.8	1.2	9.0	36.7	JUL 21	- 28.3	DEC 31	3655	420	28	MAY 29	787	84	APR 22-23	71	79	50	46
VALENTINE	15.8	.6	8.2	38.9	JUL 22	- 32.8	DEC 31	3967	379	42	JUN 14-15	318	51	MAR 14				
NEVADA																		
ELKO	17.3	.6	9.0	38.9	AUG 16+	- 23.9	DEC 13	3769	219	25	MAR 11-12	1628	351	MAR 11-12	62	72	50	40
ELY	15.3	- 1.9	6.7	33.3	AUG 17	- 24.4	DEC 21+	4311	374	37	JUN 12-13	1854	307	DEC 30-1	63	71	46	41
LAS VEGAS	26.1	11.7	18.9	45.6	JUL 3	- 5.0	DEC 21	1364	141	27	NOV 21-22	51	51	DEC 15	36	43	30	23
RENO	19.5	.3	9.9	38.3	JUL 2	- 17.8	DEC 15	3244	241	22	JAN 21-22	970	284	JAN 24	55	69	47	32
WINNEMUCCA	18.6	.3	9.4	38.3	JUL 1	- 18.3	DEC 19	3519	196	17	JUN 12-13	805	147	MAR 30-31	55	66	45	36
NEW HAMPSHIRE																		
CONCORD	13.4	.3	6.8	33.3	JUN 16	- 30.6	FEB 13	4336	868	55	JUL 4-5	2451	264	MAR 7	81	82	56	68
MT WASHINGTON OBS	.3	- 7.3	- 3.5	16.7	JUL 22+	- 40.6	FEB 12	7905	2083	117	MAY 25-26	7176	564	MAY 25-26	84	84	83	85
NEW JERSEY																		
ATLANTIC CITY	16.5	4.8	10.7	33.3	JUN 25+	- 21.7	FEB 13	3118	1113	148	AUG 3-4	1273	333	FEB 9-10	84	83	57	73
NEWARK	15.9	7.0	11.5	35.0	JUN 16	- 15.6	FEB 13	2946	1118	59	JUL 10-11	1313	320	FEB 7	72	73	56	63
TRENTON U	16.3	7.3	11.8	33.9	JUN 16+	- 14.4	FEB 13	2854	1175	59	JUL 21-22	1265	323	FEB 7				
NEW MEXICO																		
ALBUQUERQUE	21.2	5.9	13.6	37.2	JUL 1	- 17.2	JAN 8	2317	204	31	AUG 11-12	155	36	DEC 15-16	38	48	32	24
CLAYTON	19.8	3.6	11.7	35.0	JUL 31+	- 15.6	JAN 7	2709	352	53	MAY 27-28	330	114	DEC 12-13		66	36	36
RATON	18.3	.3	9.3	32.8	JUL 9	- 24.4	JAN 8	3371	371	58	JUL 9-10	551	112	JAN 16-17				
ROSWELL	25.2	5.7	15.4	39.4	JUL 31	- 18.9	JAN 9	1839	281	49	AUG 10	249	119	DEC 14-15	50	64	37	29
SILVER CITY	21.7	6.1	13.9	35.6	JUL 1	- 14.4	JAN 8	2067	260	27	AUG 4	330	178	DEC 15-16				
NEW YORK																		
ALBANY	13.8	1.9	7.9	35.6	JUN 16	- 25.6	FEB 8	4056	845	45	OCT 25-26	1989	310	DEC 28-29	77	76	57	66
BINGHAMTON	11.6	2.8	7.2	30.6	JUN 16+	- 22.2	FEB 13	4172	958	53	NOV 2	2461	165	MAR 15-16	81	84	66	71
BUFFALO	13.2	4.1	8.7	32.8	JUN 21	- 21.7	FEB 8	3797	879	92	SEP 27-28	1882	211	NOV 6-7	77	78	63	69
J.F. KENNEDY	14.1	6.4	10.3	31.7	JUL 12	- 17.8	FEB 13	3218	1146	52	MAR 7	1133	236	FEB 7	76	76	62	69
NEW YORK U	15.9	7.4	11.7	35.6	JUN 16	- 15.6	FEB 13	2934	1248	81	JUN 18-19	1298	318	FEB 7	68	71	55	61
NEW YORK LA GUARDIA	15.4	7.9	11.7	35.0	JUN 16	- 13.3	FEB 13+	2879	1094	60	MAR 6-7	1052	269	FEB 7	67	69	55	60
ROCHESTER	13.6	3.6	8.6	32.8	JUN 16	- 21.7	FEB 13+	3769	758	45	SEP 27-28	1867	185	FEB 25	75	76	59	66
SYRACUSE	13.4	3.2	8.3	31.1	JUN 16+	- 30.0	FEB 13	3807	915	53	NOV 2-3	2002	145	FEB 24-25+	77	77	59	68
NORTH CAROLINA																		
ASHEVILLE	18.7	5.2	12.0	31.1	APR 6	- 18.9	FEB 25	2479	1324	105	AUG 22-23	193	56	FEB 9	88	91	58	69
CAPE HATTERAS R	19.9	11.6	15.8	31.7	AUG 23+	- 7.2	MAR 2+	1543	1345	140	JUL 7-8	T	T	DEC 23	82	81	66	79

State and Station	Wind – Average speed (Mps)	Wind – Resultant speed (Mps)	Wind – Resultant direction	Wind – Fastest mile (1.6 kilometers) – Speed (M.p.s.)	Wind – Fastest mile – Direction	Wind – Fastest mile – Date	Possible sunshine (%)	Average sky cover sunrise to sunset (Tenths)	Number of days – Sunrise to sunset – Clear, 0-0.3	Number of days – Sunrise to sunset – Partly cloudy, 0.4-0.7	Number of days – Sunrise to sunset – Cloudy, 0.8-1.0	Number of days – Precipitation 25mm or more	Number of days – Snow, Sleet 25.4mm or more	Number of days – Thunderstorms	Number of days – Heavy fog	Number of days – Max temp. – 32.2 °C and above	Number of days – Max temp. – 0 °C and below	Number of days – Min temp. – 0 °C and below	Number of days – Min temp. – -17.8 °C and below
NEBRASKA																			
NORFOLK								5.8	109	109	147	77	4			21	44	166	17
NORTH PLATTE	4.4	.3	3	22.8	NW	JUN 14	64	5.8	106	118	141	69	8	43	14	18	33	184	10
OMAHA	4.6	.2	17	25.0	NW	JUL 9+	63	5.9	108	111	146	102	7	44	10	20	30	131	7
SCOTTSBLUFF	5.3	1.0	33	23.2	5	JUL 4		5.5	113	117	135	96	13	39	6	30	27	170	10
VALENTINE				25.0	SW	AUG 21	64	5.9	105	117	143	76	5			32	43	177	17
NEVADA																			
ELKO	2.3	.7	23	16.1	26	NOV 9		5.9	104	107	154	79	20	23	9	66	27	188	7
ELY	4.2	2.0	20	20.1	SE	DEC 18	64	5.6	105	134	126	92	19	49	3	15	24	209	20
LAS VEGAS	3.6	1.3	22	21.5	NW	AUG 8	87	3.7	201	99	65	32	1	21	1	127	0	40	0
RENO	2.7	.7	27	31.3	SE	JAN 20	82	5.2	143	87	135	63	10	23	4	61	7	188	1
WINNEMUCCA	3.0	.6	24	17.0	SW	DEC 4	53	5.9	107	97	161	63	10	18	2	65	9	194	2
NEW HAMPSHIRE																			
CONCORD	2.8	.9	30	16.1	W	APR 10+	57	6.5	87	103	175	127	24	17	57	1	49	184	27
MT WASHINGTON OBS	14.1			62.6Y	E	MAY 8	32	8.2	35	68	262	222	81	9	315	0	190	245	76
NEW JERSEY																			
ATLANTIC CITY	4.3	1.0	27	15.6	29	FEB 21+	51	6.3	98	97	170	120	10	33	48	9	18	126	3
NEWARK	4.7	1.3	28	15.6	25	JUL 23		6.3	92	104	169	131	12	24	12	7	17	89	0
TRENTON U				18.8	SW	FEB 16	52	6.2	91	120	154	122	15			12	20	84	0
NEW MEXICO																			
ALBUQUERQUE	4.2	.3	18	25.5	E	DEC 13	78	4.4	157	123	85	58	5	47	5	46	8	115	0
CLAYTON								5.1	139	106	120	72	4			21	11	146	0
RATON								5.5	116	125	124	81	8			1	20	178	12
ROSWELL	4.1	.7	19	20.1	NW	FEB 9	74	4.9	139	108	118	53	3	45	9	88	3	118	1
SILVER CITY								4.2	157	132	76	54	5			21	3	98	0
NEW YORK																			
ALBANY	4.2	1.3	26	20.1	NW	APR 23+	51	7.2	50	99	216	139	20	24	21	3	43	168	14
BINGHAMTON	4.4	1.5	25	20.1	NW	JUN 15	50	7.6	43	91	231	169	25	32	61	0	68	152	8
BUFFALO	5.4	2.5	24	27.7	SW	FEB 16	50	7.4	47	95	223	179	27	32	14	2	56	132	7
J.F. KENNEDY	5.1	1.1	28	20.6	25	FEB 16		6.3	86	111	168	133	13	16	35	0	22	98	1
NEW YORK U	4.0	.9	30	18.8	NE	APR 27	55					126	13	27		9	20	86	0
NEW YORK LA GUARDIA	5.3	1.2	30	21.5	NW	APR 3		6.5	87	97	181	128	12	26	17	6	18	77	0
ROCHESTER	4.1	1.8	25	25.5	SW	FEB 16	52	7.2	56	104	205	152	24	32	13	1	43	134	6
SYRACUSE	4.9	1.3	26	27.7	W	FEB 16	49	7.0	64	99	202	159	29	33	9	0	40	130	13
NORTH CAROLINA																			
ASHEVILLE	3.3	.8	35	17.9	32	MAY 30+	63	6.0	95	114	156	118	4	45	77	0	3	117	1
CAPE HATTERAS R	5.5	1.1	32	18.8	SW	DEC 28	54	6.1	97	100	168	123	0	51	15	0	1	20	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
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State and Station	Temperature – Averages – Daily maximum °C.	Daily minimum °C	Annual °C.	Extremes – Highest °C	Date	Lowest °C	Date	Heating degree days Base 18.3°C	Precipitation – Total Mm	Greatest in 24 hours Mm.	Date (s)	Snow, Sleet – Total Mm.	Greatest in 24 hours Mm.	Date (s)
NORTH CAROLINA														
CHARLOTTE	20.9	9.2	15.1	33.3	MAY 28	-13.9	FEB 26+	1813	1098	112	AUG 21-22	137	137	FEB 9
GREENSBORO	21.1	8.6	14.9	35.6	JUN 24	-14.4	FEB 25	1925	861	50	AUG 7	89	69	FEB 9
RALEIGH	21.3	8.8	15.1	33.9	JUL 11+	-13.3	FEB 25	1846	1005	87	JUN 17-18	279	231	FEB 9
WILMINGTON	23.9	12.0	18.0	36.1	MAY 28	-7.8	FEB 25	1187	1071	76	AUG 10-11	T	T	DEC 23 +
NORTH DAKOTA														
BISMARCK	11.5	-2.6	4.4	38.9	JUL 31	-41.7	DEC 31	5202	344	31	MAY 30-1	1763	279	MAY 30-1
FARGO	10.5	-2.2	4.2	34.4	AUG 24	-35.6	DEC 31	5290	331	35	APR 16-17	998	203	DEC 20-21
WILLISTON	11.8	-2.2	4.8	37.8	JUL 29	-36.7	JAN 17	5143	322	52	APR 20-21	1486	142	APR 29
OHIO														
AKRON	15.1	4.4	9.8	33.9	JUN 16+	-19.4	FEB 8	3388	810	59	SEP 27-28	1331	160	FEB 5-6
CINCINNATI OBS	17.5	6.6	12.1	34.4	JUL 25+	-19.4	FEB 25	2771	825	48	MAY 6-7	472	229	MAR 6-7
CLEVELAND	14.7	5.0	9.8	33.9	JUN 16+	-21.7	FEB 8	3368	680	28	MAY 7	1013	109	FEB 5-6
COLUMBUS	15.4	4.9	10.2	33.3	JUN 15+	-18.9	MAR 1+	3248	863	40	SEP 27-28	1054	168	MAR 6-7
DAYTON	16.1	5.6	10.8	35.0	JUN 15	-20.0	FEB 25	3171	849	64	JUN 28	775	107	NOV 30
MANSFIELD	14.4	4.3	9.3	33.3	JUN 14	-19.4	FEB 8	3521	759	55	SEP 20-21	942	157	FEB 5
TOLEDO	14.2	3.0	8.6	35.0	JUN 15	-25.6	FEB 8	3748	806	90	DEC 21	917	188	FEB 5-6
YOUNGSTOWN	13.5	3.2	8.3	33.3	JUN 15+	-20.6	FEB 8	3813	886	97	JUL 2	1737	145	FEB 27-28
OKLAHOMA														
OKLAHOMA CITY	22.3	9.8	16.1	39.4	AUG 2+	-12.8	MAR 8	1797	656	79	APR 12	74	30	NOV 2-3
TULSA	21.6	8.7	15.2	37.8	AUG 8	-15.0	MAR 8	1979	938	65	JUL 16	132	41	DEC 30
OREGON														
ASTORIA	14.7	6.2	10.4	31.7	SEP 14	-5.0	DEC 13	2829	1701	62	JAN 18-19	38	18	MAR 10-11
BURNS U	16.0	1.2	8.6	36.7	JUL 12	-22.2	DEC 19	3803	287	25	OCT 2	1717	279	MAR 10-11
EUGENE	18.4	6.2	12.3	37.2	AUG 15	-4.4	DEC 14+	2396	935	65	JAN 19-20	46	28	DEC 18
MEACHAM	11.8	2.4	7.1	36.1	AUG 17	-16.7	DEC 15	4238	760	45	OCT 27-28	4061	325	FEB 15
MEDFORD	20.0	5.1	12.6	41.7	AUG 19+	-10.0	DEC 14	2646	474	41	DEC 4-5	274	86	DEC 17-18
PENDLETON	19.2	6.5	12.8	40.6	AUG 17+	-15.6	DEC 15	2604	172	9	JAN 19-20	236	56	MAR 11
PORTLAND	17.8	6.9	12.4	38.9	AUG 28+	-10.6	DEC 20	2432	743	37	MAR 14-15	145	84	DEC 21
SALEM	18.5	5.2	11.8	38.9	AUG 9	-7.2	DEC 13	2538	824	58	JAN 27	25	15	DEC 20
SEXTON SUMMIT R	13.8	4.4	9.2	33.9	AUG 15	-10.0	DEC 14+	3545	528	29	OCT 2-3	2756	272	FEB 13
PACIFIC AREA														
JOHNSTON	28.4	24.1	26.3	31.1	AUG 25+	18.3	DEC 31	0	1002	97	OCT 21-22	0	0	
KOROR R	30.7	24.3	27.5	33.3	SEP 23	21.7	AUG 27+	0	3522	131	NOV 1-2	0	0	
KWAJALEIN	30.3	24.8	27.6	32.2	JUL 30+	21.7	OCT 6	0	2758	79	SEP 1	0	0	
MAJURO	29.8	25.0	27.4	32.2	SEP 17	21.1	OCT 23	0	3202	113	OCT 8-9	0	0	
MARCUS ISLAND	27.8	22.3	25.1	33.9	SEP 2	12.8	JAN 27	1	1043	97	NOV 25	0	0	

State and Station	Relative humidity – 1:00am EST %	7:00am EST %	1:00pm EST %	7:00pm EST %	Wind – Average speed M.p.s	Resultant speed M.p.s	Resultant direction	Fastest mile (1.6 kilometers) – Speed M.p.s	Direction	Date	Possible sunshine %	Average sky cover sunrise to sunset Tenths	Number of days – Sunrise to sunset – Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max temp – 32.2°C and above	Max temp – 0°C and below	Min temp – 0°C and below	Min temp – -17.8°C and below
NORTH CAROLINA																							
CHARLOTTE	77	84	54	61	3.1	.4	26	15.6	SW	MAR 7	71	5.8	103	112	150	110	1	32	30	8	1	71	0
GREENSBORO	83	88	56	66	3.3	.6	25	27.3	NW	MAY 29	58	6.0	114	89	162	106	1	33	31	21	1	76	0
RALEIGH	79	85	53	66	3.8	.4	26	19.7	32	MAR 15	59	5.7	115	102	148	105	2	39	34	17	1	73	0
WILMINGTON	78	78	51	68	3.7	.3	28	20.1	W	NOV 24	69	5.8	106	119	140	108	0	36	30	48	1	36	0
NORTH DAKOTA																							
BISMARCK	71	77	53	51	4.9	.8	31	23.2	NW	MAY 7	63	6.4	82	112	171	93	27	15	9	22	92	199	52
FARGO	72	77	58	57	5.6	.4	29	25.0	N	JAN 16	60	6.3	95	91	179	91	11	27	9	11	94	196	52
WILLISTON		78	56	54				23.2	NW	MAR 31	68	5.9	104	112	149	99	21			29	81	196	51
OHIO																							
AKRON	78	82	61	67	4.4	1.3	24	20.6	32	MAY 27		7.1	58	99	208	149	16	39	17	7	30	121	3
CINCINNATI OBS								21.0	SW	FEB 15	52					130	6			17	23	101	1
CLEVELAND	74	76	60	64	4.6	1.6	23	23.7	W	FEB 16+	49	7.2	61	96	208	156	13	23	11	8	37	115	1
COLUMBUS	80	82	62	66	4.4	1.0	24	24.1	W	FEB 16	52	7.0	62	116	187	137	12	38	9	5	29	114	4
DAYTON	74	78	60	65	4.4	1.3	23	26.8	SW	FEB 16	54	6.9	73	95	197	138	11	28	23	8	31	115	4
MANSFIELD	75	78	60	66	4.6	1.9	23	19.7	24	FEB 15		7.0	69	99	197	134	14	38	30	4	45	124	4
TOLEDO	79	81	58	66	4.3	1.3	25	25.0	SW	FEB 16	53	6.9	57	115	193	144	12	37	13	6	47	151	5
YOUNGSTOWN	80	83	64	69	4.3	1.2	24	19.2	27	FEB 15		7.3	57	98	210	151	25	31	27	4	57	137	2
OKLAHOMA																							
OKLAHOMA CITY	69	76	52	51	5.0	1.2	15	20.1	NW	DEC 2	67	5.8	115	98	152	80	1	46	13	54	2	70	0
TULSA	74	81	55	55	5.0	1.3	18	18.8	SW	DEC 18	61	5.7	109	113	143	90	2	53	9	44	6	81	0
OREGON																							
ASTORIA	91	93	83	77	3.8	1.0	23	16.5	19	JAN 19		7.4	56	77	232	196	0	12	49	0	0	45	0
BURNS U	62	71	56	41	3.1	1.2	30					5.5	128	107	130	91	18			39	18	200	3
EUGENE	80	88	73	57	3.3	.7	21	18.3	18	OCT 2		6.4	90	96	179	116	1	2	53	30	0	26	0
MEACHAM			60	54				15.6	19	OCT 2		6.7	96	60	209	131	46			12	48	175	0
MEDFORD	69	81	66	46	2.0	.6	30	15.6	19	OCT 2		5.4	138	74	153	93	5	8	62	84	1	95	0
PENDLETON	58	66	52	42	4.2	1.7	25	17.4	24	OCT 22		5.7	129	69	167	75	3	4	11	68	6	72	0
PORTLAND	77	86	73	57	3.7	.4	23	31.3	S	OCT 2	54	6.9	76	81	208	142	2	11	44	21	1	35	0
SALEM	77	84	70	55	3.5	1.1	21	30.4	26	OCT 2		6.4	96	83	186	133	0	9	27	31	0	57	0
SEXTON SUMMIT R	71	73	70	58				25.9	15	JAN 19		4.9	162	56	147	113	27			7	31	126	0
PACIFIC AREA																							
JOHNSTON	77	80	79	71	6.6	5.7	9	18.3	W	DEC 17	62	5.7	106	137	122	179	0	10	0	0	0	0	0
KOROR R	77	88	90	79	3.4	.1	9	32.6	S	MAR 2	65	9.4	2	26	337	253	0	36	0	42	0	0	0
KWAJALEIN	77	78	82	83	5.9	4.6	7	19.7	11	MAY 19		8.2	21	86	258	247	0	13	0	2	0	0	0
MAJURO	75	78	81	82	4.1	3.4	8	17.0	NE	JAN 13	55	8.1	22	95	248	256	0	13	0	1	0	0	0
MARCUS ISLAND	74	81	82	74				27.3	N	SEP 20	65					153	0			6	0	0	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature – Averages – Daily maximum °C	Daily minimum °C	Annual °C.	Extremes – Highest °C	Date	Lowest °C	Date	Heating degree days Base 18 3°C	Precipitation – Total Mm	Greatest in 24 hours Mm	Date (s)	Snow, Sleet – Total Mm	Greatest in 24 hours Mm.	Date (s)	Relative humidity – 1:00 a.m E S T %	7:00 a.m E S T %	1:00 p.m E S T %	7:00 p.m E S T %
PACIFIC AREA																		
PAGO PAGO	29.5	23.0	26.3	32.8	APR 13+	18.3	AUG 5	0	3572	191	OCT 9	0	0		84	88	87	75
PONAPE P	30.7	23.1	26.9	33.3	OCT 7	20.6	SEP 20+	0	5130	181	MAR 28-29	0	0		79	90	91	77
TAGUAC GUAM R	29.1	22.2	25.6	32.8	JUL 13	16.1	DEC 21+	0	3214	151	AUG 23-24	0	0					
TRUK MOEN ISLAND	30.1	24.2	27.2	32.8	JUN 14	21.7	JUL 10+	0	4459	240	DEC 27-28	0	0		78	85	87	78
WAKE	29.1	24.1	26.6	32.2	OCT 28	19.4	MAR 5+	0	1584	131	SEP 16-17	0	0		69	74	80	80
YAP R	30.2	23.9	27.1	33.3	OCT 11+	20.6	MAR 1	0	3585	256	MAY 8-9	0	0		77	88	90	80
PENNSYLVANIA																		
ALLENTOWN	15.1	3.7	9.4	35.0	JUN 16	- 21.7	FEB 9	3548	1112	90	JUN 18-19	1397	272	FEB 7	77	79	55	64
ERIE	13.4	4.7	9.1	31.7	JUN 16+	- 18.3	FEB 8	3591	960	75	JUL 10-11	2022	318	NOV 5	73	74	64	67
HARRISBURG	16.2	5.7	10.9	34.4	JUN 16	- 18.9	FEB 9+	3137	1044	80	AUG 3-4	1295	287	FEB 7	73	75	55	62
PHILADELPHIA	16.9	6.8	11.8	33.9	JUL 24+	- 15.6	FEB 13+	2885	1138	64	JUN 22-23	914	249	FEB 7	75	76	55	63
PITTSBURGH	15.5	4.8	10.2	33.9	JUN 17	- 21.1	FEB 8	3291	924	40	MAR 5-6	1643	345	MAR 6-7	77	80	58	63
PITTSBURG U	16.0	6.2	11.1	33.3	JUN 17+	- 16.7	FEB 25	3012	951	87	JUL 27-28	1148	292	MAR 6-7				
READING U	16.5	6.8	11.7	34.4	JUN 16	- 15.6	FEB 9	2918	1000	55	MAR 6-7	1031	328	FEB 7				
SCRANTON	14.2	4.4	9.3	33.3	JUN 16+	- 21.1	FEB 8	3553	893	58	JUN 16	1996	300	MAR 6-7	77	81	60	65
WILLIAMSPORT	15.1	4.1	9.6	33.3	JUN 13+	- 22.8	FEB 8	3479	1114	53	OCT 25	1854	353	MAR 6-7	86	86	61	69
RHODE ISLAND																		
BLOCK ISLAND	12.4	6.1	9.3	27.8	JUL 10	- 16.7	FEB 13	3419	1127	112	DEC 28-29	1003	229	MAR 15-16				
PROVIDENCE	14.5	4.5	9.5	33.9	JUN 16	- 20.6	FEB 13	3481	1181	96	MAY 25-26	1796	267	MAR 15-16	76	75	57	68
SOUTH CAROLINA																		
CHARLESTON	24.4	11.6	18.0	36.1	AUG 8+	- 10.0	FEB 26	1115	1109	158	MAY 22	T	T	FEB 13 +	83	84	52	69
COLUMBIA	22.9	9.3	16.1	35.0	JUN 24	- 12.8	FEB 26	1512	1390	141	MAY 21-22	86	86	FEB 9	86	90	53	68
GNVLE-SPARTANBURG	21.5	9.3	15.4	36.1	JUN 25+	- 13.3	FEB 25	1687	1223	114	AUG 22-23	51	38	FEB 9	77	80	53	62
SOUTH DAKOTA																		
ABERDEEN	13.0	- 1.1	5.9	38.3	JUL 31	- 39.4	DEC 31	4670	438	66	SEP 17-18	800	155	DEC 20-21	74	78	56	56
HURON	14.4	.2	7.3	38.3	JUL 31	- 31.7	FEB 18	4263	385	139	JUN 18-19	831	170	FEB 14-15	74	80	54	55
RAPID CITY	14.7	1.2	7.9	37.8	AUG 24	- 28.3	DEC 31	4008	574	52	APR 30	1204	345	APR 30	66	68	50	50
SIOUX FALLS	14.2	.2	7.2	40.0	JUL 22	- 30.0	JAN 18	4307	417	64	APR 1-2	566	145	JAN 6-7	74	79	55	55
TENNESSEE																		
BRISTOL	18.7	5.9	12.3	31.1	JUN 17	- 18.3	FEB 25	2448	1089	53	JUL 28-29	343	102	JAN 19	85	89	60	66
CHATTANOOGA	20.6	8.7	14.7	33.9	JUN 18	- 14.4	FEB 25	1887	1319	81	JUL 5-6	46	46	FEB 6-7	86	87	62	66
KNOXVILLE	19.8	8.6	14.2	33.3	JUN 14	- 15.0	FEB 25	1980	1414	76	JUL 28-29	201	84	FEB 7	83	88	61	65
MEMPHIS	21.6	10.6	16.1	34.4	JUN 21	- 10.6	JAN 18	1710	1180	74	DEC 2	23	15	JAN 17	72	77	56	58
NASHVILLE	20.8	8.8	14.8	35.0	JUN 18	- 15.0	FEB 25	1953	1149	93	MAR 6	244	124	DEC 31	77	82	56	60
OAK RIDGE R	19.8	7.8	13.8	32.8	JUN 17+	- 16.1	FEB 25	2101	1747	125	JUL 5-6	320	152	FEB 6-7				

State and Station	Wind – Average speed M p s	Resultant speed M.p s	Resultant direction	Fastest mile (1 6 kilometers) – Speed M.p s.	Direction	Date	Possible sunshine %	Average sky cover sunrise to sunset Tenths	Number of days – Sunrise to sunset – Clear, 0-0 3	Partly cloudy, 0 4-0 7	Cloudy, 0 8-1 0	Precipitation 25mm or more	Snow, Sleet 25 4mm or more	Thunderstorms	Heavy fog	Max temp – 32.2 °C and above	0 °C and below	Min temp – 0 °C and below	-17 8 °C and below
PACIFIC AREA																			
PAGO PAGO	4.1	2.7	10	17.9	SE	AUG 10	57	7.5	35	136	194	270	0	24	0	13	0	0	0
PONAPE P	3.2	1.9	10	13.0	SW	NOV 11+	48	8.5	11	70	284	294	0	30	0	41	0	0	0
TAGUAC GUAM R				17.9	SW	NOV 13						270	0			1	0	0	0
TRUK MOEN ISLAND	4.2	1.8	7	17.0	NW	NOV 11	67	9.0	5	52	308	258	0	18	0	1	0	0	0
WAKE	6.6	4.9	8	46.5	N	SEP 16		6.4	73	135	153	199	0	9	0	1	0	0	0
YAP R	3.3	1.3	5	27.3	NE	NOV 1	55	9.3	2	45	318	274	0	18	0	18	0	0	0
PENNSYLVANIA																			
ALLENTOWN	4.0	1.3	28	17.4	26	FEB 16		6.4	88	101	176	116	15	30	21	5	27	140	4
ERIE	5.3	1.9	23	17.9	27	FEB 16		7.1	68	89	208	172	26	39	12	0	44	120	3
HARRISBURG	3.5	1.0	29	19.2	W	APR 22	59	6.7	74	104	187	128	11	36	13	14	23	112	2
PHILADELPHIA	4.1	1.0	29	17.9	NW	JUL 31+	55	6.5	84	94	187	116	9	31	27	12	14	99	0
PITTSBURGH	4.1	1.3	25	25.9	26	FEB 16	43	7.4	46	99	220	143	18	31	15	9	37	120	1
PITTSBURG U							42					134	15			5	30	104	0
READING U				25.0	E	MAY 7+	55	6.0	101	121	143	119	9			12	17	94	0
SCRANTON	3.6	.9	25	18.3	SW	FEB 16	53	6.9	62	109	194	134	22	29	33	3	37	126	5
WILLIAMSPORT	3.6	.8	28	17.9	26	FEB 16		7.0	57	120	188	141	21	37	41	6	35	134	4
RHODE ISLAND																			
BLOCK ISLAND								6.4	87	110	168	129	9			0	18	100	0
PROVIDENCE	4.8	1.3	28	20.6	22	FEB 16	51	6.3	103	83	179	134	16	24	26	1	22	128	2
SOUTH CAROLINA																			
CHARLESTON	4.0	.3	24	26.8Y	N	MAY 31	61	5.9	95	126	144	105	0	39	37	56	0	40	0
COLUMBIA	3.0	.4	28	15.6	35	NOV 24+	68	5.6	112	124	129	97	1	47	19	24	1	65	0
GNVLE-SPARTANBURG	3.4	.4	30	19.7	SW	JAN 27	58	5.8	107	106	152	115	1	46	33	14	1	56	0
SOUTH DAKOTA																			
ABERDEEN	5.5	.3	1	25.9	34	JAN 16		6.1	103	94	168	88	9	39	11	19	67	190	44
HURON	5.6	.3	21	25.5	NW	JAN 16	67	6.1	102	94	169	96	10	42	7	29	50	177	31
RAPID CITY	5.2	1.6	33	29.1	SW	JAN 22	60	5.8	111	109	145	117	13	45	13	24	51	177	12
SIOUX FALLS	4.9	.4	25	20.6	32	APR 17		6.0	108	96	161	91	8	43	13	20	54	183	33
TENNESSEE																			
BRISTOL	2.5	.7	28	15.6	25	MAR 7		6.2	94	112	159	125	5	36	50	0	7	101	1
CHATTANOOGA	2.8	.4	24	16.1	N	APR 24	52	6.2	99	97	169	127	1	55	52	7	3	75	0
KNOXVILLE	3.0	.8	28	16.5	W	FEB 16	54	6.4	79	115	171	128	3	49	45	7	3	78	0
MEMPHIS	4.3	.8	19	18.8	NE	AUG 3	62	6.1	98	103	164	99	0	47	20	30	4	67	0
NASHVILLE	3.9	1.1	22	16.1	SW	FEB 15	62	6.2	85	118	162	114	4	54	22	20	6	82	0
OAK RIDGE R				22.4Y		JAN 27		6.5	94	88	183	126	4			5	3	79	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

YEAR 1967

State and Station	Temperature: Averages: Daily maximum	Averages: Daily minimum	Averages: Annual	Extremes: Highest	Extremes: Date	Extremes: Lowest	Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Snow, Sleet: Total	Snow, Sleet: Greatest in 24 hours	Snow, Sleet: Date (s)
	°C.	°C	°C.	°C		°C		Base 18 3°C	Mm	Mm.		Mm.	Mm.	
TEXAS														
ABILENE	24.9	11.7	18.3	41.7	MAY 10	-10.0	JAN 8	1301	593	54	JUN 11	102	51	DEC 14 +
AMARILLO	21.8	7.0	14.4	37.8	AUG 8	-14.4	JAN 9	2078	428	47	JUL 18	246	81	DEC 14-15
AUSTIN	26.4	14.2	20.3	38.9	JUL 31+	-5.6	FEB 7	901	852	86	NOV 9-10	51	51	FEB 6
BROWNSVILLE	27.8	18.4	23.1	37.2	MAY 31	.6	FEB 9+	338	906	310	SEP 19-20	T	T	JAN 9
CORPUS CHRISTI	26.9	16.9	21.9	36.7	AUG 10+	-3.9	JAN 4	526	971	223	SEP 21-22	25	25	JAN 9
DALLAS	25.1	13.7	19.4	40.6	JUL 31	-5.0	JAN 8	1117	705	58	APR 20-21	T	T	DEC 27 +
DEL RIO	27.5	14.7	21.1	39.4	JUL 31+	-4.4	FEB 7	801	355	96	SEP 2-3	15	15	FEB 6
EL PASO	24.9	9.6	17.3	38.3	JUN 23	-12.8	JAN 9	1456	145	25	SEP 19-20	142	99	DEC 14-15
FORT WORTH	25.0	12.6	18.8	40.0	JUL 31	-6.7	FEB 7+	1179	693	63	APR 20-21	T	T	DEC 27 +
GALVESTON U	23.7	18.6	21.1	33.9	AUG 10	1.1	FEB 8+	0	895	74	JUL 23	0	0	
HOUSTON	26.8	15.6	21.2	37.2	JUN 26	-3.3	JAN 4	633	926	79	SEP 4-5	T	T	JAN 9
LUBBOCK	22.9	7.3	15.1	37.2	AUG 8+	-16.1	JAN 9+	1889	524	145	JUN 1	99	36	DEC 14-15
MIDLAND	25.1	9.8	17.4	38.3	JUN 9+	-13.9	JAN 9	1404	215	24	MAR 22	30	25	DEC 14
PORT ARTHUR	25.9	14.9	20.4	37.2	JUL 10	-2.8	FEB 8+	747	1033	92	APR 13	T	T	FEB 11
SAN ANGELO	26.3	12.0	19.2	41.1	MAY 10	-10.0	JAN 19	1166	507	74	SEP 14-15	48	36	DEC 9-10
SAN ANTONIO	26.7	14.4	20.6	38.9	JUL 31	-6.1	JAN 4	869	743	69	SEP 20-21	T	T	FEB 6 +
VICTORIA	27.0	16.1	21.6	37.8	AUG 10	-3.3	JAN 4	612	861	216	SEP 20-21	T	T	JAN 9
WACO	26.1	14.3	20.2	40.6	JUL 31+	-6.7	FEB 7+	1012	837	87	APR 11	T	T	DEC 27 +
WICHITA FALLS	25.6	10.5	18.1	42.8	JUL 31	-10.6	JAN 8	1398	681	104	APR 12-13	15	15	MAR 6
UTAH														
MILFORD	18.1	.6	9.3	37.8	JUL 28	-26.7	DEC 21	3673	296	31	SEP 22 +	1471	231	JAN 23
SALT LAKE CITY	18.2	3.8	11.0	38.3	JUL 21	-16.7	JAN 11	3194	420	25	JUL 16-17	2296	229	JAN 6-7
WENDOVER	16.9	5.7	11.3	36.7	JUL 21	-12.2	DEC 24+	3154	170	20	MAR 13-14	351	216	MAR 13-14
VERMONT														
BURLINGTON	11.5	1.0	6.3	32.8	JUN 4	-31.7	FEB 13	4558	818	52	JUL 21-22	1877	290	DEC 28-29
VIRGINIA														
LYNCHBURG	18.6	6.3	12.4	33.3	JUN 16	-14.4	FEB 25	2508	1054	114	AUG 23-24	592	135	FEB 6-7
NORFOLK	19.1	9.2	14.2	34.4	JUL 12	-8.9	FEB 25	2055	1148	105	AUG 23-24	287	130	FEB 9-10
RICHMOND	20.1	6.8	13.4	34.4	AUG 19+	-16.1	JAN 20	2338	956	61	AUG 23-24	737	163	FEB 9-10
ROANOKE	19.0	6.7	12.8	32.8	JUN 16+	-15.6	FEB 25	2398	961	65	MAR 6-7	861	241	DEC 28
WASHINGTON														
OLYMPIA	16.7	4.6	10.7	36.7	AUG 28	-11.1	DEC 13	2853	1169	70	JAN 18-19	312	135	DEC 19
QUILLAYUTE	13.9	5.7	9.8	32.8	AUG 9+	-6.1	DEC 15	3065	3049	132	DEC 21-22	114	69	MAR 9-10
SEATTLE-TACOMA	15.9	7.6	11.8	36.7	AUG 16	-3.9	DEC 14+	2529	904	61	JAN 18-19	241	150	JAN 4
SPOKANE	15.1	3.7	9.4	39.4	JUL 12	-15.0	DEC 14	3541	353	18	JUN 1-2	960	135	DEC 21-22
STAMPEDE PASS R	8.5	1.8	5.2	30.0	AUG 19+	-13.3	DEC 21+	4832	2610	106	OCT 27-28	6449	688	JAN 18-19

State and Station	Relative humidity: 1:00 am EST	7:00 am EST	1:00 pm EST	7:00 pm EST	Wind: Average speed	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	Max temp: 32.2 °C and above	Max temp: 0 °C and below	Min temp: 0 °C and below	Min temp: -17.8 °C and below
	%	%	%	%	M.p.s	M.p.s		M.p.s.			%	Tenths											
TEXAS																							
ABILENE	63	71	52	46	5.1	2.0	18	18.8	N	JAN 6	71	5.4	128	105	132	62	2	34	5	93	1	55	0
AMARILLO	61	71	44	39	6.4	1.9	21	24.1	NW	JAN 6	71	5.1	131	112	122	71	4	49	18	54	5	100	0
AUSTIN	73	81	53	49	4.2	1.1	16	21.0	NW	OCT 29	62	5.7	102	124	139	78	1	33	26	106	0	22	0
BROWNSVILLE	85	88	61	70	5.5	2.9	14	30.8	NE	SEP 20	63	5.8	10[illegible]	140	125	68	0	24	34	97	0	0	0
CORPUS CHRISTI	85	89	63	68	5.8	3.2	13	32.2	E	SEP 20	53	6.3	82	122	161	68	1	23	42	80	0	6	0
DALLAS	65	75	52	47	5.0	1.9	15	23.7	SE	JUN 11	65	5.5	123	103	139	81	0	36	9	83	0	31	0
DEL RIO	59	73	50	40	4.5	2.5	12	20.6	33	OCT 29		5.6	101	126	138	58	0	23	16	130	0	19	0
EL PASO	38	47	32	25	3.8	.7	24	27.3	W	APR 13	83	4.2	175	95	95	42	3	31	3	89	1	69	0
FORT WORTH	69	78	53	50	4.4	1.4	18	17.4	18	APR 13		5.6	130	92	143	81	0	42	7	76	0	41	0
GALVESTON U								21.0	NW	OCT 30	58					81	0			2	0	0	0
HOUSTON	82	85	58	62	4.6	1.4	14	15.6	29	DEC 2+	60	6.2	86	129	150	92	0	38	42	80	0	8	0
LUBBOCK	59	71	44	38	5.5	1.4	20	19.7	8	JUN 1		5.3	121	118	126	59	1	47	15	47	4	98	0
MIDLAND	58	71	40	33	5.2	1.7	17	19.7	32	MAY 20		5.0	137	114	114	58	1	32	9	90	2	68	0
PORT ARTHUR	84	86	59	68	4.3	1.3	13	21.9	SW	MAY 29+	63	5.9	93	137	135	93	0	43	54	61	0	12	0
SAN ANGELO	61	71	46	41	4.4	1.7	19	17.9	29	APR 12		5.2	128	121	116	62	1	31	4	118	0	56	0
SAN ANTONIO	74	82	53	48	4.2	1.3	13	17.9	N	MAY 20+	61	5.9	95	123	147	74	0	22	23	104	0	32	0
VICTORIA	83	87	57	61	4.7	1.8	14	24.1Y	NNW	OCT 30		6.5	72	126	167	64	0	29	50	89	0	7	0
WACO	68	77	55	50	5.1	1.9	16	15.6	4	APR 10+		5.3	124	120	121	68	0	32	10	111	0	33	0
WICHITA FALLS	67	76	47	45	5.7	1.5	16	21.5	32	OCT 7+		5.9	106	105	154	66	0	49	8	113	1	64	[illegible]
UTAH																							
MILFORD			43									5.2	135	111	119	73	15			60	28	182	19
SALT LAKE CITY	62	66	46	42	3.5	1.3	16	21.0	SW	APR 5	68	6.2	88	117	160	99	24	49	7	68	23	143	0
WENDOVER		54	42													56	3			47	23	122	0
VERMONT																							
BURLINGTON	76	74	59	65	3.9	.7	23	17.9	SW	OCT 19	62	7.4	51	92	222	155	24	25	18	2	74	172	26
VIRGINIA																							
LYNCHBURG		78	52	62				15.2	NW	AUG 19	61	5.5	129	98	138	107	8			7	4	92	0
NORFOLK	76	77	57	66	4.5	.2	30	18.8	W	MAR 7	70	6.0	109	88	168	109	3	27	17	9	2	56	[illegible]
RICHMOND	84	85	54	69	3.3	.3	24	17.0	SW	JUL 20	65	6.1	96	104	165	100	7	29	42	27	5	95	0
ROANOKE	70	73	49	56	3.8	1.0	29	23.2	32	MAR 15		5.7	115	115	135	117	7	29	21	9	5	89	0
WASHINGTON																							
OLYMPIA	86	92	78	63	3.4	1.7	21	15.6	18	SEP 10		7.1	72	78	215	154	4	1	67	18	2	81	0
QUILLAYUTE	93	95	83	76	3.1	.6	20	16.1	SE	DEC 5	40	7.6	53	66	246	216	2	12	39	3	0	50	0
SEATTLE-TACOMA	76	86	76	63	3.2	1.1	20	17.9	20	MAR 23	52	7.1	70	74	221	146	3	3	44	6	0	24	0
SPOKANE	64	74	61	49	4.1	1.9	20	19.7	W	JAN 15	59	5.9	109	86	170	95	16	12	35	31	20	140	0
STAMPEDE PASS R		88	79	75								7.3	72	60	233	202	97			0	75	184	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Snow, Sleet: Total	Snow, Sleet: Greatest in 24 hours	Snow, Sleet: Date (s)	Relative humidity: 100am EST	Relative humidity: 700am EST	Relative humidity: 100pm EST	Relative humidity: 700pm EST	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1 6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-03	Number of days: Sunrise to sunset: Partly cloudy, 04-07	Number of days: Sunrise to sunset: Cloudy, 08-10	Number of days: Precipitation 25mm or more	Number of days: Snow, Sleet 25.4mm or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp: 32.2°C and above	Number of days: Max temp: 0°C and below	Number of days: Min temp: 0°C and below	Number of days: Min temp: -17.8°C and below
	°C	°C	°C	°C		°C		Base 18 3°C	Mm	Mm		Mm	Mm		%	%	%	%	Mps	Mps		Mps			%	Tenths											
WASHINGTON																																					
WALLA WALLA U	19.2	8.4	13.8	40.6	AUG 17+	- 10.6	DEC 21	2333	304	21	MAR 28-29	320	51	MAR 28-29								15.2	W	OCT 22+	60	6.0	121	62	182	89	8			57	7	38	0
YAKIMA	18.9	3.5	11.2	38.9	AUG 18	- 12.8	DEC 16	2921	115	13	JUN 21	196	51	NOV 27	63	73	52	40	3.[illegible]	1.7	28	21.5	28	FEB 17		5.3	144	75	146	50	3	2	7	50	6	142	0
WEST INDIES																																					
SAN JUAN P.R.	29.4	23.3	26.4	34.4	SEP 14+	17.8	DEC 25+	0	1081	55	DEC 9-10	0	0		80	78	64	74	4.4	3.5	9	15.6	E	APR 2	68	5.6	52	245	68	204	0	30	0	22	0	0	0
SWAN ISLAND	29.6	24.5	27.1	32.2	JUL 5	20.6	NOV 11	0	1159	93	NOV 11-12	0	0													6.0	101	127	137	152	0			1	0	0	0
WEST VIRGINIA																																					
BECKLEY	15.6	4.4	10.0	29.4	JUN 21+	- 20.6	FEB 25	3112	1210	64	SEP 28	1582	351	DEC 28-29	79	83	59	68	4.4	1.6	23	20.6	30	SEP 21		6.8	77	94	194	159	19	41	35	0	23	113	3
CHARLESTON	18.2	5.9	12.1	33.9	JUN 16+	- 17.8	FEB 8	2617	1059	73	MAR 6-7	1097	284	DEC 28-29	83	85	56	62	3.0	1.1	23	16.5	22	FEB 16		6.8	61	127	177	144	10	35	95	9	18	107	1
ELKINS	16.2	2.6	9.4	31.7	JUN 17+	- 20.0	FEB 25	3341	1269	68	SEP 28	1905	452	DEC 28	87	90	59	71	3.3	1.3	27	20.6	30	MAY 2+		7.4	43	108	214	155	20	45	69	0	22	139	5
HUNTINGTON	18.1	6.3	12.2	34.4	JUN 17	- 18.3	FEB 25	2606	1065	87	MAR 5-6	808	170	DEC 31	81	86	59	62	3.0	.9	22	21.0	29	MAY 8		6.8	58	176	181	136	10	41	45	9	19	103	1
PARKERSBURG U	17.6	6.4	12.0	33.9	JUN 17+	- 17.8	FEB 25+	2692	890	58	JUL 2	660	102	DEC 31 +								20.1	W	FEB 16	50					118	10			7	21	101	2
WISCONSIN																																					
GREEN BAY	11.4	.6	6.0	32.2	JUL 22	- 31.7	JAN 18	4623	776	46	JUN 9	955	145	JAN 6	81	83	63	67	4.2	1.0	27	21.9	SW	MAY 18	50	6.4	93	91	181	124	12	36	23	1	74	171	29
LA CROSSE	13.2	1.6	7.4	34.4	MAY 26	- 35.0	JAN 18	4227	668	100	JUN 15-16	1064	150	MAR 19-20	76	81	58	60	4.0	.4	23	23.2	36	JUN 8		6.5	91	96	178	86	12	31	16	17	59	155	23
MADISON	12.6	.4	6.5	32.2	JUL 23+	- 29.4	JAN 18	4404	863	49	JUN 9-10	808	104	FEB 5	78	81	61	64	4.1	.8	26	18.8	SW	APR 14	55	6.6	74	106	185	117	10	54	24	2	61	180	20
MILWAUKEE	12.3	2.7	7.6	32.8	JUL 22+	- 26.7	JAN 18	4098	657	51	JUN 10	1270	262	FEB 5	77	79	64	68	4.7	1.0	26	20.1	NW	JUL 23+	55	6.5	90	97	178	131	14	37	26	5	58	146	13
WYOMING																																					
CASPER	14.4	- .2	7.1	35.0	AUG 24+	- 28.3	DEC 30	4233	389	39	JUN 22-23	2070	145	MAY 12-13	63	67	46	45	6.0	3.0	24	24.1	25	APR 5		6.0	102	116	147	129	35	49	11	19	57	186	19
CHEYENNE	14.6	.8	7.7	33.3	AUG 24	- 26.1	DEC 20	3918	391	41	APR 12-13	1334	323	APR 13	62	63	42	44	5.9	2.9	29	30.8	NW	MAY 1	60	5.7	112	123	130	120	10	44	30	1	29	168	6
LANDER	13.6	- .1	6.8	32.2	JUL 22+	- 26.1	DEC 21	4337	482	31	APR 29	3927	556	APR 29	62	68	52	48	3.2	1.2	25	32.6	SW	JAN 22	66	6.2	80	127	158	107	32	51	3	2	56	183	17
SHERIDAN	14.1	- 1.1	6.6	35.0	AUG 23	- 31.7	DEC 31+	4358	462	36	JUN 14-15	2840	404	APR 29-30	64	66	48	48	3.3	1.4	30	25.5	NW	JAN 15	59	6.5	74	123	168	125	31	36	5	11	50	200	22

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

Data in this table are obtained by conversion from data in the English Units table.

+ And also on an earlier date or dates.

B Number of days maximum 21.1°C. or above for Alaskan Stations.

Y Peak gust.

V Sun below horizon November 19 - January 23, inclusive.

X Sun below horizon November 24 - January 17, inclusive.

* less than 0.05

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours	Snow, sleet Mean total January	Seasonal	Extreme Maximum in 24 hours	Relative humidity (percent) January 7:00 a m EST	January 1 00 p m EST	January 7 00 p m EST	July 7 00 a m EST	July 1 00 p m EST	July 7 00 p m EST	Wind Speed (m p h) Mean speed January	Mean speed July	Fastest mile	Sunshine (percent of possible) January	July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Max 32 and below	Min Zero and below
ALABAMA							84	112	-24							0.00	20.33																								
BIRMINGHAM	620	56.6	36.3	92.5	70.7	64.1	4	102	- 4	592	2551	6.00	2.95	53.05	17.67	T	6.57	0.5	1.5	8.4	83	61	66	91	65	69	8.8	6.0	65	40	60	102	113	150	117	1	55	8	29	62	*
HUNTSVILLE	624	52.4	33.4	92.4	69.8	62.0	8	104	-11	694	3070	5.57	2.72	48.67	12.55	T	5.84	2.4	8.2	17.1	80	62	67	86	56	60	8.4	5.5	63	---	---	109	101	155	113	2	53	12	64	70	1
MOBILE	211	62.3	43.7	92.0	73.1	68.2	6	100	8	415	1560	9.67	3.03	68.13	19.29	0.05	13.36	0.1	0.4	3.5	80	64	71	88	62	72	11.3	7.3	51	---	---	105	116	144	123	*	81	36	76	20	0
MONTGOMERY	194	58.5	37.7	91.9	71.7	65.0	4	102	5	543	2291	6.16	2.28	50.69	21.32	0.02	8.81	0.2	0.2	2.5	84	62	65	92	64	68	7.9	6.1	60	48	64	105	109	151	109	*	62	21	56	36	0
ALASKA							84	100	-76							0.00	37.67																								
ANCHORAGE PK 1966	2/ 85	20.5	4.3	64.6	49.5	35.2	44	86	-38	1631	10864	2.57	0.42	14.71	5.91	0.00	2.06	10.7	59.4	17.7	--	--	--	--	--	--	---	---	---	---	---	---	---	---	113	21	--	--	#12	201	41
ANCHORAGE	114	19.9	4.3	66.0	50.3	35.8	3	78	-30	1640	10648	2.57	0.42	14.71	4.60	0.27	1.66	11.6	76.4	16.4	74	74	73	81	73	62	5.6	6.9	44	39	43	67	63	235	126	23	1	29	#12	189	49
ANNETTE	110	38.4	30.3	63.2	51.4	45.6	7	90	1	949	7069	16.88	5.67	118.36	34.87	0.71	7.59	12.6	51.4	14.2	80	81	77	87	77	67	12.7	8.1	60	---	---	42	57	266	222	16	2	17	#26	78	0
BARROW	31	- 9.4	-23.0	44.9	33.3	9.6	47	78	-56	2517	20174	0.90	0.11	4.26	2.81	0.00	1.00	2.3	29.1	15.0	64	64	64	95	91	88	11.2	11.6	58	---	---	x60	x53	x186	74	7	*	65	*	324	169
BARTER ISLAND	39	- 9.9	-23.6	47.5	35.0	10.4	18	75	-59	2536	19862	1.05	0.17	6.28	4.91	T	2.25	6.4	47.6	17.0	69	69	68	92	89	86	13.9	10.2	78	---	---	v49	v66	v195	99	14	*	72	*	311	167
BETHEL	125	10.8	- 3.7	61.8	47.5	28.7	9	86	-39	1903	13196	4.20	0.58	18.42	5.81	0.02	1.31	4.9	49.1	6.5	74	75	74	93	86	67	14.3	12.1	62	---	---	63	58	244	142	17	1	63	#12	225	80
COLD BAY	96	32.6	22.9	54.3	45.0	37.9	23	78	- 9	1153	9880	4.59	1.46	34.30	9.97	0.02	3.43	7.7	47.9	9.7	85	86	83	92	91	82	17.4	15.5	73	---	---	12	48	305	209	15	*	24	*	162	1
CORDOVA 1963	41	31.6	14.5	60.3	46.1	38.2	20	84	-33	1299	9764	12.51	3.48	80.98	27.72	0.08	7.92	25.0	124.7	22.9	83	82	81	92	86	80	4.6	4.1	---	---	---	51	52	262	215	35	2	12	# 8	189	18
FAIRBANKS	436	- 0.8	-21.4	71.7	47.6	25.8	4	91	-56	2359	14279	2.20	0.25	11.29	6.20	T	3.42	10.4	66.0	20.1	70	70	73	78	69	54	2.8	6.1	40	---	---	68	81	216	103	22	5	19	#50	227	127
JUNEAU	12	30.1	20.0	62.7	47.8	40.1	24	84	-21	1237	9075	8.33	2.87	54.62	13.29	0.27	4.66	21.6	103.0	31.0	80	80	78	89	80	69	8.5	7.7	55	30	30	46	37	292	221	28	*	21	#20	149	9
KING SALMON	49	20.8	5.9	63.0	46.8	33.8	4	80	-30	1600	11343	3.43	0.64	19.18	7.30	0.00	2.00	6.1	43.8	9.5	76	77	77	90	83	68	11.0	10.3	71	---	---	56	64	245	152	15	1	34	#10	212	54
KOTZEBUE	10	1.3	-12.7	58.6	46.8	20.7	25	85	-52	2192	16105	2.16	0.28	8.18	5.18	T	1.78	5.4	46.8	8.6	72	72	72	88	86	78	14.5	12.7	93	---	---	88	69	208	113	15	*	21	# 4	252	120
MC GRATH	344	0.8	-18.7	68.6	48.7	25.8	25	88	-67	2294	14283	3.79	0.47	18.58	6.26	T	2.39	15.1	89.0	15.2	69	68	69	87	75	57	2.6	6.1	75	---	---	66	64	235	136	28	6	14	#28	231	113
NOME	13	11.5	- 2.7	54.6	44.4	26.1	19	81	-42	1879	14171	3.80	0.69	17.88	7.82	T	2.38	10.3	57.4	8.4	77	77	77	90	86	82	12.2	10.2	55	38	30	81	67	217	131	19	*	26	# 2	240	89
ST. PAUL ISLAND	22	29.7	21.1	49.4	41.6	34.3	50	64	-26	1228	11199	3.29	0.96	23.60	9.32	0.08	1.93	13.1	57.1	13.8	87	87	86	96	96	91	20.3	12.9	82	---	---	23	64	278	203	19	*	51	# 0	190	5
SHEMYA	122	33.9	28.6	49.2	43.6	38.4	22	63	16	1045	9687	2.76	1.32	27.27	8.71	0.14	5.26	11.9	59.0	15.3	85	84	83	96	97	93	20.8	13.5	90	---	---	6	60	299	213	19	0	83	# 0	125	0
YAKUTAT	28	34.4	20.2	60.5	47.7	40.0	3	73	-24	1169	9092	19.59	5.06	131.81	43.88	0.52	7.13	37.3	217.8	32.4	82	83	80	98	90	83	8.1	7.1	75	---	---	41	47	277	226	50	2	33	# 2	202	23
ARIZONA							73	127	-37							0.00	13.09																								
FLAGSTAFF	6993	40.4	14.1	81.4	49.6	45.6	18	94	-20	1169	7152	2.84	0.51	18.31	7.30	T	3.43	17.0	81.1	27.3	76	53	50	72	34	41	7.7	5.9	40	---	---	170	93	102	73	19	50	7	1	211	10
PHOENIX	1117	64.0	35.3	104.6	75.0	69.0	7	114	20	474	1765	1.12	0.09	7.20	5.56	0.00	3.07	T	T	0.6	66	44	30	49	29	21	4.7	6.6	75	77	84	211	84	70	34	0	22	2	162	17	0
PRESCOTT 1964	5014	51.0	23.1	90.8	61.1	55.7	22	103	- 5	865	4362	2.66	0.24	12.23	9.61	0.00	3.08	5.9	16.7	12.4	71	49	44	59	30	31	7.1	8.3	72	73	74	184	99	82	60	6	46	4	48	130	*
TUCSON	2584	62.6	37.0	98.5	74.1	67.7	27	111	16	471	1800	2.88	0.13	11.00	7.93	0.00	3.93	0.3	1.3	6.4	62	39	33	57	32	28	7.8	8.1	59	81	76	195	89	81	50	1	40	1	143	21	0
WINSLOW	4895	45.2	16.8	95.7	64.6	55.7	8	105	-13	1054	4782	1.43	0.26	7.23	4.80	0.00	2.12	2.8	10.6	17.0	78	63	51	56	30	27	7.5	9.1	59	---	---	178	97	90	53	4	37	5	72	139	5
YUMA	194	66.8	40.0	106.9	78.7	72.5	3	114	30	363	1217	0.50	0.01	3.03	2.68	0.00	2.42	0.0	T	T	57	39	27	47	31	22	7.3	9.5	54	85	90	249	67	49	15	0	7	1	171	2	0
ARKANSAS							77	120	-29							0.00	12.00																								
FORT SMITH	447	50.2	29.4	94.7	71.2	61.8	3	110	0	781	3292	5.26	2.66	42.22	14.01	T	7.13	1.9	5.0	5.6	80	55	59	89	55	52	8.3	6.5	58	48	69	127	96	142	93	3	57	13	63	80	0
LITTLE ROCK	257	50.6	30.5	92.7	71.1	61.7	8	108	- 4	756	3219	5.28	2.82	48.66	14.46	T	7.71	2.5	5.6	11.3	81	59	62	87	58	61	8.9	7.1	65	45	69	120	101	144	102	2	56	15	75	66	*
TEXARKANA	391	54.9	35.2	93.3	71.9	64.3	3	101	9	626	2533	5.30	2.73	49.19	16.65	T	6.55	1.5	2.7	7.5	79	62	62	90	60	62	8.2	6.2	---	---	---	126	95	144	98	1	62	18	64	44	0
CALIFORNIA							83	134	-45							0.00	26.12																								
BAKERSFIELD	475	57.4	37.4	100.3	68.2	65.1	4	111	25	546	2122	1.17	T	6.36	4.61	0.00	1.68	T	T	T	82	74	59	46	32	20	5.1	7.1	44	---	---	199	83	83	37	0	3	22	101	15	0
BISHOP	4108	53.7	19.8	98.0	55.2	56.2	20	109	- 6	874	4227	1.18	0.09	5.84	5.79	0.00	3.35	3.5	6.8	9.0	--	46	34	--	19	14	---	---	---	---	---	204	87	74	29	2	13	*	97	143	*
BLUE CANYON	5280	43.6	30.5	77.0	59.0	50.7	24	93	5	865	5507	11.70	0.06	60.37	45.12	0.00	9.33	49.8	238.3	38.5	--	60	--	--	32	--	m10.7	m7.1	70	---	---	175	65	125	88	39	12	68	1	100	0
BURBANK 1965	724	64.9	42.3	86.2	61.4	63.6	2	106	32	366	1646	3.22	T	14.53	13.84	0.00	7.76	0.2	0.2	4.7	62	45	37	82	50	38	4.5	5.9	---	---	---	187	102	76	38	*	4	28	49	1	0
EUREKA U	43	53.6	41.1	60.5	52.0	52.3	57	85	22	546	4643	6.71	0.10	38.43	13.97	0.00	5.83	0.2	0.2	3.0	--	--	--	--	--	--	6.9	6.8	56	41	52	79	101	185	117	*	5	49	0	5	0
FRESNO	328	55.4	36.7	100.0	62.6	63.0	4	110	21	586	2492	2.19	T	11.14	6.73	0.00	1.91	0.1	0.1	1.5	91	85	66	64	39	23	5.4	7.1	43	53	97	202	70	93	43	*	5	41	108	31	0
LONG BEACH	34	65.3	40.8	82.0	61.1	62.8	8	111	25	375	1711	2.31	T	9.84	9.05	0.00	6.86	T	T	T	70	54	47	84	63	54	5.5	6.7	44	---	---	156	126	83	28	0	4	62	19	*	0
LOS ANGELES	97	63.8	45.0	75.9	62.3	61.9	9	110	30	347	1799	2.88	0.01	12.53	11.07	0.00	6.19	T	T	T	64	50	57	86	68	69	6.5	7.3	62	---	---	143	114	108	35	0	3	48	5	*	0
LOS ANGELES U	270	65.0	46.6	83.3	62.6	64.4	27	110	28	310	1349	3.33	T	14.68	12.42	0.00	6.11	T	T	0.3	63	51	50	84	54	53	6.8	5.4	49	72	82	186	107	72	35	0	6	17	18	*	0
MT SHASTA R	3544	41.4	25.1	85.3	50.7	49.9	25	103	- 2	983	5722	6.36	0.18	36.72	17.60	0.00	5.90	84.7	111.2	37.4	--	75	70	--	40	30	---	---	---	---	---	163	85	117	89	20	13	7	21	134	0
OAKLAND	6	55.4	40.6	72.7	55.9	57.5	4	92	32	527	2870	3.83	T	17.93	11.29	0.00	5.45	T	T	1.0	81	76	71	85	75	67	6.3	9.2	49	---	---	144	117	104	63	*	2	18	1	*	0
POINT ARGUELLO 1963	364	59.0	40.3	65.5	51.5	55.2	4	97	24	474	3595	2.35	0.02	11.27	8.36	T	2.28	T	T	T	--	--	--	--	--	--	7.3	6.9	---	---	---	116	89	160	68	0	2	140	1	9	0
RED BLUFF	342	53.4	37.5	99.6	67.9	63.5	23	114	21	605	2515	4.29	0.04	22.05	11.38	0.00	4.00	1.1	1.6	9.9	80	72	59	49	29	18	8.9	8.1	68	53	96	178	68	119	69	1	11	18	96	23	0
SACRAMENTO	17	53.2	37.2	93.4	57.4	60.4	7	115	23	614	2773	3.24	T	16.29	12.64	0.00	5.59	T	T	T	91	88	72	77	48	28	8.4	9.5	70	45	97	194	68	103	57	0	5	35	79	21	0
SACRAMENTO U 1964	19	54.4	38.3	90.0	58.0	60.7	32	112	22	577	2587	3.58	T	18.02	12.20	0.00	5.07	---	---	---	--	--	--	--	--	--	---	---	---	---	---	---	---	---	58	--	--	--	66	10	0
SANDBERG R	4517	46.0	33.8	85.6	63.2	55.5	35	102	3	778	4209	2.58	0.02	12.10	11.12	0.00	4.95	8.7	26.2	38.5	55	56	57	41	25	27	17.3	12.9	77	---	---	210	80	75	39	7	4	79	20	57	0
SAN DIEGO	13	64.6	45.4	76.8	63.4	63.2	7	111	31	313	1439	2.15	0.01	10.40	7.60	0.00	3.07	T	T	T	69	51	54	83	70	67	5.5	6.9	51	70	68	153	120	92	42	0	3	29	3	0	0
SAN FRANCISCO	8	55.4	41.7	71.9	53.5	56.9	4	95	30	508	3012	4.09	0.01	18.69	12.30	0.00	4.58	T	T	1.5	86	79	66	88	66	61	6.9	13.7	62	---	---	162	103	100	62	*	2	19	3	4	0
SAN FRANCISCO U	52	55.8	45.5	64.3	53.3	56.8	31	101	30	443	3001	4.55	0.01	20.78	11.47	0.00	3.65	T	T	T	--	c82	c68	--	c85	c75	6.7	11.2	47	56	66	---	---	---	66	0	2	--	1	*	0
SANTA CATALINA	1568	59.7	47.4	77.9	59.4	60.9	5	103	34	353	2052	3.16	0.02	14.36	7.49	0.00	4.22	0.0	T	T	--	--	--	--	--	--	---	---	---	---	---	173	94	98	42	0	4	158	15	0	0
SANTA MARIA	236	62.3	38.1	71.6	52.8	57.0	4	100	21	459	2967	2.84	0.03	13.37	9.69	0.00	3.07	T	T	T	81	61	57	93	65	62	6.7	6.5	---	---	---	177	108	80	46	0	2	87	7	29	0
STOCKTON	22	52.4	37.0	95.4	60.9	61.3	8	113	19	629	2676	2.66	T	13.37	8.05	0.00	3.01	0.0	0.0	0.0	90	87	69	64	40	24	6.4	7.8	46	---	---	193	71	101	49	0	3	42	87	27	0
COLORADO							80	118	-60							0.00	11.08																								
ALAMOSA	7536	35.6	- 0.8	82.5	47.2	41.9	22	91	-50	1476	8529	1.07	0.17	6.56	3.28	T	1.82	4.3	33.0	15.8	76	59	58	83	39	37	---	---	---	---	---	149	139	77	67	12	44	15	1	226	47
COLORADO SPRINGS	6145	41.9	15.2	84.2	56.7	48.5	7	99	-21	1128	6423	2.37	0.24	13.19	8.00	T	3.09	4.4	37.9	18.0	55	37	44	72	38	43	10.2	9.6	60	---	---	131	123	111	86	11	60	21	17	156	8
DENVER	5283	42.1	14.8	88.4	57.4	49.5	8	100	-25	1132	6283	2.70	0.47	14.81	7.31	T	3.43	8.7	58.3	19.4	60	43	47	71	36	36	9.6	8.7	56	73	72	114	136	115	87	18	41	11	32	162	11
GRAND JUNCTION	4855	34.8	17.1	92.5	63.8	52.5	4	102	- 5	1209	5641	1.07	0.42	8.29	3.48	0.00	1.35	8.0	27.3	9.1	75	61	62	51	30	23	5.4	9.4	66	59	77	142	106	117	71	9	36	8	59	129	4
PUEBLO	4684	45.3	14.7	92.1	60.8	52.7	3	102	-13	1085	5462	1.85	0.30	11.84	6.17	T	3.77	6.1	31.7	16.8	57	40	37	71	38	36	7.9	8.4	80	75	77	140	122	103	70	9	44	8	47	155	9
CONNECTICUT							80	105	-32							0.00	12.12																								
BRIDGEPORT	7	37.4	22.9	82.6	64.8	51.5	2	100	- 2	1079	5617	4.45	2.96	44.89	13.29	0.07	4.67	7.5	28.3	15.0	76	66	69	77	58	67	12.7	9.5	67	---	---	103	108	154	116	8	21	28	8	116	1
HARTFORD	169	34.7	17.3	85.0	61.8	49.8	8	102	-26	1209	6172	4.01	2.94	42.92	21.87	0.35	12.12	12.6	56.3	14.8	74	59	65	80	50	62	10.0	7.8	53	55	61	84	109	172	125	14	22	33	19	139	7
NEW HAVEN	6	37.1	22.0	80.5	63.2	50.2	24	100	- 8	1097	5897	4.62	3.19	46.02	10.95	0.12	5.55	9.4	37.9	17.2	76	63	--	81	66	--	8.3	6.3	57	54	67	101	106	158	128	11	27	28	3	114	1

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours	Snow, sleet Mean total January	Seasonal	Extreme Maximum in 24 hours	Relative humidity (percent) January 7 00 a m EST	January 1 00 p m EST	January 7 00 p m EST	July 7 00 a m EST	July 1 00 p m EST	July 7 00 p m EST	Wind Speed (m p h) Mean speed January	Mean speed July	Fastest mile	Sunshine (percent of possible) January	July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Min 32 and below	Min Zero and below
DELAWARE							75	110	-17							0.00	7.83																								
WILMINGTON	78	41.3	25.5	86.2	65.8	54.1	20	102	- 4	980	4930	5.59	2.91	44.56	12.09	0.16	6.24	6.1	23.5	15.6	76	62	70	81	53	67	9.7	7.6	58	---	---	96	109	160	117	6	30	41	20	104	*
DIST.OF COLUMBIA																																									
WASHINGTON U 1958	72	44.0	28.9	87.1	68.4	56.8	87	106	-15	884	4258	4.49	2.64	41.44	17.45	0.14	7.31	5.9	19.4	25.0	73	56	64	78	52	67	7.7	5.7	62	46	64	125	116	124	124	6	33	12	28	81	*
WASHINGTON NATL AP	14	44.3	29.5	87.0	69.3	57.0	7	101	3	871	4224	4.90	2.47	40.78	14.31	T	6.39	5.4	18.7	14.4	69	54	59	76	51	60	10.3	8.4	78	50	63	105	105	155	112	5	28	14	38	81	0
FLORIDA							78	109	- 2							0.00	38.70																								
APALACHICOLA U	13	62.3	47.9	87.6	75.4	68.8	38	102	13	347	1308	8.53	2.44	56.23	22.55	0.01	11.71	T	T	1.2	87	69	80	85	72	76	8.4	6.6	67	59	63	135	111	119	106	*	71	25	17	4	0
DAYTONA BEACH	31	69.6	48.7	88.2	72.0	70.3	24	102	21	248	879	7.00	1.95	49.90	19.89	T	9.29	0.0	T	T	89	60	79	89	67	80	9.3	7.9	58	---	---	95	135	135	115	0	82	33	55	5	0
FORT MYERS	15	74.8	52.2	91.0	73.3	73.7	8	98	26	146	442	9.08	1.20	53.34	16.32	0.00	10.85	0.0	0.0	0.0	88	59	75	86	60	74	6.6	7.0	92	---	---	103	159	103	116	0	98	22	115	1	0
JACKSONVILLE	20	66.8	45.0	92.0	73.2	69.5	26	105	12	332	1239	7.68	1.69	53.36	19.36	0.04	10.17	T	0.1	1.5	87	56	74	86	57	75	8.6	8.0	82	58	59	97	129	139	116	*	61	34	86	11	0
KEY WEST INTL AP	4	73.7	65.4	87.4	79.1	76.8	15	95	46	40	108	6.73	1.53	39.99	18.45	0.00	8.89	0.0	0.0	0.0	83	69	78	76	66	71	12.4	10.1	122	68	72	104	163	98	111	0	59	1	56	0	0
LAKELAND U	214	71.2	52.2	90.5	72.6	72.3	27	101	20	195	661	8.30	1.59	51.37	15.67	0.00	10.12	T	T	T	--	--	--	--	--	--	7.3	5.7	---	61	59	96	157	112	121	0	100	19	84	1	0
MIAMI U 1961	8	74.4	62.6	86.8	76.4	75.3	49	95	27	57	173	7.88	1.73	47.26	25.34	T	15.10	0.0	0.0	0.0	--	--	--	--	--	--	---	---	122	70	61	155	96	114	---	--	--	--	--	---	---
MIAMI BEACH 1964	9	74.2	63.9	87.0	77.6	76.2	24	98	35	56	141	7.36	1.65	46.26	18.02	0.01	8.35	0.0	0.0	0.0	--	--	--	--	--	--	11.7	10.9	122	67	63	147	121	97	123	0	--	--	14	0	0
MIAMI INTL AP	7	75.8	57.9	88.8	74.7	75.1	3	94	35	74	214	9.47	1.67	59.76	24.40	0.01	9.95	0.0	0.0	0.0	84	60	71	87	65	74	9.3	7.8	74	---	---	78	171	116	127	0	77	7	26	0	0
ORLANDO	108	70.7	50.0	92.0	73.0	72.0	4	97	24	220	766	8.00	1.57	51.37	19.57	T	9.67	T	T	T	87	58	70	92	61	76	9.1	7.7	50	---	---	96	147	122	115	0	79	28	94	2	0
PENSACOLA U 1961	13	61.1	46.9	86.9	75.0	68.0	22	103	13	383	1435	7.59	3.84	61.60	18.80	T	9.16	T	0.2	2.1	86	64	79	85	64	74	8.1	6.7	91	56	66	---	---	---	112	*	65	--	39	9	0
PENSACOLA 1/	112	62.3	44.6	89.2	74.1	68.4	4	97	11	400	1463	8.02	2.98	62.87	15.52	0.00	10.02	T	T	T	82	64	75	89	67	71	8.5	6.1	59	46	55	106	117	142	123	0	69	--	35	15	0
TALLAHASSEE	55	65.1	42.7	90.5	72.0	68.0	7	100	10	375	1485	8.05	2.43	56.86	20.12	T	9.26	T	T	T	88	60	73	91	60	73	8.8	6.2	58	---	---	94	134	137	119	0	81	51	87	30	0
TAMPA	19	71.3	51.0	89.7	73.4	72.2	4	97	24	202	683	8.62	1.46	51.57	20.59	T	12.11	T	T	T	87	60	74	87	64	73	9.2	7.7	67	66	60	98	142	125	109	0	89	25	73	4	0
WEST PALM BEACH	15	75.5	58.3	90.8	74.3	75.3	3	96	32	87	253	9.66	2.35	61.70	24.86	0.04	15.23	0.0	0.0	0.0	83	60	74	86	66	77	9.9	7.5	86	---	---	73	156	136	131	0	78	8	49	1	0
GEORGIA							76	112	-17							0.00	19.55																								
ATHENS	802	54.6	34.5	90.2	69.2	61.9	24	105	- 1	642	2929	5.10	2.86	48.53	14.98	T	9.93	0.7	1.8	5.0	82	58	66	91	60	70	9.2	6.6	52	---	---	112	107	146	111	1	51	34	53	52	*
ATLANTA	1010	52.0	37.3	87.0	70.7	61.4	7	98	- 3	639	2983	5.37	2.44	47.14	15.72	T	5.67	0.8	1.7	8.3	78	59	63	90	66	71	10.9	7.5	70	48	62	111	108	146	115	*	50	28	15	57	*
AUGUSTA	145	59.4	35.7	91.3	70.0	64.0	3	99	6	549	2397	4.50	2.01	39.18	11.43	T	5.98	0.1	0.5	3.3	84	55	67	89	59	72	6.9	5.9	62	---	---	109	105	151	104	*	55	25	58	63	0
COLUMBUS	385	59.0	36.6	91.5	70.6	64.4	22	104	3	552	2383	6.01	1.77	48.67	12.53	0.00	5.63	T	T	T	85	60	72	88	59	70	7.7	5.5	52	---	---	111	99	155	110	0	59	19	76	45	0
MACON	354	60.2	38.2	92.8	71.0	65.6	3	101	3	505	2136	5.64	2.01	44.08	11.77	0.00	4.97	0.2	0.3	3.7	85	57	65	90	60	71	8.6	7.2	70	57	64	114	105	146	112	*	56	23	59	55	0
ROME	637	52.8	31.3	90.6	67.4	60.4	22	106	- 5	710	3326	5.87	2.93	52.26	17.37	T	7.53	0.6	1.8	8.2	81	58	73	88	54	67	---	---	---	---	---	105	117	143	122	1	61	26	61	81	*
SAVANNAH	46	62.5	40.9	91.2	71.4	66.4	3	98	9	437	1819	6.62	2.05	48.91	20.10	0.02	6.36	T	0.1	1.0	86	54	70	91	60	75	9.0	7.6	66	56	65	106	117	142	110	*	65	37	52	40	0
THOMASVILLE U 1963	283	63.4	44.0	92.0	72.0	68.2	41	106	8	394	1529	6.81	2.08	51.01	18.83	T	9.00	T	T	2.0	85	60	70	85	60	78	5.3	4.1	---	54	57	122	119	124	116	*	72	13	77	15	0
HAWAII							63	100	18							0.00	51.35																								
HILO	27	78.7	62.8	82.4	67.4	73.1	21	94	53	----	----	15.18	6.79	136.62	50.82	0.36	15.59	0.0	0.0	0.0	84	80	66	88	82	67	7.9	7.3	46	46	41	29	123	213	283	0	8	0	*	0	0
HONOLULU U 1964	12	----	----	----	----	75.1	42	88	57	----	----	3.86	0.62	23.96	18.70	0.06	17.41	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	147	0	--	--	0	0	0
HONOLULU	7	79.1	65.8	84.6	73.0	75.9	5	93	56	----	----	3.76	0.33	21.89	20.79	T	17.07	0.0	0.0	0.0	77	77	62	69	66	52	10.0	13.3	67	65	76	95	168	102	101	0	7	0	24	0	0
KAHULUI	48	80.8	63.4	86.4	70.1	75.2	3	93	54	----	----	3.14	0.18	16.33	10.90	0.00	5.82	0.0	0.0	0.0	78	81	61	86	73	55	12.5	17.3	34	67	74	100	175	90	94	0	5	0	10	0	0
LIHUE	103	78.2	63.5	83.1	72.0	74.5	17	90	51	----	----	5.51	1.46	43.00	18.45	0.30	11.20	0.0	0.0	0.0	84	83	68	80	75	65	10.4	12.7	73	52	62	52	171	142	206	0	10	0	*	0	0
IDAHO							75	118	-60							0.00	7.17																								
BOISE	2838	36.1	22.1	91.4	59.0	51.0	28	111	-17	1113	5809	1.33	0.16	11.43	4.00	0.00	2.24	8.0	21.4	13.0	82	75	72	53	34	22	8.6	8.5	61	42	89	125	90	150	90	8	16	20	42	128	2
IDA FALLS 42NW R1964	4790	26.5	0.2	89.0	49.2	41.7	16	103	-43	1600	8760	1.24	0.33	7.02	5.04	0.00	1.78	---	---	---	--	--	--	--	--	--	4.7	8.0	50	---	---	---	---	---	66	--	--	--	30	219	41
IDA FALLS 46W R 1964	4932	27.5	3.2	87.9	50.1	42.4	17	101	-40	1538	8475	1.10	0.26	7.57	4.42	0.00	1.73	6.4	26.7	8.5	--	--	--	--	--	--	5.6	7.9	51	---	---	---	---	---	68	10	13	14	25	212	33
LEWISTON	1413	37.7	23.7	89.8	57.8	51.6	21	115	-22	1063	5542	1.73	0.43	13.24	4.80	T	1.73	7.3	18.1	12.8	80	75	72	60	36	23	---	---	---	---	---	94	78	193	102	6	16	21	37	97	3
POCATELLO	4454	31.6	13.0	89.6	55.1	47.0	4	100	-19	1324	7033	1.21	0.51	10.85	3.30	0.00	1.30	10.5	37.1	10.1	79	73	71	63	33	23	10.9	9.6	72	37	84	114	94	157	89	13	26	15	35	181	10
SALMON 1960	3949	28.2	4.1	89.6	46.8	44.0	48	---	---	1513	7922	1.28	0.42	8.64	3.88	0.00	1.50	---	---	---	--	--	--	--	--	--	---	---	---	---	---	---	---	---	---	--	--	--	--	---	---
ILLINOIS							78	117	-35							0.00	16.17																								
CAIRO U	314	44.6	30.2	90.3	71.8	59.6	25	104	- 5	856	3821	4.79	2.88	45.23	14.95	T	7.56	2.6	9.0	8.0	80	67	--	84	59	--	9.8	6.5	60	47	76	110	103	152	114	3	53	7	51	65	*
CHICAGO MIDWAY	607	33.0	19.0	84.1	67.1	50.8	4	98	-16	1209	6155	4.07	1.60	33.18	14.17	0.20	6.24	9.3	38.6	19.8	71	64	67	78	56	57	11.4	8.0	60	44	70	94	104	167	120	11	36	14	17	118	6
MOLINE	582	31.6	13.6	88.0	63.2	50.1	8	100	-26	1314	6408	4.37	1.35	32.79	11.00	0.01	6.29	7.2	27.8	11.7	74	65	69	86	58	60	10.5	7.4	77	48	72	102	99	164	110	9	47	20	21	136	18
PEORIA	652	33.7	17.6	87.0	65.0	51.4	8	102	-20	1218	6025	4.27	1.71	34.84	13.09	0.03	5.06	5.3	22.7	9.0	77	68	70	86	59	59	11.2	8.2	75	45	69	102	100	163	109	8	48	20	18	133	12
ROCKFORD	724	30.2	13.7	86.3	62.1	48.6	4	99	-20	1333	6830	4.30	1.44	35.62	11.81	0.01	5.56	8.8	33.4	10.9	77	68	73	86	55	57	9.8	8.0	54	---	---	96	103	166	112	11	41	24	12	146	14
SPRINGFIELD	588	36.3	20.5	89.6	66.4	53.6	8	106	-22	1135	5429	4.45	1.82	34.83	9.91	0.15	5.12	4.3	21.0	10.3	77	67	70	84	57	58	13.2	8.5	75	45	73	111	92	162	112	7	50	17	27	122	9
INDIANA							81	116	-35							0.00	10.50																								
EVANSVILLE	381	42.7	25.6	90.3	67.2	57.0	7	104	-18	955	4435	4.31	2.57	41.45	13.50	0.01	6.05	3.3	11.9	10.6	80	65	69	87	57	59	9.6	6.5	59	42	76	104	100	161	114	4	47	14	42	110	6
FORT WAYNE	791	34.4	19.6	85.1	63.2	50.3	7	101	-18	1178	6205	4.17	2.09	35.31	9.72	0.14	4.60	6.6	30.3	13.6	80	71	75	83	54	56	11.4	8.0	65	40	71	80	108	177	130	9	42	19	15	135	12
INDIANAPOLIS	792	37.1	21.0	86.0	64.3	52.1	9	99	-18	1113	5699	4.62	2.28	39.25	12.69	0.17	3.90	4.4	20.0	12.5	79	68	70	87	59	61	11.4	7.5	90	41	71	92	101	172	121	7	45	20	17	121	9
SOUTH BEND	773	33.0	18.1	84.5	62.6	49.4	4	97	-13	1221	6439	3.62	1.88	35.70	9.75	0.02	3.70	15.3	63.4	15.6	76	69	70	80	54	56	12.1	8.3	63	---	---	73	107	185	139	21	43	23	12	129	6
IOWA							95	118	-47							0.00	12.99																								
BURLINGTON	703	32.7	16.1	87.6	65.6	51.2	70	111	-27	1259	6114	5.01	1.39	34.60	15.10	0.06	6.28	7.2	25.6	13.0	80	69	74	85	57	59	11.3	8.0	73	53	77	103	106	156	104	9	53	18	33	128	11
DES MOINES	938	28.5	11.3	87.3	65.2	49.2	7	100	-23	1398	6808	4.71	1.10	30.37	14.19	0.03	5.50	8.3	31.9	19.8	80	73	74	85	59	58	11.8	9.1	76	51	72	102	98	165	104	10	50	18	17	141	19
DUBUQUE	1056	27.3	11.1	83.7	61.5	46.6	2	97	-24	1420	7376	4.22	1.40	35.71	15.46	T	8.85	8.9	41.7	15.5	76	66	72	86	59	61	---	---	---	---	---	92	100	173	110	14	45	28	8	151	22
SIOUX CITY	1095	27.9	9.5	89.5	65.2	49.1	8	104	-26	1435	6951	4.33	0.74	24.77	9.69	T	4.28	6.1	31.5	11.4	78	69	72	87	60	57	11.0	8.9	91	58	76	108	105	152	98	10	47	18	17	151	25
WATERLOO	868	26.8	8.9	85.7	61.8	47.2	8	99	-34	1460	7320	4.83	0.92	31.48	11.38	T	5.28	6.8	29.6	12.2	80	72	75	88	60	62	10.8	8.0	54	---	---	94	109	162	92	9	41	23	13	158	28

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temp. Normal (1931-1960) January Daily maximum	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precip. Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours	Snow, sleet Mean total January	Seasonal	Ex-treme Maximum in 24 hours	Relative humidity January 7:00 a m EST	1:00 p m EST	7:00 p m EST	July 7:00 a m EST	1:00 p m EST	7:00 p m EST	Wind Speed (m p h) Mean speed January	July	Fastest mile	Sunshine (percent of possible) January	July	Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	32 and below	Min Zero and below
KANSAS							81	121	-40							0.00	12.59																								
CONCORDIA U 1961	1375	37.6	18.6	91.2	68.7	54.5	77	116	-25	1144	5323	4.23	0.59	25.40	13.74	T	6.46	4.5	21.4	17.2	78	63	68	67	47	48	7.7	7.0	65	60	78	142	126	97	86	7	45	10	48	118	6
CONCORDIA	1470	37.3	17.6	92.1	68.4	54.1	6	108	-13	1163	5479	4.20	0.70	25.39	14.14	0.03	5.46	3.0	17.1	13.2	80	64	66	82	52	48	12.1	11.4	67	62	74	137	94	134	87	5	65	17	47	130	7
DODGE CITY	2582	42.4	19.7	92.8	67.5	55.4	4	107	-10	1051	4986	3.03	0.47	19.25	9.13	T	4.17	4.2	17.9	9.3	75	54	55	78	48	42	14.1	13.3	78	69	78	141	106	118	77	6	54	23	61	125	3
GOODLAND	3645	40.9	13.9	91.8	61.3	50.8	45	111	-26	1166	6141	2.67	0.39	16.50	8.09	0.00	2.95	5.6	32.5	15.2	76	53	60	77	43	41	12.3	12.0	66	---	---	143	125	97	76	11	51	29	58	158	8
TOPEKA	876	38.5	19.0	91.6	68.1	54.9	3	105	- 9	1122	5182	4.51	1.02	32.36	15.20	T	5.52	5.4	20.2	9.3	75	62	62	92	60	58	10.9	9.3	81	55	67	115	96	154	94	6	60	14	25	124	3
WICHITA	1321	41.6	22.3	92.4	69.4	57.1	15	113	-12	1023	4620	4.21	0.81	28.41	10.46	T	4.98	4.5	14.8	13.0	80	63	65	80	51	47	12.8	11.3	66	61	73	127	99	139	92	5	56	16	63	111	2
KENTUCKY							79	114	-34							0.00	10.40																								
COVINGTON	869	40.5	22.7	87.4	63.3	53.4	6	102	-19	1035	5265	3.89	2.26	38.02	12.18	0.18	5.21	7.0	24.3	9.3	78	65	68	86	55	58	10.7	7.2	40	---	---	82	99	184	128	7	45	18	24	113	8
LEXINGTON	966	42.9	26.1	88.2	66.5	55.6	4	98	-10	946	4683	4.94	2.28	44.73	16.65	0.24	5.88	5.5	15.6	9.5	77	65	67	85	57	62	12.1	7.7	46	---	---	99	105	161	128	6	47	18	19	98	3
LOUISVILLE	477	43.5	26.5	88.5	66.6	55.7	7	101	-20	930	4660	4.59	2.25	41.32	14.91	0.23	6.97	5.2	17.3	13.0	78	63	63	88	59	60	9.7	6.6	61	41	67	98	103	164	122	5	45	10	26	97	3
LOUISIANA							77	114	-16							0.00	22.00																								
ALEXANDRIA	92	60.7	39.9	91.8	72.6	66.4	8	104	5	471	1921	5.73	3.13	56.69	13.09	0.08	6.18	0.2	0.3	7.3	88	65	72	96	62	70	6.9	4.7	46	---	---	104	111	150	99	*	65	42	73	47	0
BATON ROUGE	64	63.5	42.3	92.0	73.4	68.1	9	102	10	409	1560	6.27	2.45	54.46	14.51	0.09	12.08	T	0.1	1.0	84	65	67	91	63	71	9.6	6.1	58	---	---	98	121	146	104	*	70	38	81	27	0
LAKE CHARLES	9	62.3	45.0	90.5	74.0	68.6	3	98	22	381	1459	7.29	3.06	56.04	17.36	T	14.10	T	T	T	88	67	76	92	60	67	10.7	6.5	58	---	---	94	128	143	87	0	65	53	72	12	0
NEW ORLEANS U 1961	9	63.5	48.3	90.3	75.8	70.4	47	102	17	341	1175	7.09	3.66	63.54	25.11	T	14.01	T	0.1	1.3	+85	+67	+73	+84	+63	+71	7.5	5.6	98	49	61	110	135	120	119	*	74	15	68	4	0
N.O. AUDUBON PK1964	6	64.8	46.2	91.4	73.7	69.5	3	97	17	344	1254	8.12	3.15	62.96	10.15	0.00	4.03	0.0	2.3	4.5	80	68	72	96	72	80	5.4	3.2	26	37	47	99	129	137	115	1	79	18	84	14	0
NEW ORLEANS INTL AP	3	64.4	44.8	90.6	72.6	68.6	21	100	14	363	1385	6.72	2.84	53.90	19.09	0.00	9.86	T	0.2	2.7	87	67	74	91	66	74	9.6	6.4	69	---	---	112	124	129	112	*	70	33	69	11	0
SHREVEPORT	254	56.7	38.3	94.2	73.2	66.1	15	107	3	552	2184	4.94	2.28	46.28	12.39	0.00	7.17	0.4	1.5	4.0	83	63	64	90	55	56	10.7	8.2	44	52	75	123	101	141	94	1	53	21	92	33	0
MAINE							80	105	-48							0.00	7.72																								
CARIBOU	624	19.8	1.1	75.1	53.9	38.4	28	96	-41	1690	9767	4.07	2.02	36.31	8.45	0.12	6.23	22.6	107.6	18.2	74	68	73	83	58	71	12.4	9.8	---	---	---	57	102	206	160	30	20	27	2	191	42
PORTLAND	47	31.8	11.7	79.5	56.7	45.0	27	100	-39	1339	7511	4.37	2.42	42.85	12.27	0.26	7.71	19.3	72.6	21.0	79	64	73	80	59	75	9.4	7.6	76	54	65	110	99	156	126	18	19	53	5	163	15
MARYLAND							72	109	-40							0.00	14.75																								
BALTIMORE U 1964	14	44.1	30.4	87.4	70.7	57.6	94	107	- 7	859	4111	4.60	2.98	44.21	17.69	0.05	7.82	6.1	22.7	24.5	72	58	66	71	52	65	10.3	8.8	66	48	65	121	123	121	122	6	32	15	26	71	*
BALTIMORE INTL AP	148	44.2	25.3	87.2	66.4	55.2	17	102	- 7	936	4654	5.19	2.89	43.05	18.35	T	7.82	6.3	25.9	15.5	73	57	64	81	53	64	10.4	8.7	80	52	67	111	111	143	112	9	27	31	31	103	1
FREDERICK 1961	294	41.4	24.0	87.9	65.4	54.7	12	102	-11	1001	4854	4.03	2.58	40.23	11.26	0.15	5.56	5.2	22.0	16.0	--	64	--	--	57	--	---	---	---	---	---	---	---	---	123	8	--	9	28	119	1
MASSACHUSETTS							80	106	-34							0.00	11.14																								
BLUE HILL OBS	629	34.4	19.5	80.2	61.6	48.7	82	101	-21	1178	6368	4.54	3.27	47.50	18.78	0.06	9.93	15.8	60.8	27.2	77	63	69	81	57	75	17.4	13.0	92	45	57	---	---	---	135	16	--	--	5	132	4
BOSTON	15	36.8	23.0	81.9	65.4	51.4	3	97	- 4	1088	5634	4.22	2.88	42.77	17.09	0.35	8.40	12.7	42.0	19.4	70	61	66	72	55	65	14.8	11.2	65	52	65	100	105	160	129	11	20	23	7	101	1
NANTUCKET	43	39.2	26.8	74.3	61.7	49.5	2	88	5	992	5891	4.54	2.71	43.66	12.92	0.01	6.53	9.3	36.0	20.1	82	69	78	88	77	92	14.7	11.1	73	42	61	87	91	187	125	9	20	98	0	120	0
PITTSFIELD	1170	30.5	13.1	79.2	56.4	44.9	29	95	-25	1339	7578	4.89	2.51	44.42	10.32	0.42	4.25	19.0	78.0	17.0	--	--	--	--	--	--	---	---	---	---	---	57	127	181	152	24	28	45	3	163	14
WORCESTER	986	31.2	16.8	79.0	60.5	46.8	12	94	-19	1271	6969	4.26	2.92	45.41	8.56	0.83	4.79	17.7	80.4	24.0	74	60	67	74	56	67	13.2	9.0	76	---	---	96	105	164	129	19	20	84	2	148	7
MICHIGAN							81	112	-51							0.00	9.91																								
ALPENA U 1959	587	28.1	14.2	76.8	57.9	43.5	45	104	-28	1358	8073	3.20	1.45	26.63	7.43	0.16	4.40	16.0	64.4	16.7	80	70	76	77	61	68	11.7	9.2	61	29	70	82	119	164	144	19	29	20	3	155	10
ALPENA	689	28.9	10.4	80.4	51.4	42.1	9	98	-28	1404	8506	3.61	1.61	29.92	8.14	0.16	2.54	20.7	77.9	16.1	77	67	72	82	50	59	7.7	6.2	43	41	71	71	107	187	146	22	33	21	6	189	29
DETROIT CITY AP	619	33.0	20.7	83.9	64.8	50.1	34	105	-16	1181	6232	3.53	2.05	30.95	8.05	0.23	3.72	7.9	31.8	10.0	80	70	74	75	51	55	11.9	8.2	77	32	70	80	108	177	133	11	33	11	15	125	2
DETROIT METRO. AP	633	33.3	19.0	83.9	60.9	48.9	9	98	-13	1203	6516	3.54	1.92	30.80	7.70	0.27	3.71	7.5	36.1	10.3	78	69	72	83	51	57	11.3	8.3	52	41	64	77	107	181	130	12	34	25	12	142	7
DETROIT WILLOW RUN	711	33.4	19.8	86.0	62.4	50.0	7	99	-13	1190	6258	3.48	1.94	30.67	8.71	0.25	4.78	7.2	32.7	8.7	78	70	72	82	49	52	12.0	8.7	60	---	---	78	107	180	125	12	33	28	15	143	7
ESCANABA U 1961	594	25.0	10.0	75.3	58.4	41.9	52	100	-31	1473	8657	3.22	1.37	28.08	9.93	0.07	5.05	13.5	55.7	14.5	78	70	74	80	65	69	10.2	9.0	68	41	66	102	108	155	129	18	33	19	*	163	20
FLINT	770	31.9	17.1	83.5	58.9	47.5	4	97	-22	1256	6885	3.39	1.70	30.14	8.68	0.07	6.04	10.6	41.3	19.8	74	68	70	82	53	55	11.9	8.1	81	---	---	68	108	189	130	13	33	19	7	144	9
GRAND RAPIDS	784	31.3	16.7	84.5	60.0	47.6	4	100	-16	1271	6998	3.46	1.75	31.19	8.21	0.60	2.66	24.6	84.4	12.6	82	73	78	82	52	54	11.9	8.2	58	37	64	70	100	195	143	27	37	27	12	149	7
HOUGHTON LAKE	1149	27.6	10.7	80.1	53.9	42.9	3	96	-24	1420	8342	3.12	1.29	28.34	5.76	0.40	1.81	22.9	79.2	9.2	83	73	79	82	51	54	10.4	7.1	37	---	---	72	98	195	149	26	37	31	4	180	24
LANSING	841	31.1	17.4	83.4	59.9	47.6	4	100	-24	1262	6909	3.73	1.95	31.18	7.63	0.35	4.35	11.0	47.1	20.4	85	77	81	80	51	54	12.6	8.7	63	34	71	81	106	178	137	14	33	23	15	155	13
MARQUETTE U	677	25.7	13.2	75.7	57.6	42.6	31	102	-21	1411	8393	3.46	1.65	31.61	10.20	0.21	4.65	19.4	103.7	16.1	75	68	72	76	63	66	8.9	7.1	59	33	67	63	100	202	157	31	28	17	5	161	11
MUSKEGON	627	32.3	19.7	81.9	60.6	48.2	8	99	-12	1209	6696	3.06	1.80	30.07	8.54	0.19	3.61	27.7	89.8	20.1	82	77	79	81	57	57	12.4	8.1	44	---	---	81	90	194	141	30	37	23	4	140	5
SAULT STE MARIE	721	23.1	8.4	75.6	53.5	40.6	27	98	-27	1525	9048	3.81	1.50	31.22	7.12	0.16	3.58	23.3	103.6	14.3	83	77	81	88	61	67	10.3	8.5	52	34	63	68	91	206	163	34	30	48	2	179	28
MINNESOTA							81	114	-59							0.00	10.75																								
DULUTH U 1959	1162	18.7	1.9	75.8	55.8	39.2	84	106	-41	1696	9574	3.72	1.00	26.67	11.52	0.07	5.35	11.1	56.0	23.0	78	74	74	87	61	66	12.3	10.5	75	46	67	110	119	136	126	16	31	37	2	173	41
DULUTH	1428	17.9	- 0.6	77.1	53.9	37.9	7	95	-38	1745	10000	4.27	0.96	28.97	8.48	0.13	4.05	15.4	74.9	25.4	73	65	65	84	58	59	12.4	10.1	75	51	67	78	103	184	133	21	34	53	1	189	54
INTERNATIONAL FALLS	1179	14.2	- 8.1	78.4	57.8	36.2	28	98	-44	1919	10606	3.87	0.71	24.69	11.26	0.10	4.87	9.6	58.1	17.0	73	68	70	88	57	58	9.4	7.7	52	---	---	80	105	180	133	18	30	14	4	199	68
MINNEAPOLIS	834	22.4	2.3	83.9	60.7	43.7	8	99	-32	1631	8382	4.00	0.70	24.78	8.03	T	4.12	7.5	43.3	16.2	75	68	69	85	56	55	10.5	9.3	92	51	69	102	102	161	111	13	36	11	13	162	36
ROCHESTER	1297	23.0	4.2	84.0	60.5	44.0	8	97	-31	1593	8295	4.46	0.80	28.46	8.34	0.04	3.28	8.0	43.1	11.3	77	73	75	86	60	61	13.6	9.7	52	---	---	95	98	172	112	12	44	37	6	165	35
ST CLOUD	1034	20.4	- 0.2	83.1	58.9	42.0	28	103	-40	1702	8879	4.49	0.72	25.92	9.34	0.01	4.62	7.3	42.3	14.5	76	69	71	87	55	56	8.2	7.0	---	---	---	96	104	165	107	13	36	20	11	178	44
MISSISSIPPI							79	115	-19							0.00	12.35																								
JACKSON	310	58.3	37.4	92.9	71.7	65.5	4	101	7	547	2203	5.74	2.04	50.82	11.88	0.00	6.97	0.4	0.4	1.8	84	62	70	93	60	66	9.7	6.6	45	47	64	106	107	152	106	*	55	28	72	49	0
MERIDIAN	290	59.4	36.8	92.6	70.3	64.8	3	102	6	543	2289	6.32	2.22	53.13	16.82	0.00	6.95	0.5	1.6	15.0	87	61	69	92	58	65	7.4	5.3	40	---	---	120	110	135	103	*	57	22	59	59	0
VICKSBURG U 1966	234	57.4	40.5	90.4	73.2	65.9	29	101	2	512	2041	5.73	2.04	49.50	16.58	T	9.97	0.9	1.6	10.0	83	62	70	93	62	71	9.3	6.7	56	45	67	111	114	140	105	1	62	12	65	23	0
MISSOURI							80	118	-40							0.00	18.18																								
COLUMBIA	778	39.3	21.3	89.7	67.6	55.0	29	113	-18	1076	5046	4.70	1.71	36.96	13.30	0.09	4.05	4.4	19.6	10.3	79	65	68	85	55	56	11.2	8.0	63	53	74	116	98	151	106	6	55	15	40	109	4
KANSAS CITY	742	39.9	23.4	91.9	71.0	56.8	8	104	- 9	1032	4711	4.57	1.24	34.07	11.94	0.04	5.96	5.8	20.3	12.8	72	58	58	79	59	54	9.9	8.8	72	53	76	118	106	141	99	6	50	12	39	98	4
ST. JOSEPH	811	37.2	17.1	91.0	67.8	53.8	4	101	-13	1172	5484	5.93	1.09	34.18	13.73	T	7.12	5.7	20.1	11.3	75	63	66	87	64	61	11.1	8.0	60	46	62	126	97	142	95	6	57	19	35	125	4
ST. LOUIS U 1958	465	41.0	25.6	89.6	71.6	57.3	23	112	-12	983	4469	4.10	1.88	37.86	20.45	0.03	8.78	3.8	14.6	12.4	b77	b65	b68	b73	b50	b55	12.6	9.5	82	45	72	128	106	131	110	6	51	8	46	83	2
ST LOUIS	535	40.2	23.5	89.2	66.9	55.3	7	106	-11	1026	4900	4.29	1.97	35.31	7.97	0.25	3.29	4.3	17.1	11.2	78	59	64	85	58	55	10.2	7.6	60	54	71	106	104	155	103	7	42	9	32	106	4
SPRINGFIELD	1268	43.4	23.8	90.3	67.2	56.5	8	102	-10	973	4561	5.28	1.96	41.08	18.75	0.08	6.85	2.8	12.6	12.5	77	56	61	87	60	60	12.6	9.4	66	51	70	115	100	150	106	5	59	19	35	105	3

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours	Snow, sleet Mean total January	Seasonal	Extreme Maximum in 24 hours	Relative humidity (percent) January 7:00 a m EST	January 1:00 p m EST	January 7:00 p m EST	July 7:00 a m EST	July 1:00 p m EST	July 7:00 p m EST	Wind Speed (m p h) Mean speed January	Mean speed July	Fastest mile	Sunshine (percent of possible) January	July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Min 32 and below	Min Zero and below
MONTANA							101	117	-70							0.00	10.10																								
BILLINGS	3567	33.2	13.1	88.5	60.8	47.5	9	105	-26	1296	7049	2.55	0.54	13.23	7.64	T	2.83	8.1	54.7	23.7	65	61	57	63	39	30	12.9	9.8	73	51	79	91	119	155	93	19	30	18	30	148	17
BUTTE 1961	5530	28.0	0.4	79.8	45.0	38.3	29	100	-52	1575	9760	2.28	0.55	12.69	5.40	T	2.02	7.1	51.0	13.0	--	--	--	--	--	--	6.9	8.0	---	---	---	79	107	179	105	19	41	6	4	228	43
GLASGOW	2284	19.6	-0.1	85.3	56.1	41.4	3	102	-34	1711	8996	2.98	0.41	12.27	5.36	T	3.98	5.7	25.8	5.2	72	70	69	74	45	34	---	---	---	---	---	89	104	172	85	9	28	11	19	182	53
GREAT FALLS	3662	31.6	12.5	84.7	54.1	44.7	7	106	-36	1349	7750	2.90	0.60	14.07	8.13	T	3.20	9.0	55.8	11.0	68	64	64	65	37	29	16.2	10.4	82	52	80	86	104	175	99	19	28	13	19	148	28
HAVRE U 1961	2852	26.3	6.1	85.9	56.6	43.6	57	107	-57	1513	8213	2.98	0.39	12.31	7.09	T	2.94	7.3	37.4	22.9	82	71	--	74	38	--	8.8	7.2	70	49	78	121	124	120	90	13	25	5	22	172	39
HAVRE	2582	24.2	3.6	85.3	54.6	42.1	7	111	-35	1584	8700	2.73	0.43	11.89	4.72	T	1.96	5.9	33.5	16.2	74	69	77	72	38	20	10.8	8.3	71	52	83	92	102	171	84	12	24	5	25	182	43
HELENA	3828	28.8	8.4	84.4	52.3	43.4	4	100	-38	1438	8129	2.23	0.43	10.85	4.74	0.02	2.06	7.8	48.8	21.5	71	65	66	67	38	28	6.9	7.9	73	50	80	84	107	174	97	14	37	8	21	185	15
KALISPELL	2965	27.6	12.0	83.7	47.6	42.8	8	105	-29	1401	8191	2.21	0.96	15.42	4.72	T	2.35	18.7	66.5	15.4	86	84	82	83	42	34	7.1	6.8	40	---	---	75	82	208	132	22	24	31	16	195	15
MILES CITY	2629	27.4	5.6	90.2	60.4	45.8	30	110	-37	1504	7723	2.71	0.37	12.17	9.78	T	2.71	6.2	31.0	10.5	75	70	69	69	38	29	9.1	9.3	---	---	---	101	108	156	90	14	30	10	39	172	33
MISSOULA	3190	28.0	10.3	85.0	49.0	43.2	8	105	-30	1420	8125	1.91	0.72	12.83	4.19	T	1.82	12.6	48.4	11.2	85	82	78	78	44	30	5.1	6.7	72	29	80	75	83	207	123	16	26	28	22	193	10
NEBRASKA							92	118	-47							0.00	13.15																								
GRAND ISLAND	1841	34.1	11.0	90.7	63.7	50.1	7	106	-28	1314	6530	3.85	0.56	21.85	13.96	0.00	5.41	5.8	27.5	9.1	78	63	66	86	54	50	11.5	10.8	57	---	---	125	102	138	87	9	51	17	38	152	17
LINCOLN U	1150	34.0	16.2	92.3	67.9	52.8	3	105	-18	1237	5864	4.50	0.90	27.43	12.93	0.05	5.38	6.0	27.6	19.0	--	--	--	--	--	--	9.8	9.4	64	61	75	114	108	143	97	8	49	8	23	131	8
NORFOLK	1544	30.1	8.6	89.2	64.7	48.9	22	113	-26	1414	6979	4.26	0.73	23.95	12.22	T	3.46	5.5	28.1	9.7	76	63	58	84	54	50	---	---	---	---	---	118	101	146	87	9	50	11	33	158	21
NORTH PLATTE	2775	37.3	10.7	90.0	62.2	49.2	3	100	-25	1271	6684	3.25	0.40	18.27	8.01	T	3.80	5.4	32.1	9.7	80	65	64	88	59	55	9.6	10.0	72	61	74	120	109	136	84	11	51	18	21	177	20
OMAHA	977	31.7	12.9	89.7	67.3	51.5	4	107	-17	1324	6218	4.53	0.80	27.56	13.75	T	6.47	8.1	32.0	18.3	77	65	66	82	59	59	11.2	9.2	73	55	76	115	107	143	98	9	49	15	28	136	10
SCOTTSBLUFF	3957	38.7	11.9	89.2	60.1	48.7	3	101	-25	1231	6673	3.10	0.29	14.38	8.33	T	3.74	5.9	36.1	12.1	77	56	56	85	48	43	10.6	9.7	80	---	---	122	109	134	84	12	45	10	33	170	15
VALENTINE	2587	33.3	6.7	90.6	60.2	46.9	13	109	-29	1395	7425	3.11	0.34	17.30	8.96	T	3.19	3.4	21.9	8.2	81	68	66	84	50	42	10.1	10.1	72	68	77	120	107	138	77	8	45	5	39	178	26
NEVADA							79	122	-50							0.00	7.13																								
ELKO	5050	35.1	10.0	90.8	48.3	45.4	3	102	-14	1314	7433	1.16	0.30	9.05	3.35	0.00	1.62	10.6	38.6	16.7	83	74	66	57	27	21	5.5	6.3	58	---	---	134	98	133	77	15	21	6	49	200	16
ELY	6253	36.8	8.7	86.8	48.1	44.3	29	99	-27	1308	7733	0.95	0.49	8.33	3.53	0.00	1.50	9.1	45.9	13.1	71	59	55	49	22	20	10.7	10.6	74	64	81	135	106	124	70	14	31	2	15	217	20
LAS VEGAS	2162	54.2	32.0	103.5	75.8	65.7	8	114	8	688	2709	0.53	0.04	3.90	2.59	0.00	2.59	1.0	1.4	5.0	51	36	26	27	18	13	6.9	10.0	54	78	86	216	82	67	23	1	15	1	134	43	0
RENO	4404	44.6	16.2	89.4	45.9	48.4	4	101	-4	1073	6332	1.19	0.17	7.15	5.25	0.00	2.37	6.3	24.6	16.9	78	69	52	70	31	20	6.1	6.6	70	66	92	167	92	106	48	8	13	8	46	189	1
WINNEMUCCA	4299	39.7	14.7	92.0	49.9	47.4	18	105	-24	1172	6761	1.05	0.15	8.63	2.86	0.00	1.79	6.3	24.4	9.9	78	67	58	44	21	14	7.6	8.3	66	44	85	140	86	139	66	9	15	4	51	194	8
NEW HAMPSHIRE							91	106#	-46							0.00	8.00																								
CONCORD	342	31.7	10.6	82.8	56.4	45.6	2	102	-23	1358	7383	3.75	2.48	38.80	10.10	0.41	4.47	18.0	62.1	19.0	75	61	69	85	52	63	7.3	5.5	72	49	62	99	106	160	124	18	22	53	13	175	24
MT WASHINGTON OBS	6262	14.7	-2.2	54.9	43.3	27.0	35	71	-47	1820	13817	7.00	5.21	74.09	18.23	0.75	7.03	30.6	203.3	32.0	83	83	83	91	87	90	46.4	24.9	231	33	31	52	79	234	205	60	16	308	0	243	64
NEW JERSEY							83	110	-34							0.00	15.37																								
ATLANTIC CITY U 1958	8	42.4	29.1	79.3	67.9	54.1	85	104	-9	905	4741	4.72	2.98	41.77	14.87	0.01	9.21	4.2	14.6	18.0	79	68	74	81	72	82	16.2	13.3	91	51	67	118	122	125	122	5	23	21	3	75	*
ATLANTIC CITY/NAFEXP	64	42.9	26.6	83.8	66.3	54.1	3	104	-8	936	4812	4.90	2.83	42.36	13.09	0.10	6.46	5.3	17.7	14.4	75	58	69	85	55	73	12.4	9.3	60	56	61	102	108	155	113	5	25	45	17	122	3
NEWARK	7	39.5	25.0	86.1	66.5	53.7	2	105	4	1014	5067	4.43	2.80	42.38	11.84	0.21	4.71	7.3	30.5	26.0	72	58	62	71	50	58	11.3	8.8	82	---	---	99	113	153	122	8	25	22	20	88	0
TRENTON U	56	40.0	26.2	85.2	66.7	53.9	35	106	-14	989	4980	4.77	2.59	41.28	14.10	0.05	4.85	5.6	24.0	16.6	--	--	--	--	--	--	9.8	7.8	64	51	66	101	116	148	121	7	33	--	18	90	*
NEW MEXICO							76	116	-50							0.00	11.28																								
ALBUQUERQUE	5311	46.4	23.5	91.2	65.8	56.6	8	103	-7	930	4348	1.33	0.38	8.13	3.30	0.00	1.92	2.0	9.8	14.2	65	47	36	60	35	27	7.8	9.0	90	72	76	175	111	79	58	4	44	4	61	117	1
CLAYTON	4969	46.2	20.2	88.4	60.6	53.1	23	102	-21	986	5158	2.74	0.33	14.51	7.77	0.00	4.67	3.4	18.2	12.7	63	42	48	77	41	41	---	---	---	---	---	165	99	101	67	6	54	11	38	142	3
RATON	6379	45.3	12.6	86.6	52.9	48.9	23	98	-31	1116	6228	2.63	0.26	14.75	11.93	0.00	5.60	4.8	24.2	10.1	--	45	--	--	38	--	---	---	---	---	---	134	132	99	78	9	75	8	16	182	9
ROSWELL	3617	55.1	20.6	95.4	61.7	58.5	8	107	-24	840	3793	1.82	0.34	11.62	5.64	0.00	3.37	3.1	10.2	15.3	67	44	34	72	38	33	8.4	9.5	75	86	78	181	99	85	49	4	41	9	105	126	3
SILVER CITY	5373	52.6	26.4	90.3	63.9	58.2	7	102	-9	791	3705	2.40	0.28	10.76	4.47	0.00	2.08	2.6	8.4	7.0	--	43	39	--	36	36	---	---	---	---	---	187	110	68	60	3	54	1	43	105	*
NEW YORK							78	108	-52							0.00	11.17																								
ALBANY	275	31.0	14.4	83.7	60.5	47.6	2	98	-16	1311	6875	3.58	2.20	35.08	8.96	0.20	4.08	16.5	63.3	18.3	78	65	75	79	55	62	9.8	7.3	71	45	64	75	109	181	132	15	28	23	7	163	14
BINGHAMTON	1590	30.1	17.4	78.3	58.5	45.8	16	96	-20	1277	7286	3.85	2.18	36.24	9.46	0.26	3.88	21.6	89.6	23.0	82	74	76	84	56	65	12.0	8.5	72	35	67	51	103	211	162	25	31	50	3	150	8
BINGHAMTON U	858	34.2	18.9	83.1	60.4	48.8	77	103	-28	1190	6451	3.81	2.38	36.68	9.59	0.16	4.55	12.8	52.2	21.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	151	15	--	--	9	133	7
BUFFALO	705	30.8	18.2	80.1	59.4	46.7	7	94	-20	1256	7062	3.60	2.54	35.65	9.13	0.11	3.88	25.8	96.2	19.9	76	72	76	79	56	62	14.7	10.7	91	33	69	61	107	197	168	28	30	20	3	139	5
NEW YORK U 1960	10	39.9	25.8	82.3	66.9	53.4	90	102	-14	995	5050	4.34	3.04	42.03	14.51	0.11	9.40	7.3	30.1	25.8	72	a62	66	76	a58	67	16.4	14.5	113	51	65	104	131	130	124	8	30	20	7	91	*
NEW YORK CENTRAL PK	132	39.5	26.9	85.3	68.2	54.5	99	106	-15	986	4871	4.44	2.84	42.37	16.85	0.02	11.17	7.7	29.9	26.4	68	60	61	76	56	63	11.0	7.8	70	50	66	107	125	133	121	8	18	--	16	81	1
NEW YORK J F KENNEDY	13	38.0	25.6	84.7	67.1	53.2	7	104	-2	1029	5219	4.97	2.93	43.93	17.41	T	6.59	8.2	30.3	18.0	71	59	66	74	56	71	13.3	10.6	52	---	---	98	119	148	120	9	24	32	9	92	*
NEW YORK LA GUARDIA	11	39.6	27.5	84.8	68.8	54.7	6	107	-2	973	4811	5.08	3.09	44.22	16.05	0.03	7.11	6.9	30.2	22.8	66	59	60	70	49	59	14.4	10.4	70	---	---	94	118	153	120	8	23	14	15	73	*
ROCHESTER	547	32.6	17.8	82.5	60.7	48.0	4	98	-8	1234	6748	3.01	2.38	31.50	9.70	0.22	3.13	20.7	81.9	18.7	72	66	70	77	48	56	11.7	7.9	73	36	70	66	111	188	153	25	30	13	10	137	5
SYRACUSE	410	31.5	16.5	82.4	62.0	48.0	4	97	-26	1271	6756	3.60	2.84	37.60	8.41	0.21	4.27	27.6	107.5	24.5	78	67	76	78	53	61	11.0	8.6	63	35	67	70	101	194	168	32	29	9	9	142	10
NORTH CAROLINA							81	109	-26							0.00	22.22																								
ASHEVILLE U 1964	2203	49.0	30.4	85.0	63.7	56.5	34	99	-7	784	4042	4.31	2.22	37.88	13.75	T	6.78	2.5	12.2	15.8	81	59	66	89	57	70	9.4	5.6	52	48	60	105	124	136	128	3	50	47	13	84	*
ASHEVILLE	2140	47.5	27.7	83.5	61.3	54.7	3	90	-7	849	4466	5.85	2.77	48.15	11.28	0.16	4.12	8.2	16.1	7.6	87	59	70	97	66	76	9.7	6.0	44	60	59	101	101	163	127	5	51	77	*	118	1
CAPE HATTERAS R	7	53.2	39.9	83.8	72.2	62.2	10	94	14	580	2612	6.42	2.99	54.47	14.63	0.45	8.11	0.4	1.8	7.0	80	67	77	85	70	83	12.4	10.5	72	56	68	102	103	160	121	1	45	17	2	31	0
CHARLOTTE	736	51.4	34.0	88.8	69.5	60.8	7	100	2	691	3191	4.88	2.53	43.38	10.89	T	4.84	2.3	4.9	10.2	79	55	61	89	58	67	8.1	6.6	59	57	68	114	104	147	110	2	43	24	36	72	0
GREENSBORO	897	49.6	29.8	87.7	66.9	58.2	4	100	3	784	3805	4.79	2.68	42.16	13.26	0.13	7.49	3.4	8.5	14.3	82	56	65	91	63	72	8.3	6.7	63	52	63	112	108	145	118	2	47	31	27	83	0
RALEIGH	434	51.9	31.3	88.1	67.6	59.5	3	97	3	725	3393	5.49	2.71	43.58	12.94	0.25	5.20	3.2	7.4	9.1	77	53	62	89	58	70	8.5	6.6	73	57	63	116	108	141	114	2	46	34	28	79	0
WILMINGTON	28	58.4	37.3	89.0	70.9	63.8	4	97	17	546	2347	7.68	2.85	51.29	15.51	0.17	8.24	0.3	1.4	5.3	79	54	70	82	64	75	9.9	8.9	88	58	64	117	114	134	116	1	45	22	39	40	0
WINSTON-SALEM 1964	963	49.8	31.5	88.2	67.8	59.1	10	100	1	753	3595	4.63	2.78	44.13	10.86	0.12	3.60	3.2	9.2	10.9	72	52	59	84	57	67	9.3	7.4	---	---	---	121	102	142	115	3	42	32	34	76	0
NORTH DAKOTA							76	121	-60							0.00	7.70																								
BISMARCK	1647	19.6	0.1	85.7	57.7	42.2	8	108	-43	1708	8851	3.40	0.36	15.15	8.29	T	3.25	6.8	37.7	15.5	70	64	66	81	48	43	10.1	9.8	72	55	76	94	109	162	96	12	35	12	23	188	52
DEVILS LAKE U 1961	1471	14.2	-4.7	81.7	56.9	38.7	58	112	-46	1866	9940	3.18	0.40	17.61	8.55	T	4.82	6.2	35.4	13.4	76	72	76	86	53	52	9.7	8.4	57	53	71	112	109	144	101	11	30	9	10	189	60
FARGO	896	17.3	-2.8	83.8	59.0	41.1	8	100	-35	1789	9226	3.04	0.51	18.45	8.52	0.02	4.72	6.0	32.3	11.2	71	68	70	85	54	53	13.2	10.9	88	51	70	89	110	166	102	10	34	13	15	183	56
WILLISTON U 1961	1877	19.8	0.2	83.5	58.2	41.3	46	110	-50	1705	9068	3.59	0.46	14.66	7.88	T	3.06	5.5	32.9	10.6	74	67	69	77	45	41	6.8	6.9	60	52	78	122	116	127	89	12	27	7	18	178	43
WILLISTON	1899	19.4	-2.9	85.9	56.7	40.9	6	107	-41	1758	9243	3.31	0.48	13.70	7.38	T	5.03	6.9	35.5	5.7	75	69	70	83	47	40	10.3	9.3	70	49	74	93	111	161	89	12	19	9	21	190	56

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temp. Normal (1931-1960) January Daily maximum	Temp. Normal January Daily minimum	Temp. Normal July Daily maximum	Temp. Normal July Daily minimum	Temp. Normal Annual	Temp. Extremes Length, yrs	Temp. Extremes Record highest	Temp. Extremes Record lowest	Normal degree days (1931-1960) January	Normal degree days Seasonal	Precip. Normal (1931-1960) Wettest month	Precip. Normal Driest month	Precip. Normal Annual	Precip. Extremes Wettest month	Precip. Extremes Driest month	Precip. Extremes Maximum in 24 hours	Snow, sleet Mean total January	Snow, sleet Mean total Seasonal	Snow, sleet Extreme Maximum in 24 hours	Rel. humidity January 7:00 a m EST	Rel. humidity January 1 00 p m EST	Rel. humidity January 7.00p m EST	Rel. humidity July 7.00 a m EST	Rel. humidity July 1 00 p m EST	Rel. humidity July 7 00 p m EST	Wind Speed (m p h) Mean speed January	Wind Speed Mean speed July	Wind Speed Fastest mile	Sunshine (percent of possible) January	Sunshine July	Sunrise to sunset Clear	Sunrise to sunset Partly cloudy	Sunrise to sunset Cloudy	Precipitation 01 inch or more	Snow, sleet, hail 1 0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Temperature Min 32 and below	Temperature Min Zero and below
OHIO							94	113	-39							0.00	8.70																								
AKRON	1208	35.6	20.9	83.2	61.9	50.3	4	94	- 9	1138	6037	4.26	2.25	36.43	11.43	0.20	4.18	9.8	48.0	10.9	79	70	73	83	50	58	11.8	7.6	51	---	---	70	106	189	149	15	40	27	11	132	4
CINCINNATI 1961	869	39.7	23.8	85.9	64.3	53.6	17	---	---	1021	5195	4.04	2.17	39.16	----	----	----	---	---	---	82	70	74	84	52	60	---	---	---	---	---	108	115	142	---	--	--	--	--	---	---
CINCINNATI ABBE OBS.	761	41.3	26.1	87.5	66.3	55.2	52	109	-17	970	4806	4.18	2.24	39.51	13.68	0.10	4.77	5.3	19.0	11.0	--	--	--	--	--	--	8.3	5.2	49	42	71	---	---	---	132	7	50	--	29	98	2
CLEVELAND	777	35.4	21.3	82.4	61.3	49.7	7	98	-19	1135	6196	3.52	2.33	35.35	9.50	0.36	3.73	10.1	50.5	15.0	78	71	73	83	55	61	12.5	8.9	74	30	68	73	102	190	153	18	36	14	9	128	5
COLUMBUS	812	37.8	22.0	86.6	62.9	52.0	8	98	-15	1088	5660	4.16	2.11	36.67	9.75	0.11	4.81	6.8	28.4	8.7	76	66	69	84	54	58	10.1	6.5	63	39	68	78	107	180	135	9	42	18	17	124	6
DAYTON	1002	36.9	22.2	85.3	65.1	52.3	4	100	-12	1097	5622	4.10	2.23	36.04	10.89	0.10	4.30	6.5	27.2	10.0	74	64	67	79	52	55	12.1	9.1	78	41	70	82	104	179	128	8	41	22	24	117	4
MANSFIELD	1295	34.8	19.8	82.6	60.8	49.1	2	96	- 8	1169	6403	4.23	2.27	38.16	7.04	0.43	2.79	8.1	41.5	8.0	75	67	70	81	54	61	13.7	5.7	---	---	---	76	101	188	135	14	38	27	4	131	5
SANDUSKY U 1961	603	35.7	21.8	83.7	65.5	51.3	34	105	-12	1122	5859	3.73	1.92	33.16	12.51	0.19	5.95	6.2	26.9	12.3	--	--	--	--	--	--	10.1	6.9	75	35	75	93	115	157	137	10	37	8	19	111	2
TOLEDO	669	34.1	18.4	85.1	60.2	49.0	12	98	-17	1200	6494	3.79	1.88	30.50	8.47	0.27	3.53	8.1	36.2	9.8	80	70	74	86	53	59	10.8	7.5	72	46	70	75	112	178	131	11	40	18	15	144	8
YOUNGSTOWN	1178	34.4	20.2	81.7	59.3	48.8	24	100	-18	1169	6417	4.32	2.50	39.27	9.87	0.27	4.31	12.7	57.8	20.7	82	73	77	83	53	63	11.8	7.9	58	---	---	72	100	193	160	19	36	29	9	136	5
OKLAHOMA							76	120	-27							0.00	19.75																								
OKLAHOMA CITY	1285	45.9	28.1	92.8	72.2	60.3	2	108	2	868	3725	5.19	1.31	30.82	10.78	T	4.82	3.3	8.7	8.4	79	57	58	80	52	49	14.2	11.7	87	61	75	142	98	125	82	3	51	18	66	77	0
TULSA	650	45.9	26.5	92.9	71.4	59.7	8	110	- 3	893	3860	5.26	1.62	37.08	18.00	T	7.54	3.5	9.2	9.0	78	56	55	83	55	51	11.3	9.3	75	54	70	125	104	136	90	4	54	9	72	89	1
OREGON							78	119	-54							0.00	31.10																								
ASTORIA	8	46.5	34.8	68.6	52.5	50.8	14	100	14	753	5186	13.65	1.27	80.44	21.89	0.01	4.32	1.8	5.6	7.2	88	85	79	91	75	69	9.0	8.4	52	---	---	53	68	244	199	2	9	43	1	37	0
BURNS U	4151	35.2	14.3	86.8	52.1	46.7	17	103	-26	1246	6957	1.62	0.29	10.96	5.47	0.00	2.15	16.0	49.8	11.0	83	76	68	53	34	21	6.4	7.6	---	---	---	127	87	151	92	17	14	12	21	185	5
EUGENE	359	45.3	32.8	82.2	51.0	52.5	25	105	- 4	803	4726	6.61	0.27	39.56	20.99	0.00	4.82	3.9	6.5	7.2	93	87	80	88	55	37	8.2	8.1	63	---	---	78	87	200	137	3	5	58	14	55	*
MEACHAM	4050	32.7	19.3	77.6	49.2	43.5	23	105	-23	1209	7874	4.53	0.50	33.87	9.29	0.00	3.00	33.3	149.9	22.9	--	80	81	--	40	25	---	---	39	---	---	91	69	205	152	45	16	31	3	169	4
MEDFORD	1298	42.4	28.4	88.3	55.7	52.6	7	109	0	918	5008	3.38	0.18	19.78	12.72	0.00	3.75	3.9	8.3	7.9	91	89	75	76	46	27	4.1	5.7	55	---	---	118	82	165	101	3	9	48	50	97	*
PENDLETON	1482	39.3	25.1	89.3	57.8	52.8	32	113	-22	1017	5127	1.49	0.22	12.38	3.23	0.00	1.49	7.9	16.9	13.3	82	77	76	54	34	23	8.2	9.7	77	---	---	106	90	169	100	6	11	29	33	84	3
PORTLAND U 1964	30	44.9	35.5	79.2	57.9	54.6	62	107	3	769	4109	7.42	0.39	42.37	17.45	0.00	5.01	5.1	9.1	16.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	152	3	--	--	8	21	0
PORTLAND	21	43.7	33.0	78.6	55.7	52.9	27	107	- 3	825	4635	6.38	0.41	37.18	12.83	0.00	2.60	4.5	7.5	10.6	86	82	77	84	62	46	10.0	7.5	88	23	68	66	74	225	152	2	7	33	9	45	*
ROSEBURG 1964	505	47.2	33.4	84.0	51.8	53.4	11	106	- 1	766	4491	5.69	0.21	33.11	15.74	T	4.80	3.2	6.5	9.4	--	86	73	--	54	34	3.9	5.9	50	26	79	75	89	201	135	2	5	59	21	56	*
SALEM	196	45.5	31.5	81.7	50.4	52.4	6	104	9	822	4754	7.37	0.35	41.75	15.40	0.00	3.16	3.4	6.2	10.8	88	85	78	89	59	41	8.9	6.7	68	---	---	75	87	203	150	2	6	40	16	62	0
SEXTON SUMMIT R	3836	39.3	28.9	75.5	51.6	48.0	23	100	- 2	958	6254	5.59	0.25	33.12	20.03	0.00	5.20	24.4	99.5	33.5	83	80	75	69	61	42	12.8	11.8	58	---	---	126	67	172	129	29	6	160	2	112	*
PACIFIC AREA																																									
CANTON ISLAND 1966	8	88.4	77.8	89.4	77.7	83.5	20	98	70	----	----	4.35	1.10	29.43	20.49	T	5.56	0.0	0.0	0.0	80	79	65	80	80	65	15.1	13.1	---	---	---	75	146	144	103	0	4	0	155	0	0
ENIWETOK 1966	13	84.6	77.8	86.5	79.1	82.3	13	94	70	----	----	9.09	1.02	51.46	24.54	0.12	4.62	0.0	0.0	0.0	77	77	68	82	84	75	17.3	12.6	---	---	---	---	---	---	202	0	5	0	15	0	0
JOHNSTON ISLAND	7	80.7	73.4	85.0	77.1	79.3	12	88	62	----	----	3.89	0.84	26.11	15.80	0.11	9.51	0.0	0.0	0.0	75	76	67	78	77	69	13.7	15.1	49	69	77	65	185	115	165	0	5	0	0	0	0
KOROR R	94	86.0	74.6	86.6	75.1	80.9	18	93	69	----	----	15.76	7.13	147.49	34.82	1.65	11.57	0.0	0.0	0.0	88	91	81	90	92	82	8.4	6.4	73	50	53	*	41	324	272	0	39	0	43	0	0
KWAJALEIN ISLAND	8	82.2	78.0	85.2	77.9	81.1	15	97	69	----	----	12.13	2.15	94.76	30.38	0.18	6.68	0.0	0.0	0.0	76	80	80	80	85	86	18.6	10.2	44	---	---	22	91	252	242	0	10	0	22	0	0
MAJURO ISLAND	10	84.1	76.3	84.6	75.7	80.4	12	91	69	----	----	15.92	6.98	143.63	24.26	0.96	10.01	0.0	0.0	0.0	78	80	81	79	83	84	13.3	8.4	38	61	54	11	72	282	258	0	19	0	*	0	0
MARCUS ISLAND	20	76.0	68.2	87.2	78.0	78.2	4	93	55	----	----	7.19	1.61	42.57	13.51	0.10	5.66	0.0	0.0	0.0	72	75	68	79	83	71	14.0	11.7	114	58	73	85	147	133	146	0	5	1	23	0	0
PAGO PAGO AM SAMOA	12	----	----	----	----	----	8	92	62	----	----	----	----	----	31.84	1.36	8.65	0.0	0.0	0.0	89	90	74	84	84	79	7.7	11.3	40	60	63	35	136	194	270	0	24	0	19	0	0
PONAPE R	123	85.6	75.3	86.6	72.7	80.1	17	96	67	----	----	20.31	9.74	191.92	38.65	1.71	22.48	0.0	0.0	0.0	84	85	76	94	95	79	8.3	4.4	36	49	50	1	60	304	299	0	31	0	34	0	0
TAGUAC GUAM R	361	83.9	72.4	86.7	72.3	79.3	11	95	54	----	----	13.36	2.64	88.53	23.07	0.50	7.50	0.0	0.0	0.0	--	--	--	--	--	--	8.1	4.9	80	54	46	---	---	---	265	0	28	*	4	0	0
TRUK MOEN ISLAND	5	84.9	76.5	86.1	74.8	80.7	17	94	70	----	----	14.12	6.29	137.52	34.89	0.84	14.92	0.0	0.0	0.0	81	82	76	89	91	80	9.7	6.8	45	61	53	1	58	306	269	0	21	0	5	0	0
WAKE	11	81.5	73.3	86.6	77.4	80.0	20	92	64	----	----	7.08	1.14	36.86	17.66	0.06	ϕ15.00	0.0	0.0	0.0	70	74	75	74	81	82	13.1	12.1	48	---	---	111	157	97	179	0	7	0	5	0	0
YAP R	62	85.3	75.6	87.6	75.1	81.3	19	97	69	----	----	14.70	4.64	121.50	29.44	1.08	10.45	0.0	0.0	0.0	85	87	79	90	92	81	10.7	5.4	72	53	46	7	44	314	263	0	15	0	46	0	0
PENNSYLVANIA							80	111	-42							0.00	34.50																								
ALLENTOWN	387	36.7	21.3	85.2	63.0	51.1	2	105	- 7	1116	5810	4.82	2.64	44.12	12.10	0.09	4.79	8.5	34.8	17.5	72	60	66	79	45	57	11.1	7.4	81	---	---	95	115	155	123	10	33	29	23	138	3
AVOCA W-B SCRANTON	930	33.6	21.7	81.6	63.2	49.4	12	101	-11	1156	6254	4.79	1.99	38.48	7.78	0.03	3.18	11.9	53.3	20.1	75	64	67	82	53	61	8.9	7.4	60	42	60	75	108	182	125	14	31	26	9	135	5
ERIE	731	34.0	20.5	80.1	62.0	48.7	2	92	- 6	1169	6451	3.67	2.32	37.50	9.87	0.58	4.84	18.4	80.6	23.0	73	70	73	80	64	65	13.2	8.9	55	---	---	72	96	197	155	26	39	16	1	123	4
HARRISBURG	338	38.9	23.6	87.0	65.3	53.3	29	107	- 8	1045	5251	3.90	2.31	37.65	9.07	0.04	4.36	10.0	36.9	21.0	71	58	64	78	51	60	8.4	6.3	68	48	69	85	107	173	123	9	33	21	26	107	1
PHILADELPHIA	5	40.3	24.3	85.9	65.2	53.5	8	104	- 5	1014	5101	4.63	2.78	42.48	9.70	0.09	5.45	5.8	22.2	14.6	74	60	67	79	53	62	10.3	8.1	73	50	63	93	113	159	117	6	26	28	17	109	1
PITTSBURGH U	747	39.5	24.7	85.0	64.8	53.0	33	103	-13	1020	5291	3.95	2.31	36.87	8.84	0.16	3.57	10.8	46.0	14.7	77	66	68	84	51	58	10.8	7.5	58	39	65	59	104	202	148	14	35	17	9	127	5
PITTSBURGH GTR. AP	1137	36.5	21.2	83.3	60.9	50.3	8	98	-18	1119	5987	3.91	2.19	36.14	8.20	0.16	3.56	7.7	31.2	20.1	--	--	--	--	--	--	---	---	---	25	53	---	---	---	145	9	--	--	18	96	1
READING U	266	39.1	26.3	86.4	67.3	54.3	27	103	- 2	1001	4945	4.26	2.64	41.43	14.85	0.17	6.08	8.6	31.3	18.7	71	--	--	75	--	--	11.4	8.5	80	46	63	96	112	157	122	8	32	8	24	92	*
WILLIAMSPORT	524	36.1	21.4	85.3	61.8	50.7	23	102	-15	1122	5934	4.18	2.51	40.65	9.45	0.19	4.38	10.2	43.9	23.1	76	62	69	86	52	63	9.2	6.8	78	---	---	69	116	180	142	12	34	37	16	132	4
RHODE ISLAND							80	102	-23							0.00	12.13																								
BLOCK ISLAND	110	37.9	26.3	75.9	63.2	50.1	17	91	- 4	1020	5804	4.07	2.56	40.45	11.51	T	8.52	5.6	23.6	16.9	73	65	--	87	72	--	---	---	---	---	---	98	113	154	112	7	17	82	*	89	*
PROVIDENCE	51	37.3	21.0	81.4	62.7	50.1	4	97	- 5	1110	5954	4.14	2.76	42.13	11.89	0.39	6.63	10.6	41.4	18.3	70	58	65	78	57	67	11.9	9.8	90	56	60	108	102	155	124	11	22	28	6	126	2
SOUTH CAROLINA							83	111	-13							0.00	13.25																								
CHARLESTON	40	61.2	38.3	89.2	72.0	65.2	25	103	8	487	2033	7.71	2.09	49.16	18.46	0.08	8.84	T	0.1	2.1	85	55	74	89	64	80	9.4	8.0	62	57	62	98	117	150	116	*	57	29	48	35	0
CHARLESTON U 1961	9	61.4	39.2	89.4	70.8	65.2	18	103	14	472	1973	8.04	1.92	46.11	17.31	0.08	8.84	T	0.1	2.1	87	56	75	90	65	82	9.9	8.3	---	65	80	96	116	153	121	*	60	31	48	31	0
COLUMBIA	213	58.2	35.6	92.5	70.7	64.0	19	107	4	570	2484	6.09	2.36	46.82	16.72	T	7.66	0.3	1.3	8.8	85	54	68	86	52	66	7.1	6.8	60	60	65	124	104	137	110	*	53	25	84	55	0
FLORENCE 1964	146	58.3	36.7	90.9	70.4	64.0	17	108	8	552	2387	6.24	2.18	42.69	13.68	0.00	6.36	0.1	1.0	4.8	82	52	66	88	57	73	8.2	7.2	---	---	---	121	107	137	110	*	53	29	71	46	0
GREENVILLE 1961	1018	51.6	35.0	87.9	68.8	61.0	2	98	8	673	3060	4.81	3.00	47.65	10.10	0.52	5.79	0.5	4.1	6.4	70	41	50	85	56	70	9.4	7.7	70	58	63	107	104	154	116	1	50	23	48	54	0
SPARTANBURG 1961	801	52.1	34.7	88.7	69.1	61.2	18	104	3	670	3044	4.70	2.97	46.66	10.33	0.13	6.85	0.8	3.6	7.1	73	44	51	89	56	70	8.6	6.8	---	---	---	127	87	151	114	1	47	23	48	52	0
GRNVLE SPARTANBURG	957	52.4	35.0	87.0	71.0	61.2	5	98	- 6	665	3044	4.75	2.84	46.42	11.30	0.24	4.49	3.6	6.3	5.7	74	52	61	87	60	69	7.5	6.4	52	57	58	122	97	146	113	3	42	34	28	63	*

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Normal (1931-1960) January Daily maximum (°F)	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours
SOUTH DAKOTA							78	120	-58							0.00	13.52
ABERDEEN	1296	21.5	0.0	87.6	59.4	43.7	8	112	-39	1680	8473	3.76	0.61	19.14	8.88	0.00	4.02
HURON	1282	23.1	1.9	90.3	59.6	44.7	8	112	-39	1628	8223	3.14	0.48	17.33	8.30	T	5.48
RAPID CITY	3162	34.1	9.8	87.7	59.9	46.8	18	109	-26	1333	7345	3.08	0.30	14.71	7.05	T	4.01
SIOUX FALLS	1418	25.1	5.2	86.0	62.5	45.7	4	106	-30	1544	7839	4.35	0.62	25.16	7.94	T	4.32
TENNESSEE							85	113	-32							0.00	11.00
BRISTOL	1507	46.8	29.7	86.4	65.4	56.8	6	95	-15	828	4143	5.55	2.15	41.06	9.73	0.07	3.65
CHATTANOOGA	665	49.9	33.4	90.0	71.4	61.2	28	106	-10	722	3254	5.64	3.02	51.96	13.68	0.20	5.40
KNOXVILLE	980	50.1	32.6	88.5	68.2	59.6	7	98	- 9	732	3494	4.88	2.54	45.85	11.74	T	5.08
MEMPHIS	258	50.6	32.4	91.1	71.5	61.5	26	106	-13	729	3232	6.07	2.72	49.73	12.29	T	4.94
NASHVILLE	590	48.8	30.9	90.7	69.6	60.0	2	103	- 6	778	3578	5.49	2.32	45.14	13.92	T	5.34
OAK RIDGE R	905	49.2	30.6	87.7	66.7	58.2	20	105	- 9	778	3817	5.95	2.67	54.71	19.27	T	7.48
OAK RIDGE AREA 1964	886	48.9	31.2	88.0	66.7	58.5	20	103	- 8	772	3742	5.44	2.82	51.52	12.84	0.00	7.75
TEXAS							87	120	-24							0.00	38.20
ABILENE	1762	56.4	32.8	94.3	72.1	64.3	4	107	7	642	2624	4.33	0.88	23.32	13.19	0.00	6.70
AMARILLO	3604	49.8	23.5	94.2	67.0	58.7	7	104	- 9	877	3985	3.37	0.62	19.67	10.73	0.00	6.75
AUSTIN	597	60.3	40.5	95.1	73.9	68.3	7	105	12	468	1711	3.71	1.94	32.58	12.31	0.00	7.22
BROWNSVILLE	19	70.5	52.2	92.5	75.5	73.7	28	104	19	205	600	4.99	1.04	26.75	19.26	T	12.19
CORPUS CHRISTI	41	67.4	47.4	93.5	74.6	71.8	3	101	25	291	914	4.40	1.44	28.34	20.33	0.00	8.76
DALLAS	481	55.8	36.0	94.5	75.3	65.8	9	107	8	601	2363	4.83	1.93	34.55	15.40	T	9.18
DEL RIO e	1026	63.7	38.8	98.5	73.8	70.0	5	107	19	438	1504	2.73	0.62	17.83	15.79	T	4.50
EL PASO	3918	56.3	29.5	94.9	68.9	63.3	8	106	- 8	685	2700	1.29	0.29	7.89	6.29	0.00	2.89
FT. WORTH GTR. INTL	537	56.0	34.9	95.9	74.9	65.8	4	108	4	614	2405	4.59	1.68	31.33	12.64	0.02	5.91
GALVESTON 1961	7	60.4	48.2	88.7	77.9	70.1	11	97	18	362	1233	5.82	3.14	47.98	25.06	T	11.34
GALVESTON U	7	60.5	49.3	87.3	78.9	69.9	97	101	8	350	1235	5.09	2.59	41.81	26.01	0.00	14.35
HOUSTON U 1966	41	62.6	46.6	92.0	75.8	70.0	29	106	10	363	1278	5.15	2.40	45.26	17.64	0.01	10.83
HOUSTON	50	63.6	43.6	92.1	73.8	69.2	8	106	17	384	1396	4.36	2.67	45.95	22.31	T	15.65
LAREDO 1964	496	68.4	47.0	99.0	76.0	73.9	20	110	18	267	797	2.86	0.62	18.63	8.62	0.00	5.55
LUBBOCK	3254	53.0	25.4	92.4	66.5	59.7	2	106	- 3	800	3578	3.18	0.54	18.08	8.85	0.00	5.70
MIDLAND	2851	57.1	30.9	94.5	71.2	64.3	4	107	2	651	2591	2.08	0.36	14.24	6.73	0.00	5.99
PORT ARTHUR	16	63.5	43.7	91.0	72.7	68.5	7	107	14	384	1447	6.00	2.88	53.09	18.71	0.00	13.17
SAN ANGELO	1903	59.4	34.3	96.9	72.7	66.4	8	111	6	567	2255	3.20	0.78	18.63	9.20	0.00	6.03
SAN ANTONIO INTL AP	788	62.3	41.6	94.0	73.9	68.7	26	106	0	428	1546	3.49	1.37	27.84	15.78	0.00	6.97
VICTORIA	104	64.8	46.0	91.7	74.6	70.2	7	107	16	344	1173	4.23	2.32	36.20	14.52	T	8.51
WACO	501	58.2	37.8	96.0	74.6	67.2	4	106	7	536	2030	4.57	1.68	32.08	15.00	0.00	7.18
WICHITA FALLS	994	53.9	31.6	97.9	73.3	64.5	8	113	- 5	698	2832	4.60	1.12	26.20	12.03	0.00	5.61
UTAH							77	116	-50							0.00	5.08
MILFORD	5028	37.1	12.1	92.1	55.5	48.9	19	104	-28	1252	6497	1.03	0.43	8.00	2.60	0.00	1.24
SALT LAKE CITY	4220	36.8	17.5	94.1	59.6	50.9	8	107	-18	1172	6052	1.76	0.53	13.90	4.90	0.00	2.41
WENDOVER	4237	35.9	18.0	92.0	66.8	52.3	30	112	-19	1178	5778	0.66	0.29	4.67	3.01	0.00	1.33
VERMONT							80	105	-50							0.00	8.77
BURLINGTON	332	25.4	6.9	81.9	56.0	43.2	3	98	-25	1513	8269	3.85	1.79	33.21	11.54	0.38	3.59
VIRGINIA							77	110	-29							0.00	12.50
LYNCHBURG	916	46.2	29.0	86.6	65.9	56.7	4	99	0	849	4166	4.41	2.58	40.30	11.36	0.33	4.98
NORFOLK	22	50.2	32.2	87.9	69.6	59.7	19	103	8	738	3421	5.97	2.74	44.94	12.83	0.36	11.40
RICHMOND	164	48.3	29.0	89.4	66.7	58.1	38	104	-12	815	3865	5.61	2.90	44.21	18.87	0.30	8.79
ROANOKE	1149	47.0	29.1	88.0	65.2	56.9	3	100	3	834	4150	4.63	2.70	41.23	9.12	0.18	4.95
WASHINGTON							101	118	-42							0.00	32.27
OLYMPIA	195	45.1	31.1	79.7	48.0	50.8	8	100	3	834	5236	9.05	0.76	52.37	19.84	0.00	4.93
QUILLAYUTE	179	44.1	33.0	70.3	49.0	49.2	1	91	21	828	5745	16.81	2.08	103.55	24.86	0.40	5.21
SEATTLE U 1964	14	45.6	36.8	75.1	56.1	53.2	31	100	11	738	4424	5.42	0.63	34.10	10.93	T	3.31
SEATTLE-TACOMA	400	43.6	33.0	75.6	54.1	51.1	8	99	10	828	5145	6.29	0.81	38.94	12.92	T	3.41
SPOKANE	2356	31.4	19.2	85.6	55.4	47.8	8	108	-20	1231	6655	2.44	0.38	17.19	5.71	T	2.07
STAMPEDE PASS R	3958	27.5	19.5	65.4	47.0	39.5	24	90	-16	1287	9283	16.19	1.46	92.19	29.06	0.19	7.94
TATOOSH ISLAND 1966	101	45.2	38.8	59.5	51.5	49.3	63	88	14	713	5719	12.16	1.98	77.69	22.57	0.02	5.91
WALLA WALLA U	949	39.0	27.4	89.2	62.7	54.2	53	113	-16	986	4805	1.89	0.21	15.50	4.52	0.00	2.02
YAKIMA	1052	36.5	18.5	88.9	53.1	49.8	21	108	-25	1163	5941	1.19	0.13	7.86	4.19	0.00	1.40
WEST INDIES							67	103	40							0.00	
SAN JUAN U 1964	47	79.9	70.3	84.2	76.0	78.3	66	96	62	----	----	7.16	2.07	60.36	16.88	0.05	10.55
SAN JUAN	13	81.3	67.4	87.1	73.7	78.0	13	94	60	----	----	7.13	2.20	64.21	14.99	0.68	5.08
SWAN ISLAND r	28	82.6	73.9	87.3	77.6	81.0	24	92	64	----	----	7.39	0.63	51.61	31.53	T	10.77

State and Station	Snow, sleet Mean total January	Mean total Seasonal	Extreme Maximum in 24 hours	Relative humidity (percent) January 7 00 a m EST	January 1 00 p m EST	January 7 00 p m EST	July 7 00 a m EST	July 1 00 p m EST	July 7 00 p m EST	Wind Speed (m p h) Mean speed January	Mean speed July	Fastest mile	Sunshine (percent of possible) January	July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Min 32 and below	Min Zero and below
SOUTH DAKOTA																								
ABERDEEN	7.0	34.5	14.3	70	66	69	82	50	48	11.6	9.4	58	---	---	94	105	166	85	12	35	16	23	186	49
HURON	6.1	37.4	17.5	76	69	72	89	52	49	11.8	10.9	77	55	77	105	109	151	93	11	43	15	31	177	42
RAPID CITY	5.3	36.8	14.7	70	60	65	71	45	41	10.4	9.9	66	55	71	111	113	141	95	12	45	15	32	167	20
SIOUX FALLS	5.7	39.7	26.0	77	65	70	85	53	49	10.9	9.5	70	---	---	105	106	154	92	11	44	21	25	175	35
TENNESSEE																								
BRISTOL	4.7	15.3	16.2	79	60	65	92	62	67	6.6	4.1	50	---	---	90	112	163	132	5	46	41	13	99	2
CHATTANOOGA	1.4	3.8	8.9	82	62	68	88	57	64	7.3	5.1	82	42	62	107	109	149	120	2	56	35	54	73	*
KNOXVILLE	3.8	12.2	18.2	79	63	64	91	62	66	8.4	6.4	73	38	58	99	109	157	126	3	48	30	20	75	1
MEMPHIS	2.4	5.6	14.3	80	64	70	85	57	59	10.9	7.6	56	48	73	117	102	146	103	2	50	11	67	60	*
NASHVILLE	3.7	11.1	10.2	79	61	61	90	60	64	9.1	6.2	73	41	65	105	107	153	117	4	56	15	67	79	2
OAK RIDGE R	2.9	9.6	12.0	--	--	--	--	--	--	4.8	3.9	59	---	---	113	91	161	126	3	53	34	33	81	*
OAK RIDGE AREA 1964	---	---	---	--	--	--	--	--	--	5.7	3.8	---	---	---	---	---	---	119	--	--	--	35	79	*
TEXAS																								
ABILENE	1.6	3.9	5.7	66	48	42	65	41	33	12.3	10.8	73	64	78	151	97	117	64	2	41	6	101	54	0
AMARILLO	3.8	13.4	12.2	67	44	40	73	42	37	13.2	12.4	84	71	77	161	105	99	66	4	48	24	70	105	3
AUSTIN	0.6	1.3	7.0	76	56	54	87	47	41	9.9	8.7	57	49	78	119	116	130	81	1	40	23	111	25	0
BROWNSVILLE	T	T	T	89	65	74	92	55	65	11.9	11.9	69	46	81	99	137	129	71	0	23	26	114	2	0
CORPUS CHRISTI	0.1	0.1	1.1	89	66	69	93	56	61	11.9	11.7	72	48	83	107	120	138	75	*	32	27	91	8	0
DALLAS	1.4	2.3	7.4	77	58	55	78	51	44	10.5	10.1	65	51	77	141	94	130	79	1	41	8	96	39	0
DEL RIO e	T	1.6	3.0	69	49	39	72	46	32	8.5	10.9	52	---	---	124	106	135	53	1	34	14	128	22	0
EL PASO	1.3	4.0	7.8	57	40	31	56	40	29	9.7	9.3	70	78	79	196	97	72	44	1	36	2	105	64	*
FT. WORTH GTR. INTL	2.1	3.4	12.1	78	57	54	75	47	41	12.1	10.5	73	---	---	146	94	125	77	1	44	11	88	46	0
GALVESTON 1961	T	0.2	2.0	84	73	78	82	69	71	13.0	11.3	---	---	---	111	118	136	90	*	52	32	32	2	0
GALVESTON U	T	0.2	15.4	--	--	--	--	--	--	11.6	9.8	100	49	72	---	---	---	96	*	--	--	11	4	0
HOUSTON U 1966	0.2	0.3	3.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	104	*	--	--	91	7	0
HOUSTON	0.2	0.4	4.4	83	64	67	91	59	64	12.0	8.9	54	49	75	86	129	150	102	*	59	43	97	13	0
LAREDO 1964	0.1	0.1	2.0	81	58	53	83	44	39	9.6	14.8	---	---	---	130	116	119	58	*	31	14	174	6	0
LUBBOCK	1.9	8.1	12.1	66	43	38	71	45	38	13.2	12.2	70	---	---	167	106	92	59	3	43	14	63	98	1
MIDLAND	1.3	3.0	5.9	68	43	36	65	37	28	9.5	9.9	67	---	---	166	99	100	49	2	35	14	102	72	0
PORT ARTHUR	T	0.5	4.4	88	68	77	93	62	69	11.6	8.1	73	44	66	90	129	146	103	*	62	42	90	19	0
SAN ANGELO	0.9	2.5	5.1	70	47	41	72	40	33	10.3	9.6	69	---	---	162	96	107	54	1	36	6	124	56	0
SAN ANTONIO INTL AP	0.3	0.6	4.7	80	60	58	88	49	43	9.1	9.1	74	49	77	113	115	137	78	*	35	24	118	20	*
VICTORIA	T	T	T	84	62	65	92	54	58	10.9	9.1	99	---	---	86	125	154	79	0	41	36	108	13	0
WACO	1.0	1.7	7.0	79	58	57	70	42	36	12.7	11.5	69	---	---	136	97	132	75	1	46	13	107	37	0
WICHITA FALLS	2.1	5.2	5.9	78	52	51	75	42	38	11.1	10.6	60	---	---	159	93	113	69	2	48	12	108	66	*
UTAH																								
MILFORD	9.8	41.6	16.3	--	66	60	--	24	20	---	---	---	---	---	152	103	110	60	14	32	7	60	179	14
SALT LAKE CITY	13.6	54.0	15.4	79	71	69	50	25	18	7.4	9.4	71	47	83	131	106	128	86	17	35	10	61	141	*
WENDOVER	2.3	7.2	8.5	67	60	58	30	21	14	---	---	---	---	---	154	94	117	46	3	29	5	51	128	1
VERMONT																								
BURLINGTON	18.0	70.9	16.5	73	66	69	79	52	61	9.9	7.9	72	39	64	63	101	201	148	20	25	15	4	168	21
VIRGINIA																								
LYNCHBURG	6.1	18.7	12.8	72	52	61	84	56	67	8.8	6.8	56	51	62	111	108	146	120	6	41	40	18	94	*
NORFOLK	3.7	7.7	11.4	77	60	69	82	59	72	11.8	8.7	78	58	64	109	105	151	115	2	37	24	32	55	0
RICHMOND	5.9	15.4	21.6	81	57	70	85	56	72	8.1	6.9	68	53	67	104	106	155	114	4	37	29	43	85	1
ROANOKE	7.8	25.3	17.4	69	52	57	79	52	59	9.9	6.6	58	---	---	103	116	146	120	7	39	26	18	92	0
WASHINGTON																								
OLYMPIA	7.2	16.5	13.7	92	89	82	90	64	49	7.5	6.0	60	---	---	50	90	225	162	5	4	92	7	84	0
QUILLAYUTE	4.3	8.1	11.5	--	--	--	--	--	--	---	---	65	28	63	71	93	201	152	3	6	--	2	15	0
SEATTLE U 1964	T	3.7	2.7	96	94	91	94	70	61	8.1	6.3	36	18	57	53	66	246	216	2	12	39	3	50	0
SEATTLE-TACOMA	6.0	14.0	21.4	82	81	76	85	67	50	10.5	8.7	55	14	66	53	84	228	162	5	8	53	3	34	0
SPOKANE	18.6	55.2	13.0	84	82	76	60	38	24	8.2	7.8	56	26	82	87	89	189	115	18	11	47	21	138	4
STAMPEDE PASS R	76.9	433.4	36.2	93	92	92	87	67	60	---	---	---	---	---	67	58	240	205	85	7	252	*	188	3
TATOOSH ISLAND 1966	3.5	7.7	12.0	84	82	82	94	89	87	20.0	10.1	94	26	47	58	76	231	197	3	5	59	0	8	0
WALLA WALLA U	7.7	19.6	14.0	--	76	--	--	34	--	5.1	5.4	67	24	86	119	88	158	105	7	11	14	36	65	2
YAKIMA	9.5	23.6	14.0	84	77	71	69	35	25	5.5	7.6	48	---	---	112	88	165	68	8	8	19	33	150	4
WEST INDIES																								
SAN JUAN U 1964	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	208	0	49	0	10	0	0
SAN JUAN	0.0	0.0	0.0	86	66	78	81	68	79	8.6	9.8	80	67	64	52	209	104	209	0	38	0	32	0	0
SWAN ISLAND r	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	81	162	122	152	0	--	--	14	0	0

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	Temperature Normal January Daily minimum	Temperature Normal July Daily maximum	Temperature Normal July Daily minimum	Temperature Normal Annual	Temperature Extremes Length, yrs	Temperature Extremes Record highest	Temperature Extremes Record lowest	Normal degree days (1931-1960) January	Normal degree days Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Precipitation Normal Driest month	Precipitation Normal Annual	Precipitation Extremes Wettest month	Precipitation Extremes Driest month	Precipitation Extremes Maximum in 24 hours	Snow, sleet Mean total January	Snow, sleet Mean total Seasonal	Snow, sleet Extreme Maximum in 24 hours
WEST VIRGINIA							77	112	-37							0.00	19.00			
BECKLEY	2504	41.1	26.1	80.4	61.3	51.8	4	90	- 9	973	5390	5.05	2.71	46.79	8.27	0.14	5.34	16.7	60.6	13.8
CHARLESTON	939	45.2	27.9	85.6	64.2	55.6	20	102	-12	880	4476	5.67	2.58	44.43	13.54	0.09	5.60	8.3	28.5	15.1
ELKINS	1970	43.0	22.0	82.3	57.9	50.7	23	97	-21	1008	5675	5.49	2.75	45.92	9.30	0.31	2.94	15.1	65.4	17.8
HUNTINGTON	827	45.3	27.9	86.0	64.3	55.8	7	100	-15	880	4446	4.50	1.85	39.53	8.57	T	4.27	7.8	24.8	8.2
PARKERSBURG U	615	42.9	26.3	86.3	65.2	55.0	79	106	-27	942	4754	4.27	2.05	38.77	12.05	0.07	4.81	6.8	24.4	18.3
WISCONSIN							77	114	-54							0.00	11.72			
GREEN BAY	682	25.1	8.5	82.0	59.0	44.3	7	97	-29	1494	8029	3.36	1.08	25.83	8.47	T	3.68	9.0	39.7	10.1
LA CROSSE	651	25.6	7.4	84.6	63.0	46.3	3	99	-31	1504	7589	4.20	1.05	31.16	10.52	0.02	3.94	8.5	41.8	15.7
MADISON	858	25.9	9.1	82.2	60.0	45.0	8	98	-30	1473	7863	3.95	1.13	30.16	10.93	0.06	5.25	9.1	38.4	10.8
MILWAUKEE	672	28.3	12.8	78.9	58.4	45.1	8	98	-24	1376	7635	3.64	1.40	29.51	9.87	0.15	5.28	13.3	44.6	16.7
WYOMING							108	114	-63							0.00	5.50			
CASPER	5338	32.8	13.9	87.1	56.3	46.0	3	99	-31	1290	7410	2.03	0.48	11.80	3.93	T	2.49	9.2	68.7	14.6
CHEYENNE	6126	37.2	13.6	85.2	54.8	45.9	8	96	-27	1228	7278	2.52	0.45	15.06	5.35	T	2.68	6.2	52.6	16.5
LANDER	5563	30.8	7.7	85.8	55.4	44.4	21	101	-37	1417	7870	2.65	0.42	13.58	6.88	T	3.56	8.5	96.1	23.1
SHERIDAN	3964	34.0	8.6	87.1	55.5	45.2	3	103	-29	1355	7683	2.57	0.62	15.91	9.54	0.02	3.84	9.3	67.3	26.7

State and Station	Relative humidity (percent) January 7:00 a m EST	RH January 1:00 p m EST	RH January 7:00 p m EST	RH July 7:00 a m EST	RH July 1:00 p m EST	RH July 7:00 p m EST	Wind Speed (m p h) Mean speed January	Wind Mean speed July	Wind Fastest mile	Sunshine (percent of possible) January	Sunshine July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Temperature Min 32 and below	Temperature Min Zero and below
WEST VIRGINIA																					
BECKLEY	79	64	69	89	59	71	11.3	6.9	53	---	---	73	90	202	150	17	46	37	1	117	2
CHARLESTON	77	62	66	89	61	66	7.8	5.2	55	---	---	60	117	188	147	9	42	109	24	100	1
ELKINS	81	63	71	96	58	71	7.4	4.3	55	---	---	52	111	202	164	22	45	83	3	142	5
HUNTINGTON	80	63	64	91	60	66	7.4	5.0	47	---	---	74	115	176	130	8	40	51	18	105	4
PARKERSBURG U	82	66	74	80	52	67	7.2	5.1	66	31	62	109	103	153	142	8	44	12	23	97	2
WISCONSIN																					
GREEN BAY	76	71	73	87	57	59	11.0	8.2	73	45	64	96	101	168	118	13	37	29	6	162	31
LA CROSSE	75	65	71	88	53	54	9.2	7.8	63	---	---	96	95	174	107	11	42	23	17	155	31
MADISON	77	68	71	89	57	59	10.5	8.1	77	50	70	94	101	170	114	12	41	23	9	169	27
MILWAUKEE	77	69	73	83	60	63	12.9	9.5	73	44	71	97	102	166	120	13	37	27	9	149	17
WYOMING																					
CASPER	64	55	57	66	32	27	16.9	10.2	81	---	---	114	109	142	91	22	36	9	22	186	22
CHEYENNE	54	44	49	71	35	39	14.8	10.0	69	62	69	106	130	129	101	17	52	24	13	170	12
LANDER	66	58	58	57	34	28	6.2	7.6	77	68	77	117	128	120	71	23	33	2	20	185	20
SHERIDAN	65	56	59	68	38	33	7.7	7.2	84	57	76	98	117	150	107	22	37	6	19	196	23

Data from airport or from airport and Urban site records combined. U indicates Urban, R indicates Rural sites.
Data for this table are based on records through 1967 except as indicated in notes.
Date after station name indicates last year included in summarization of data.
Normal values are based on the period, 1931-1960 and are means adjusted to represent observations taken at the present standard location.
Degree days are based on a daily average of 65 F.
For detailed periods of record see ANNUAL LOCAL CLIMATOLOGICAL DATA, 1967.

Fastest mile is the speed of the wind recorded in the shortest time on an automatic recording wind instrument.
Clear Day averages 0-3 tenths sky cover. Partly Cloudy 4-7 tenths and Cloudy 8-10 tenths.
Heavy Fog includes data formerly referred to as "Dense" or "Thick." The upper visibility limit for heavy fog is 1/4 mile.
* Less than one-half.
\- No record.
\# Number of days Maximum 70 or above (Alaskan stations).
\+ Relative humidity means for period of record through 1960.
‡ Mt. Washington excluded.
ø Estimated amounts during typhoon.
1 Means and extremes are from post office location through 1962.
2/ Based on records from Urban office through January 1943; airport through June 1964.

a Relative Humidity readings NOON Local Time.
b Relative Humidity readings reported 30 minutes later.
c Relative Humidity readings 8 00 a.m. and NOON Local Time.
e Reopened 1963.
T Trace, an amount too small to measure.
x Sun below horizon continuously Nov. 19 - Jan. 23.
v Sun below horizon continuously Nov. 24 - Jan. 17.
(x and v)-Yearly totals for period sun above horizon.
m Record for 1949-1951, 1958-1962.
r Resumed 1965.

ELEVATIONS OF STATION PRESSURES

State and station	Ft	Mtrs
ALABAMA		
Birmingham	630	192
Huntsville	644	196
Mobile	221	67
Montgomery	202	62
ALASKA		
Anchorage	132	40
Annette	110	34
Barrow	13	4
Barter Island	50	15
Bethel	150	46
Cold Bay	103	31
Fairbanks	454	138
Juneau	24	7
King Salmon	49	15
Kotzebue	16	5
McGrath	338	103
Nome	22	7
St. Paul Island	28	9
Shemya	102	31
Yakutat	31	9
ARIZONA		
Flagstaff	7018	2139
Phoenix	1107	337
Tucson	2555	779
Winslow	4883	1488
Yuma	206	63
ARKANSAS		
Fort Smith	463	141
Little Rock	265	81
Texarkana	368	112
CALIFORNIA		
Bakersfield	492	150
Bishop	4145	1263
Blue Canyon	5283	1610
Eureka (U)	60	18
Fresno	327	100
Long Beach	40	12
Los Angeles (U)	512	156
Los Angeles	104	32
Mt Shasta (R)	3587	1093
Oakland	7	2
Red Bluff	353	108
Sacramento	25	8
Sandberg (R)	4523	1379
San Diego	28	9
San Francisco (U)	155	47
San Francisco	18	5
Santa Catalina	1580	482
Santa Maria	238	73
Stockton	27	8
COLORADO		
Alamosa	7541	2298
Colorado Springs	6170	1881
Denver	5332	1625
Grand Junction	4839	1475
Pueblo	4720	1439
CONNECTICUT		
Bridgeport	17	5
Hartford	179	55
New Haven	13	4
DELAWARE		
Wilmington	80	24
DISTRICT OF COLUMBIA		
Wash. Nat'l AP	65	20
FLORIDA		
Apalachicola (U)	35	11
Daytona Beach	41	12
Fort Myers	12	4
Jacksonville	31	9
Key West	21	6
Lakeland (U)	236	72
Miami	12	4
Orlando	119	36
Pensacola	118	36
Tallahassee	68	21
Tampa	11	3
West Palm Beach	21	6
GEORGIA		
Athens	811	247
Atlanta	1034	315
Augusta	148	45
Columbus	394	120
Macon	362	110
Rome	643	196
Savannah	51	16
HAWAII		
Hilo	36	11
Honolulu	15	5
Kahului	67	20
Lihue	148	45
IDAHO		
Boise	2858	871
Idaho Falls 46W (R)	4938	1505
IDAHO (Cont'd)		
Lewiston	1436	438
Pocatello	4478	1365
ILLINOIS		
Cairo (U)	357	109
Chicago (O'Hare)	674	205
Chicago (Midway)	623	190
Moline	594	181
Peoria	662	202
Rockford	743	226
Springfield	613	187
INDIANA		
Evansville	388	118
Fort Wayne	828	252
Indianapolis	808	246
South Bend	773	236
IOWA		
Burlington	702	214
Des Moines	963	294
Dubuque	1080	329
Sioux City	1103	336
Waterloo	878	268
KANSAS		
Concordia	1484	452
Dodge City	2592	790
Goodland	3688	1124
Topeka	885	270
Wichita	1340	408
KENTUCKY		
Covington	877	267
Lexington	989	301
Louisville	488	149
LOUISIANA		
Alexandria	118	36
Baton Rouge	76	23
Lake Charles	32	10
New Orleans	30	9
Shreveport	259	79
MAINE		
Caribou	628	191
Portland	63	19
MARYLAND		
Baltimore	155	47
MASSACHUSETTS		
Boston	29	9
Nantucket	12	4
Pittsfield	1169	356
Worcester	1017	310
MICHIGAN		
Alpena	693	211
Detroit (City AP)	626	191
Detroit (M. Wayne Co.)	664	202
Detroit (Willow Run)	777	237
Flint	766	233
Grand Rapids	803	245
Houghton Lake	1160	354
Lansing	874	266
Marquette (U)	734	224
Muskegon	633	193
Sault Ste. Marie	724	221
MINNESOTA		
Duluth	1417	432
International Falls	1183	361
Minneapolis	838	255
Rochester	1320	402
St. Cloud	1043	318
MISSISSIPPI		
Jackson	331	101
Meridian	310	94
MISSOURI		
Columbia	785	239
Kansas City	750	229
St. Joseph	817	249
St. Louis (Lambert)	564	172
Springfield	1270	387
MONTANA		
Billings	3570	1088
Glasgow	2298	700
Great Falls	3657	1115
Havre	2599	792
Helena	3898	1188
Kalispell	2973	906
Miles City	2634	803
Missoula	3189	972
NEBRASKA		
Grand Island	1856	566
Lincoln (U)	1189	362
Norfolk	1551	473
North Platte	2787	849
Omaha (Eppley AP)	982	299
Scottsbluff	3958	1206
Valentine	2598	792
NEVADA		
Elko	5077	1547
Ely	6262	1909
Las Vegas	2180	664
Reno	4400	1341
Winnemucca	4339	1323
NEW HAMPSHIRE		
Concord	346	105
NEW JERSEY		
Atlantic City (Exp. Cntr.)	67	20
Newark	30	9
Trenton (U)	190	58
NEW MEXICO		
Albuquerque	5314	1620
Clayton	4972	1515
Raton	6376	1943
Roswell	3619	1103
Silver City	5376	1639
NEW YORK		
Albany	292	89
Binghamton	1638	499
Buffalo	706	215
New York Central Park	87	27
New York (Kennedy AP)	22	7
New York (LaGuardia)	52	16
Rochester	555	169
Syracuse	408	124
NORTH CAROLINA		
Asheville	2170	661
Cape Hatteras (R)	11	3
Charlotte	769	234
Greensboro	886	270
Raleigh	441	134
Wilmington	38	12
NORTH DAKOTA		
Bismarck	1660	506
Fargo	899	274
Williston	1905	581
OHIO		
Akron	1236	377
Cleveland	805	245
Columbus	833	254
Dayton	1003	306
Mansfield	1312	400
Toledo	692	211
Youngstown	1186	361
OKLAHOMA		
Oklahoma City	1304	397
Tulsa	676	206
OREGON		
Astoria	22	7
Burns (U)	4170	1271
Eugene	373	114
Meacham	4056	1236
Medford	1329	405
Pendleton	1495	456
Portland	39	12
Salem	201	61
Sexton Summit (R)	3841	1171
PACIFIC AREA		
Canton Island	11	3
Eniwetok	21	6
Johnston Island	17	5
Koror (R)	109	33
Kwajalein	26	8
Majuro, Marshall Islands	10	3
Marcus Island	55	17
Ponape (R)	151	46
Taguac, Guam (R)	365	111
Truk (Moen Island)	8	2
Wake Island	12	4
Yap (R)	56	17
Pago Pago	10	3
PENNSYLVANIA		
Allentown	385	117
Erie	737	225
Harrisburg	351	107
Philadelphia	28	9
Pittsburgh	1225	373
Reading (U)	323	98
Scranton	948	289
Williamsport	525	160
RHODE ISLAND		
Block Island	118	36
Providence	62	19
SOUTH CAROLINA		
Charleston (U)	48	15
Charleston	48	15
Columbia	225	69
Grnvl-Spartanburg	971	296
SOUTH DAKOTA		
Aberdeen	1300	396
Huron	1289	393
Rapid City	3168	966
SOUTH DAKOTA (Cont'd)		
Sioux Falls	1427	435
TENNESSEE		
Bristol	1525	465
Chattanooga	688	210
Knoxville	980	299
Memphis	284	87
Nashville	605	184
Oak Ridge (R)	914	279
TEXAS		
Abilene	1753	534
Amarillo	3604	1099
Austin	621	189
Brownsville	20	6
Corpus Christi	44	13
Dallas	488	149
Del Rio	1027	313
El Paso	3916	1194
Fort Worth	576	176
Galveston (U)	54	16
Houston	62	19
Lubbock	3241	988
Midland	2862	872
Port Arthur	22	7
San Angelo	1908	582
San Antonio	794	242
Victoria	117	36
Waco	508	155
Wichita Falls	1030	314
UTAH		
Milford	5033	1534
Salt Lake City	4227	1288
Wendover	4239	1292
VERMONT		
Burlington	340	104
VIRGINIA		
Lynchburg	937	286
Norfolk	30	9
Richmond	164	50
Roanoke	1176	358
Wallops Island	13	4
WASHINGTON		
Olympia	200	61
Seattle-Tacoma	450	137
Spokane	2365	721
Stampede Pass (R)	3967	1209
Walla Walla (U)	991	302
Yakima	1066	325
Quillayute	205	62
WEST INDIES		
San Juan, P. R.	62	19
Swan Island	35	11
WEST VIRGINIA		
Beckley	2514	766
Charleston	951	290
Elkins	2006	611
Huntington	838	255
Parkersburg (U)	637	194
WISCONSIN		
Green Bay	702	214
La Crosse	672	205
Madison	866	264
Milwaukee	693	211
WYOMING		
Casper	5290	1612
Cheyenne	6141	1872
Lander	5558	1694
Sheridan	3968	1209

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.
These are the elevations of the barometer (in feet and meters above mean sea level) to which station pressure values pertain in the "Climatological Data" table in the monthly publication CLIMATOLOGICAL DATA NATIONAL SUMMARY.

GENERAL SUMMARY OF TORNADOES, 1967

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Washington, D. C.

More tornadoes occurred in 1967 than in any prior year. A total of 912 tornadoes in 44 States on 173 days killed 116 persons, injured over 2,250, and caused millions of dollars property damage. The following paragraphs point up some of the details relative to tornadoes in 1967.

JANUARY.--More tornadoes (40) were reported in January 1967 than in any previous January in which records have been kept. Of the 40 tornadoes, 31 occurred on the 24th--8 in Illinois, 13 in Iowa, 9 in Missouri, 1 in Wisconsin. The most damaging of the January tornadoes struck St. Louis County, Mo., the evening of the 24th. It killed 3 persons, injured 216, destroyed 168 homes, caused major damage to 258, minor damage to 1,485, and destroyed 600 business establishments. About 2,000 families suffered losses totaling $15 million.

FEBRUARY.--Only 8 tornadoes occurred in February. The 15-year average is 19. Most of the storms caused relatively little damage. The most damaging tornado cut a path about 1 block wide and 4 blocks long through the northern part of Woodville, Tyler Co., Texas. Then, after lifting, it touched down again and cut a path 1 block wide and 3 blocks long. The total property damage was estimated at $500,000.

MARCH.--A total of 40 tornadoes were reported in March; the 15-year average is 42. As usual, the majority of the early-season tornadoes occurred in the south. Texas recorded 11, Alabama 7, and Arkansas 3. The other 19 tornadoes were scattered from Wisconsin to Georgia and from Iowa to Ohio.

APRIL.--Tornadoes in April are usually more numerous in the Central and North Central States than farther south as is the case with early-season tornadoes. Of the 146* tornadoes in April 1967, over half, 77*, occurred in 5 north-central and central States--Illinois 17, Iowa 17, Michigan 14, Minnesota 10, and Missouri 21.

At least 17 tornadoes struck northern Illinois on April 21. One of the most damaging cut a path 28 miles long and 600 to 1200 yards wide in Boone and McHenry Counties in midafternoon. Many farm homes were completely destroyed. This tornado killed 24 persons, injured 450, and damage was estimated in the millions of dollars. The forward movement of the tornado was estimated at 40 m.p.h. Later in the afternoon, another tornado in Cook County killed 33 persons, injured 500, and caused additional millions of dollars property damage. It destroyed more than 100 homes and damaged more than 300, besides business buildings, a high school, and many automobiles.

Thirteen tornadoes were observed in Iowa on April 30. Several of these caused property or crop damage in excess of $1/2 million. One of the storms smashed 119 buildings on 47 farms, mainly south of Northwood, before moving north-northeastward into Minnesota where it caused further damage in the Myrtle vicinity before lifting. Eight other tornadoes caused property damage exceeding $9 million in 5 counties in southern Minnesota on April 30. In Freeborn County alone, damage at 75 to 100 farmsteads ranged from light to total destruction. The 9 tornadoes killed 13 persons and injured 65 in Minnesota.

MAY.--On May 26, a tornado moving from west to east a mile north of downtown Phillipsburg, Kans., damaged a refinery. The loss was less than $50,000. This was the only tornado reported in Kansas in the 5-month period January to May. Kansas 15-year average for the first 5-month period is 33 tornadoes.

JUNE.--More tornadoes--205--occurred in June 1967 than in any previous month of record. Of the 205 tornadoes in the United States during June, 162 occurred in 9 States: South Dakota, Minnesota, and Wisconsin and southward to Texas. Thirty-six June tornadoes caused damage in excess of $50,000; 8 caused $500,000 or more property damage; and 1 over $5 million damage. This last tornado moved southward through the northeastern portion of Garden City, Kans., on the evening of June 23, destroying 125 dwellings, damaging 400 to 450 others, and causing considerable damage to other property.

Only 1 tornado was reported in Kansas prior to June. In that month, however, 20 were spotted. These were seen mostly in southwest and south-central Kansas. Only 2 tornadoes occurred in Nebraska in the first 5 months of 1967 but June brought 35 twisters. Twelve of these occurred on the 13th and 10 on the 14th. Most of the storms occurred over the eastern half of Nebraska.

JULY and AUGUST.--About the usual number of tornadoes occurred in July and August. There were 117 tornadoes compared with the 15- year average of 113. Three tornado deaths occurred in July-August 1967. The average is 2 tornado deaths in those months.

SEPTEMBER.--Tornado occurrences in September would have been well below average except for Hurricane Beulah. Hurricane Beulah, which moved inland east of Brownsville, Texas, September 20, on a northwesterly course, triggered more tornadoes than any hurricane of record. A total of 115 tornadoes were counted. Most of these occurred in south-central Texas, and along the Upper Coast and Coastal Bend sections but a few occurred as far north as Burleson in Johnson County. Most of these tornadoes were small, struck in rural areas, and caused only minor damage. The tornadoes killed 5 persons and injured 28. Tornadoes caused heavy damage at Burnet, New Braunfels, Fulton Beach, and Sweet Home. There were 24 additional tornadoes occurring in Texas and 11 other States, causing 7 injuries.

OCTOBER.--Thirty-four tornadoes occurred in 15 States on 7 days in October. Twenty-one of these occurred on October 24 in 5 States: Alabama, Illinois, Indiana, Michigan, and Missouri. The worst October tornado, starting as a waterspout in the Gulf of Mexico, struck Mississippi City, Miss., killing 4 persons, injuring 175 others, and causing extensive damage to homes, trailers, motels, and other businesses.

NOVEMBER.--Eight tornadoes occurred in November. One of these struck in Massachusetts on the 18th. This was the only tornado in that State during 1967.

DECEMBER.--More tornadoes occurred in December 1967 than in any preceding December. Sixty-three were counted--more than four times the 15-year average. They struck 14 States on 8 days. Twenty-one of the storms touched down in Missouri, Illinois, and Indiana and 33 were scattered across the Deep South from Texas to the Carolinas. One report came from Hawaii. The Hawaiian tornado struck the Island of Kauai early

* Two tornadoes crossed the Iowa-Minnesota State line in April. A tornado that crosses from one State to another is counted as having occurred in each State but only once in the National total.

Monday morning December 18, causing $1 million damage. It was the 5th tornado observed in the Hawaiian Islands in 50 years.

SUMMARY.--The annual tornado count 912, exceeded the number of tornadoes in any previous year. Tornadoes were especially numerous in January, June, September, and December. Hurricane Beulah triggered 115 tornadoes in Texas on September 19 to 23 setting a new record for any hurricane. Sixty-nine on the 20th set a new record for any date. Tornadoes did not occur in 6 States in 1967: Alaska, Connecticut, Montana, Rhode Island, Vermont, and Washington.

The tables and figures on the following pages include additional information to supplement the above summary.

TABLE 1. TORNADO SUMMARY 1967

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
ALA.													
Number			7		2	2	1			2	2	6	22
Days			1		2	2	1			1	2	5	14
Deaths			2		1	0	0			0	0	2	5
Injuries			31		25	0	0			4	9	29	98
ALASKA													
(None)													
ARIZ.													
Number							2	2				1	5
Days							2	2				1	5
Deaths							0	0				0	0
Injuries							0	0				0	0
ARK.													
Number		1	3	3	4		1					2	14
Days		1	2	1	3		1					1	9
Deaths		0	0	0	0		0					0	0
Injuries		0	10	1	1		0					6	18
CALIF.													
Number				4	1								5
Days				3	1								4
Deaths				0	0								0
Injuries				0	0								0
COLO.													
Number					5	9	5		1				20
Days					4	8	3		1				16
Deaths					0	0	0		0				0
Injuries					0	4	0		0				4
CONN.													
(None)													
DEL.													
Number	1							1		2			4
Days	1							1		1			3
Deaths	0							0		0			0
Injuries	7							0		0			7
FLA.													
Number		1			4	4	1	2	1	1		8	22
Days		1			4	4	1	2	1	1		3	17
Deaths		0			0	0	0	0	0	0		2	2
Injuries		2			2	0	0	0	0	44		84	132
GA.													
Number			3	3	8	1	4	2			2	1	24
Days			2	1	6	1	3	2			2	1	18
Deaths			0	0	0	0	0	0			0	0	0
Injuries			0	0	0	0	0	0			2	2	4
HAWAII													
Number												1	1
Days												1	1
Deaths												0	0
Injuries												0	0
IDAHO													
Number						1							1
Days						1							1
Deaths						0							0
Injuries						0							0
ILL.													
Number	8		1	17	3	5	1	1		1		3	40
Days	1		1	1	3	4	1	1		1		1	14
Deaths	1		0	58	0	0	0	0		0		0	59
Injuries	8		0	1051	0	0	0	0		0		2	1061
IND.													
Number		1		3	2	2	2		1	9		11	31
Days		1		2	1	2	2		1	1		2	12
Deaths		0		0	0	0	0		0	0		0	0
Injuries		0		2	0	0	2		1	8		4	17
IOWA													
Number	13		1	17	3	18	1						53
Days	1		1	4	2	9	1						18
Deaths	1		0	2	0	0	0						3
Injuries	12		0	17	0	8	0						37
KANS.													
Number					1	20	2	1	2				26
Days					1	9	2	1	2				15
Deaths					0	2	0	0	0				2
Injuries					0	42	0	0	0				42
KY.													
Number		2	2		4		1					4	13
Days		1	1		4		1					1	8
Deaths		0	0		0		0					0	0
Injuries		0	5		2		0					0	7

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
LA.													
Number	1			7	7				2	2			19
Days	1			3	3				1	1			9
Deaths	0			0	0				0	0			0
Injuries	0			3	8				0	16			27
MAINE													
Number						1							1
Days						1							1
Deaths						0							0
Injuries						0							0
MD.													
Number	1				1		1	2					5
Days	1				1		1	2					5
Deaths	0				1		0	0					1
Injuries	0				0		0	0					0
MASS.													
Number											1		1
Days											1		1
Deaths											0		0
Injuries											0		0
MICH.													
Number				14		1	2		1	1			19
Days				3		1	2		1	1			8
Deaths				0		0	0		0	0			0
Injuries				52		0	0		0	4			56
MINN.													
Number				10		12	6	1					29
Days				2		6	3	1					12
Deaths				13		0	1	0					14
Injuries				65		0	12	0					77
MISS.													
Number	1	1	1	5	2	1	2			1		11	25
Days	1	1	1	3	2	1	1			1		5	16
Deaths	0	0	0	0	0	0	0			4		3	7
Injuries	7	0	0	0	0	0	0			175		15	197
MO.													
Number	10			21	5	9	6	4		8		8	71
Days	2			4	5	6	2	3		1		2	25
Deaths	5			0	0	0	0	0		0		3	8
Injuries	239			22	1	0	0	0		8		67	337
MONT.													
(None)													
NEBR.													
Number			1		1	35		1	1				39
Days			1		1	9		1	1				13
Deaths			0		0	0		0	0				0
Injuries			0		0	5		0	0				5
NEV.													
Number					1				1				2
Days					1				1				2
Deaths					0				0				0
Injuries					0				0				0
N. H.													
Number							1						1
Days							1						1
Deaths							0						0
Injuries							5						5
N. J.													
Number										1			1
Days										1			1
Deaths										0			0
Injuries										0			0
N. MEX.													
Number			1			4	3						8
Days			1			4	1						6
Deaths			0			0	0						0
Injuries			0			0	0						0
N. Y.													
Number							1						1
Days							1						1
Deaths							0						0
Injuries							0						0
N. C.													
Number				1	2		2					1	6
Days				1	2		2					1	6
Deaths				0	0		0					0	0
Injuries				0	0		0					0	0

TABLE 1. TORNADO SUMMARY 1967 CONTINUED

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
N. DAK.													
Number						4	10	1		1			16
Days						2	4	1		1			8
Deaths						0	0	0		0			0
Injuries						0	0	0		0			0
OHIO													
Number			1			3	2						6
Days			1			2	1						4
Deaths			0			0	0						0
Injuries			0			0	4						4
OKLA.													
Number	4			12	4	23	4		2				49
Days	2			5	3	3	1		2				16
Deaths	0			0	0	4	0		0				4
Injuries	11			4	0	2	1		0				18
OREG.													
Number										1			1
Days										1			1
Deaths										0			0
Injuries										0			0
PA.													
Number								1	1	1			3
Days								1	1	1			3
Deaths								0	0	0			0
Injuries								0	0	7			7
R. I.													
(None)													
S. C.													
Number			2	1	4		1				2	1	11
Days			1	1	4		1				1	1	9
Deaths			0	0	0		0				0	0	0
Injuries			0	0	3		0				0	1	4
S. DAK.													
Number				6	1	11	5	2	2				27
Days				2	1	5	1	2	2				13
Deaths				0	0	0	0	0	0				0
Injuries				11	0	3	0	0	0				14
TENN.													
Number			1	3	6		2					3	15
Days			1	2	5		2					1	11
Deaths			1	0	1		0					0	2
Injuries			5	2	4		0					1	12

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
TEX.													
Number		2	11	17	34	22	10	5	124	2		5	232
Days		2	4	5	9	11	4	3	11	2		2	53
Deaths		0	0	0	0	2	0	0	5	0		0	7
Injuries		0	0	0	2	1	0	0	34	0		0	37
UTAH													
Number						1					1		2
Days						1					1		2
Deaths						0					0		0
Injuries						0					0		0
VT.													
(None)													
VIR.													
Number					1		1			1			3
Day					1		1			1			3
Deaths					0		0			0			0
Injuries					1		5			0			6
WASH.													
(None)													
W. VA.													
Number			2	1	2								5
Days			1	1	2								4
Deaths			0	0	0								0
Injuries			4	0	3								7
WIS.													
Number	1		3	1	4	12	6	3					30
Days	1		2	1	1	7	4	2					18
Deaths	0		0	0	0	0	0	2					2
Injuries	0		0	0	0	0	11	5					16
WYO.													
Number				2		4	2						8
Days				2		4	2						8
Deaths				0		0	0						0
Injuries				0		1	0						1
TOTALS													
Number	40	8	40	148 *146	112	205	88	29	139	34	8	66 *63	917 *912
Days	4	5	14	18	25	28	25	16	16	7	5	10	173
Deaths	7	0	3	73	3	8	1	2	5	4	0	10	116
Injuries	284	2	55	1230	52	66	40	5	35	266	11	211	2257

* Corrected for boundary-crossing tornadoes.

TABLE 2 -- NUMBER OF TORNADOES, TORNADO DAYS, AND DEATHS, 1953-67

Year	January Number	January Days	January Deaths	February Number	February Days	February Deaths	March Number	March Days	March Deaths	April Number	April Days	April Deaths	May Number	May Days	May Deaths	June Number	June Days	June Deaths	July Number	July Days	July Deaths
1953	14	6	0	17	3	3	40	10	24	45	16	34	99	21	162	114	24	244	40	19	0
1954	2	1	0	19	9	2	69	13	10	117	22	3	97	22	8	101	26	5	46	23	0
1955	2	2	0	4	3	0	41	15	4	101	18	7	150	26	103	148	28	2	50	21	5
1956	2	2	0	47	12	8	31	7	1	87	15	67	88	24	4	66	21	0	101	26	1
1957	17	3	13	5	3	0	39	7	1	216	21	29	226	26	87	148	25	14	54	19	0
1958	12	7	0	20	5	13	15	10	0	78	19	4	69	21	0	128	27	42	119	30	1
1959	15	2	3	19	5	21	42	11	9	30	12	1	225	28	8	73	25	2	62	24	0
1960	9	4	0	28	10	0	27	10	0	70	20	7	200	26	34	123	27	3	48	22	1
1961	1	1	0	31	8	0	121	17	7	73	19	3	135	25	23	101	23	2	77	27	0
1962	11	3	1	25	7	0	37	9	17	41	8	1	201	22	3	173	29	0	75	26	0
1963	14	5	1	6	3	0	49	12	8	82	14	16	69	21	1	93	23	0	62	26	0
1964	14	3	10	2	2	0	36	11	6	161	23	15	135	20	16	144	24	0	61	23	0
1965	21	11	0	29	4	0	33	9	2	130	20	264	271	25	19	149	28	6	86	26	0
1966	1	1	0	23	5	0	10	6	58	81	20	12	98	17	0	124	28	21	92	27	8
1967	40	4	7	8	5	0	40	14	3	146	18	73	112	25	3	205	28	8	88	25	1
TOTAL	175	55	35	283	84	47	630	161	150	1458	265	536	2175	349	471	1890	386	349	1061	364	17
MEAN	12	4	2	19	6	3	42	11	10	97	18	36	145	23	31	126	26	23	71	24	1

TABLE 2 -- NUMBER OF TORNADOES, TORNADO DAYS, AND DEATHS, 1953-67–Continued

Year	August Number	August Days	August Deaths	September Number	September Days	September Deaths	October Number	October Days	October Deaths	November Number	November Days	November Deaths	December Number	December Days	December Deaths	Annual Number	Annual Days	Annual Deaths
1953	26	15	0	5	4	0	6	4	0	11	6	0	20	8	49	437	136	516
1954	46	21	1	20	10	3	15	8	2	2	2	0	16	3	1	549	159	35
1955	34	18	0	16	8	2	23	7	1	20	4	1	3	2	0	593	153	125
1956	43	20	2	19	10	0	30	8	0	8	6	0	10	4	0	532	155	83
1957	26	14	0	17	10	2	17	11	2	61	11	25	38	4	18	864	154	191
1958	45	20	1	24	14	1	9	6	4	45	6	0	1	1	0	565	166	66
1959	37	18	0	54	15	14	19	10	0	11	4	0	2	2	0	589	156	58
1960	48	23	1	21	13	0	18	10	1	25	6	0	1	1	0	618	172	47
1961	25	16	0	53	16	15	13	5	0	36	7	1	16	5	0	682	169	51
1962	49	21	6	27	12	0	12	10	0	5	4	0	2	2	0	658	153	28
1963	27	13	2	33	12	3	14	5	0	12	6	0	0	0	0	461	140	31
1964	79	23	2	24	10	0	24	4	22	15	8	0	18	5	2	713	156	73
1965	60	23	2	62	20	0	15	4	0	35	6	5	7	4	0	898	180	298
1966	58	21	0	23	13	0	29	6	6	20	3	0	11	3	0	570	150	105
1967	29	16	2	139	16	5	34	7	4	8	5	0	63	10	10	912	173	116
TOTAL	632	282	19	537	183	45	278	105	42	314	84	32	208	54	80	9641	2372	1823
MEAN	42	19	1	36	12	3	19	7	3	21	6	2	14	4	5	643	158	122

AVERAGE NUMBER OF TORNADOES AND TORNADO DAYS EACH MONTH IN THE UNITED STATES

(Based on 9,641 Tornadoes That Occurred from 1953 to 1967)

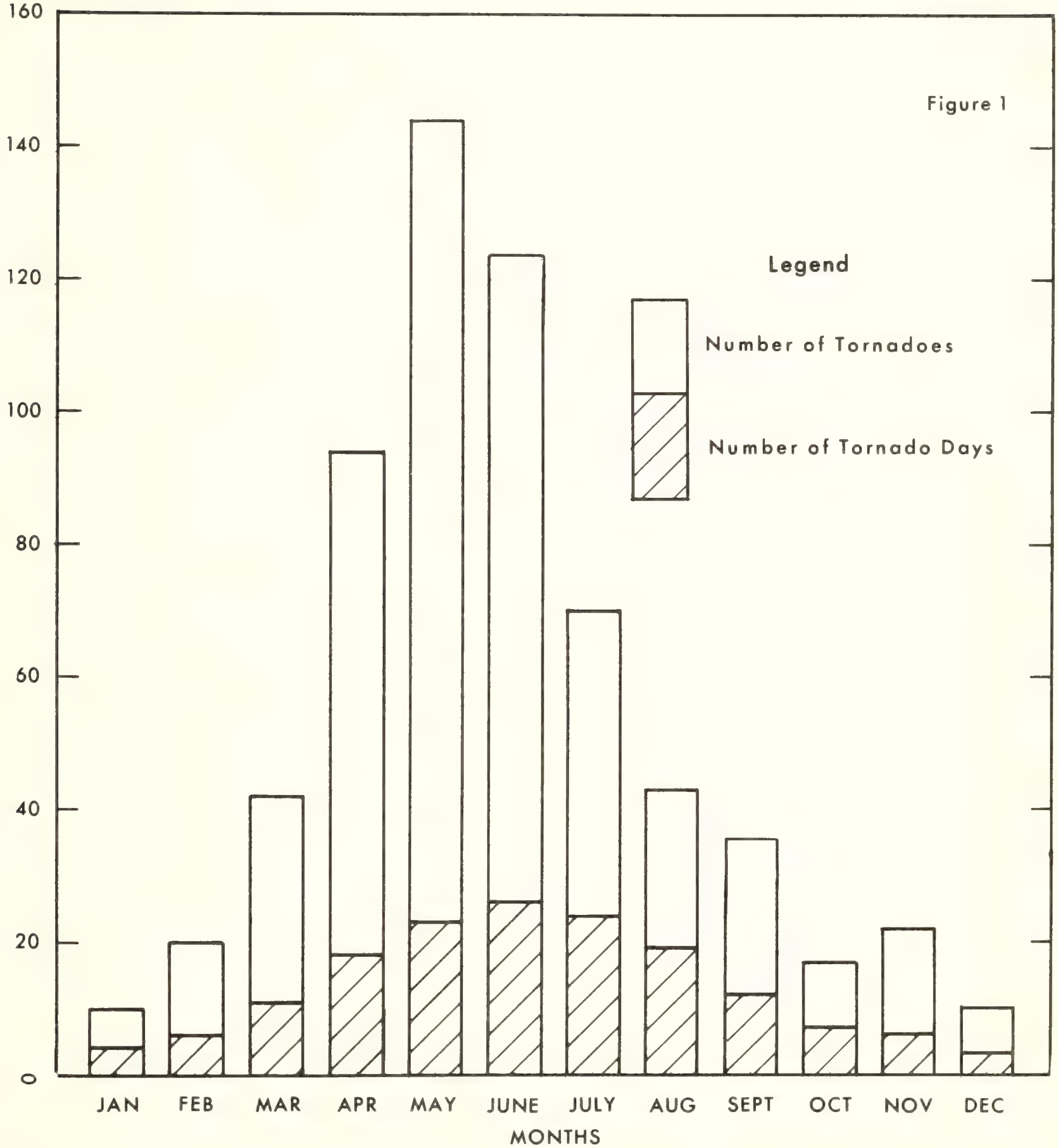


TABLE 3. NUMBER OF TORNADOES, TORNADO DAYS, AND RESULTING LOSSES BY YEARS, 1916-67

YEAR	Number tornadoes	Number tornado days	Total Deaths	Most deaths in a single tornado	Total property losses †	Number of tornadoes causing losses † in category 5	category 6	category 7 & over
1916	90	36	150	30	6	7	1	0
1917	121	38	509	101	7	21	9	0
1918	81	45	135	36	7	20	5	0
1919	64	35	206	59	7	10	2	0
1920	87	50	498	87	7	14	10	0
1921	105	55	202	61	7	22	3	0
1922	108	64	135	16	7	27	5	0
1923	102	59	109	23	6	21	1	0
1924	130	57	376	85	7	26	11	1
1925	119	65	794	689	7	34	2	1
1926	111	57	144	23	6	28	0	0
1927	163	62	540	92	7	42	9	1
1928	203	79	92	14	7	40	7	0
1929	197	74	274	40	7	48	4	0
1930	192	72	179	41	7	38	6	0
1931	94	57	36	6	6	14	1	0
1932	151	67	394	37	7	23	1	1
1933	258	96	362	34	7	46	9	0
1934	147	77	47	6	6	10	3	0
1935	180	77	70	11	6	29	0	0
1936	151	71	552	216	7	17	5	1
1937	147	75	29	5	6	24	0	0
1938	213	76	183	32	7	29	6	0
1939	152	75	87	27	7	21	3	0
1940	124	62	65	18	7	13	2	0
1941	118	57	53	25	6	24	1	0
1942	167	66	384	65	7	42	10	0
1943	152	61	58	5	7	28	8	0
1944	169	68	275	100	7	50	9	0
1945	121	66	210	69	7	21	10	1
1946	106	65	78	15	7	29	7	0
1947	165	78	313	169	7	46	7	1
1948	183	68	140	33	7	62	11	2
1949	249	80	212	58	7	54	13	0
1950	199	88	70	18	7	47	9	0
1951	272	113	34	6	7	35	11	2
1952	236	98	230	57	7	53	19	0
1953	437	136	516	116	8	63	18	7
1954	549	159	35	6	7	63	8	1
1955	593	153	125	80	7	74	13	1
1956	532	155	83	25	7	83	24	1
1957	864	154	191	44	8	129	26	3
1958	565	166	66	19	7	70	8	1
1959	589	156	58	21	7	70	4	1
1960	618	172	47	16	7	65	11	1
1961	683	169	51	16	7	103	21	1
1962	658	153	28	17	7	51	10	0
1963	461	140	31	5	7	77	15	1
1964	713	156	73	22	7	113	17	5
1965	898	180	298	44	8	126	30	11
1966	570	150	105	58	8	79	13	4
1967	912	173	116	33	8	125	33	8
Means: 1953-67	643	158	122	--	-	86	17	3

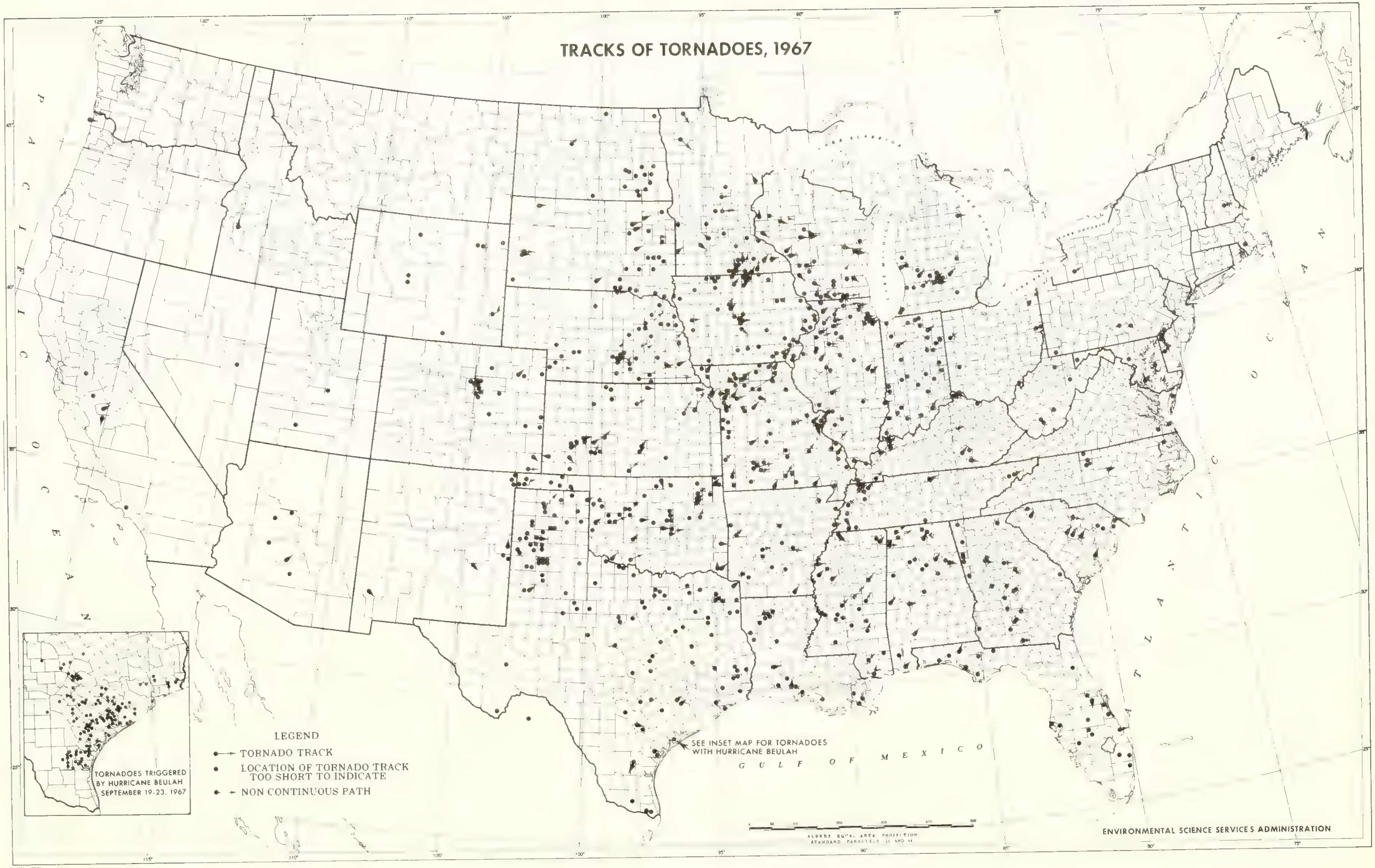
NOTE:--The above estimated losses are based on values at time of occurrence.

† Storm damages in categories:
5 $50,000 to $500,000 | 7 $5,000,000 to $50,000,000
6 $500,000 to $5,000,000 | 8 $50,000,000 and over.

This tabulation does not include funnel clouds that remained aloft or funnels on water surfaces only.

TABLE 4 -- NUMBER OF FUNNEL CLOUDS IN 1967

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Ala.			1	1	4		1					2	9
Alaska													0
Ariz.		1							1				2
Ark.			1	10	6								17
Calif.		1	2	7									10
Colo.					12	38	11		4				65
Conn.													0
Del.													0
D.C.													0
Fla.	4		1		12	16	16	22	7	2		3	83
Ga.		1		1	2			1			2		7
Hawaii				2									2
Idaho					2	8							10
Ill.	3			10	9	18	8	3		4			55
Ind.			1	14	4	12	14	7		4		1	57
Iowa	3		2	8	9	101	17	5					145
Kan.				4	3	58	5	7	1				78
Ky.				2				1				2	5
La.				9	3	4	5	5	2			1	29
Maine													0
Md.													0
Mass.													0
Mich.				3		7	3		4				17
Minn.				2		13	8	2					25
Miss.	2		2	1	30	1		4		3	4	5	52
Mo.				11	2	21	2	3					39
Mont.							1		1				2
Nebr.					2	35	4		1				42
Nev.					2								2
N.H.													0
N.J.													0
N. Mex.					1	4	12	2					19
N.Y.							3						3
N.C.					1		1						2
N. Dak.						9		1	4				14
Ohio					3	4	4	1					12
Okla.	3			14	11	24	3		1				56
Oreg.													0
Pa.													0
R.I.													0
S.C.	2												2
S. Dak.						8	1		1				10
Tenn.				4	7	1	1			4		4	21
Tex.			4	15	16	34	16	5	30		1		121
Utah						12	1						13
Vt.													0
Va.					1			1			1		3
Wash.					1								1
W. Va.													0
Wis.	3			4	3	15	1	2					28
Wyo.						13	4	1	2				20
TOTAL	20	3	14	122	146	456	142	73	59	17	8	18	1078


TRACKS OF TORNADOES, 1967
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
SEE INSET MAP FOR TORNADOES WITH HURRICANE BEULAH
LEGEND
TORNADO TRACK
LOCATION OF TORNADO TRACK TOO SHORT TO INDICATE
NON CONTINUOUS PATH
TORNADOES TRIGGERED BY HURRICANE BEULAH SEPTEMBER 19-23, 1967
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

HAILSTORM LOSSES FOR PAST YEARS

Year	Property (exclusive † of crops)	Crops †	Total †
1933	-	-	7
1934	-	-	7
1935	-	-	7
1936	6	7	7
1937	6	7	7
1938	6	7	7
1939	5	6	6
1940	6	7	7
1941	6	7	7
1942	6	7	7
1943	6	7	7
1944	7	7	8
1945	6	7	7
1946	7	7	7
1947	6	8	8
1948	7	8	8
1949	7	7	7
1950	7	7	7
1951	7	7	8
1952	7	7	7
1953	7	7	7
1954	7	8	8
1955	7	7	8
1956	7	8	8
1957	7	8	8
1958	7	8	8
1959	6	7	7
1960	7	8	8
1961	8	8	8
1962	9	8	9
1963	8	8	8
1964	8	8	8
1965	8	8	8
1966	8	8	8
1967	8	8	8

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50   4 $5,000 to $50,000   7 $5,000,000 to $50,000,000
2 $50 to $500   5 $50,000 to $500,000   8 $50,000,000 to $500,000,000
3 $500 to $5,000   6 $500,000 to $5,000,000   9 $500,000,000 to $5,000,000,000.

NOTE.--The above estimated losses are based on values at time of occurrence.

WINDSTORM LOSSES FOR PAST YEARS

(Windstorms other than tornadoes)

Year	Total loss of life	Total property loss †
1916	65	7
1917	25	6
1918	79	7
1919	344	7
1920	42	6
1921	65	7
1922	133	7
1923	68	7
1924	78	7
1925	88	7
1926	357	8
1927	64	7
1928	1,947	8
1929	46	7
1930	49	7
1931	17	7
1932	306	7
1933	156	8
1934	109	7
1935	461	7
1936	121	7
1937	43	7
1938	630	8
1939	60	6
1940	251	7
1941	43	7
1942	68	7
1943	61	7
1944	448	8
1945	85	7
1946	70	7
1947	117	8
1948	52	8
1949	102	8
1950	210	8
1951	289	8
1952	137	8
1953	118	8
1954	292	9
1955	301	8
1956	196	8
1957	553	8
1958	129	8
1959	145	7
1960	85	8
1961	64	8
1962	134	9
1963	54	9
1964	64	9
1965	107	9
1966	74	8
1967	48	8
	Total 9,650	

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50   4 $5,000 to $50,000   7 $5,000,000 to $50,000,000
2 $50 to $500   5 $50,000 to $500,000   8 $50,000,000 to $500,000,000
3 $500 to $5,000   6 $500,000 to $5,000,000   9 $500,000,000 to $5,000,000,000.

NOTE.--The above estimated losses are based on values at time of occurrence.

NORTH ATLANTIC TROPICAL CYCLONES, 1967

Richard M. DeAngelis
Environmental Data Service
Environmental Science Services Administration
Washington, D. C.

After a late start, the 1967 hurricane season recovered in the latter months to bring annual totals close to normal. While the total number of tropical cyclones (eight) was slightly below the latest 30-year average of 9.3, six of these reached hurricane proportions which is slightly above the 30-year average of 5.6. Beulah was the only great hurricane this season (central pressure below 950 mb. for 24 hr.).

A total of 68 people lost their lives as a result of hurricanes; damages caused by hurricane Beulah were estimated at $208 million. Shipping losses were minimal; one reported sinking occurred in the Bay of Biscay during the extratropical stages of Chloe.

Summaries of the individual tropical cyclones follow. Tracks are shown in the chart, and meteorological data are given in accompanying tables.

HURRICANE ARLENE, AUGUST 28-SEPTEMBER 4

Arlene became the season's first tropical cyclone on the 28th of August near 15°N., 35°W. Moving west-northwestward, the depression reached tropical storm strength the following day near 21°N., 45°W. A 1001-mb. central pressure, on the 30th, rose to 1009 mb. by September 1. The storm then intensified attaining hurricane strength on the 3d near 37.5°N., 56°W. Winds increased to 75 m.p.h. around a 994-mb. pressure center. The lowest reported pressure was 982 mb. on the 4th. Arlene was a hurricane for a day; she dropped back to tropical storm strength, early on the 4th, some 130 mi. southeast of Newfoundland. Turning east-northeastward the storm became extratropical later in the day near 46.5°N., 46°W.

HURRICANE BEULAH, SEPTEMBER 5-22

Killer hurricane Beulah ripped through the Caribbean Sea, across the Yucatan Peninsula to the Gulf of Mexico, before bringing her wrath to southern Texas. In her devastating wake Beulah left 59 persons dead, thousands homeless, and more then $200 million in property and crop damage. Texas was hard hit; floods resulting from the storm's torrential rains, aided initially by strong winds, caused most of the damage.

Beulah began as a weak tropical depression, east of the Windward Islands, on September 5. Early on the 7th reports from the islands, and reconnaissance aircraft, indicated tropical storm development about 35 mi. west of Martinique (14.5°N., 61.5°W.). Beulah's torrential rains battered the islands from St. Lucia to Guadeloupe. An 18-hr. rainfall of 11.85 in. was recorded at Martinique on the 8th. Moving into the warm Caribbean waters, the storm intensified to hurricane strength, on the 8th, some 330 mi. southeast of San Juan, Puerto Rico. Winds, at this time were 85 m.p.h. near the center with gales extending out 75 mi. in all directions. Late the following day pressure fell to 940 mb. Beulah passed within 70 mi. of Puerto Rico, lashing the southern coast with gale force winds and rough surf. On the 10th maximum winds increased to 140 m.p.h., highest in the storm's history, before Beulah brushed the southern coast of the Dominican Republic early on the following day. Moving westward across the Barahona Peninsula, Beulah's circulation was disrupted by rugged, mountainous terrain and upper atmospheric conditions; consequently winds dropped to 75 m.p.h. as the storm moved back into the Caribbean late in the day. The next two days saw Beulah degenerate to tropical storm intensity as it dipped south of Jamaica.

Beulah caused considerable damage and some good among the Caribbean Islands. Fifteen victims were counted on the island of Martinique. Homes were destroyed, flood waters poured 3 ft. deep in Fort-de-France and banana crops were flattened on the French Island. Damage was estimated at $4.5 million. At St. Vincent, gales and torrential rains caused two deaths along with extensive crop destruction. St. Lucia was also hit badly and damage was estimated at $3 million. With Puerto Rico, particularly the southern coastal regions, in the throes of its most severe drought, Beulah's torrential rains were a blessing. Pastures on the south coast were completely burned and the cattle industry was depending on emergency supplies. A drought-caused disease was killing off the coffee trees. Puerto Rico, therefore, fared the best receiving only gale force winds and much-needed rains. One person was killed in a storm-related accident. For the fourth year in the last five Haiti and the Dominican Republic reeled under the destructive force of a hurricane. Two lives were lost in the Dominican Republic; high winds and torrential rains wreaked havoc among the sugar cane and coffee crops.

Beulah degenerated to tropical storm strength on the 13th, some 150 mi. south of Kingston, Jamaica. The storm reorganized as it proceeded westward. She regained hurricane strength on the 14th about 425 mi. south-southeast of Havana, Cuba. The hurricane plowed through the northwest Caribbean on a northwesterly course toward the Yucatan Peninsula. Generating winds up to 125 m.p.h. around a 964-mb. pressure center, Beulah moved over the Mexican resort island of Cozumel and across the Yucatan Peninsula. Once inland the storm weakened; when it entered the Gulf of Mexico, just west of Progresso, winds had died to minimum hurricane intensity.

Damage on Cozumel Island was severe; 40 percent of the houses were destroyed along with several major resort hotels. Coastal towns along the east Yucatan coast were hard hit; piers were destroyed and lobster fishing boats were badly damaged. The biggest blow to Yucatan was the loss of almost the entire corn crop, in an area which supplies almost half the entire state's production.

Once over the warm waters of the Gulf of Mexico, Beulah regained the momentum and intensity she had lost on land. She continued west-northwestward and, early on the 18th, was located about 420 mi. southeast of Brownsville, Texas; maximum winds were 105 m.p.h. The intense hurricane turned to a northwesterly course. On the 19th, Beulah, some 175 mi. southeast of Brownsville, was generating 120-m.p.h. winds close to the center and gale force winds out to 250 mi. to the north. Reconnaissance reports indicated that the central pressure had dropped to 923 mb. This was the lowest reported pressure during the life of the storm.

Great hurricane Beulah moved inland just east of Brownsville, near the mouth of the Rio Grande, at 6 p.m. CST on the 20th. Brownsville's pressure dropped to 951 mb.; winds at the airport gusted to 109 m.p.h. before damaging the anemometer. Tides from Port Isabel to Rockport ran 7 to 10 ft. above normal.

Beulah moved north-northwestward to just south of Riviera. Early on the 21st the hurricane dropped to tropical storm intensity and turned slowly southwest-

TROPICAL CYCLONE DATA
HURRICANE BEULAH
SEPTEMBER 5 - 22 1967

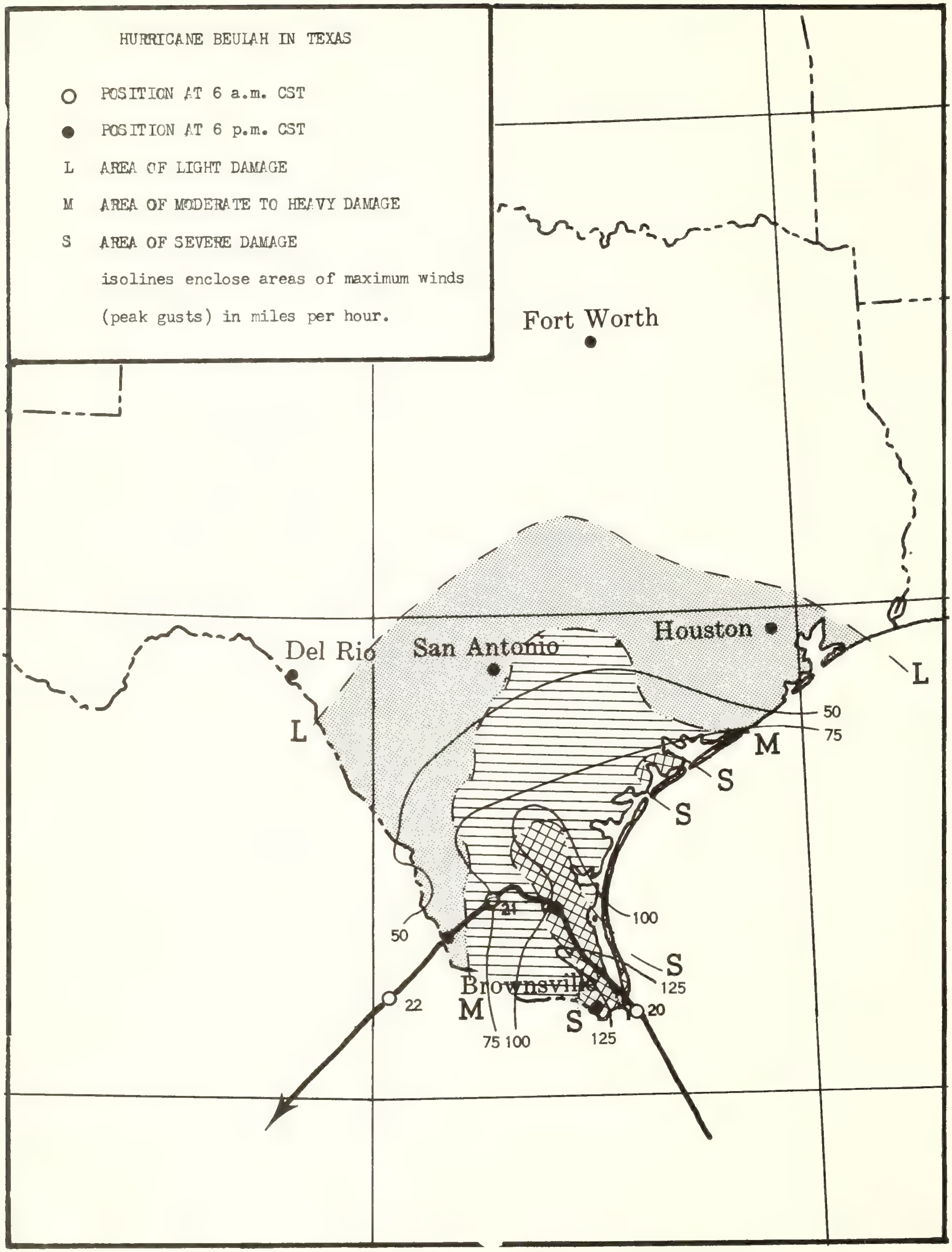
Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet)		Storm Rainfall (inches)
		Low	Time+	Fastest Mile	Time+	Gusts	Time+	#	Time+	
TEXAS	Sept.									
Alice	21	29.15	0100	ENE 58*	20/1900	ENE 97*	20/1915			14.84
Aransas Pass	20	29.44		SE 68*	1920	SE 84*	1920			16.71
Beaumont	20	29.85	1900	E 30	1505			3.0	1500	0.04
Brownsville (WBAS)	20	28.07	0700			NE 109†	0119			15.57
Corpus Christi (WBAS)	20	29.24	1710	ESE 72	1934	ESE 86	1935	7.0	2200	14.43
Edinburg	20			NW 85*	1500	NW 104*				15.34
Galveston (WBAS)	20	29.80	0600	SE 31	19/2155	SE 37	1458	3.4	2230	0.01
Houston (WBAS)	20	29.78	1756	ESE 28	1355	ESE 41	1355			2.80
Kingsville	20	29.00	1758	E 90*	0900-1000	E 108*	1000-1100			11.41
Laredo (WBAS)	21	29.41	0900-1000	N 29	1400	ENE 53	1400			7.25
Pharr	20	27.98	1530	NW 70*	0930	NW 102*	1000			21.50
Premont	20	28.82	1900	S 85*	1900	S 100*	21/0100			18.00*
Raymondville	20	28.12	1250	NE 115*	1100	NE 120*	1220			16.15
Rockport	20	29.52	1430	E 58*	2230	ESE 81*	2230			18.38*
San Antonio (WBAS)	20	28.91	1917	NE 27	1938	35	1607			5.55
Victoria	20	29.64	1645	E 35		E 47				12.97

+ Times are Central Standard
* Estimated
# Tide above normal
† Anemometer damaged

TROPICAL CYCLONE DATA
HURRICANE DORIA
SEPTEMBER 7 - 19 1967

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet)		Storm Rainfall (inches)
		Low	Time+	Fastest Mile	Time+	Gusts	Time+	#	Time+	
NEW JERSEY										
Atlantic City (WBAS)	16	29.84	0245	NE 26	0056	NE 39	0214	3.0	0554	0.53
DELAWARE										
Indian River Inlet	16			WNW 50*	0215	WNW 83*	0215			
MARYLAND										
Ocean City (USCG)	16					NE 58	0600	6.0 MLW	15/1900	1.44
Ocean City (Motel)	16			NE 55		NE 59	0530			1.03
Salisbury	16	29.65	0800	NE 29	1100	NE 55	1100			0.68
VIRGINIA										
Wallops Island (NASA 37°56'N. 75°28'W.)	16	29.63	1000	NE 49	1234	NE 59	1122			0.65
Wallops Island (NASA 37°51'N. 75°29'W.)	16	29.63	1005	NE 51	1131	NNE 60	0944			0.66
Norfolk (WBAS)	16	29.60	1615	NE 40	1619	N 55	1652	5.2 MLW	1950	0.53
NORTH CAROLINA										
Cape Hatteras (WBO)	16			SW 26	2018	SW 27	2019	2.0		1.04
Wilmington (WBAS)	17	29.83	10/0435	N 26	1313	N 25	1355	1.5		1.40 (9th and 10th)

+ Times are Eastern Standard
* Estimated
# Tide above normal except where noted


HURRICANE BEULAH IN TEXAS
POSITION AT 6 a.m. CST
POSITION AT 6 p.m. CST
L AREA OF LIGHT DAMAGE
M AREA OF MODERATE TO HEAVY DAMAGE
S AREA OF SEVERE DAMAGE
isolines enclose areas of maximum winds (peak gusts) in miles per hour.
Fort Worth
Houston
Del Rio
San Antonio
Brownsville
L
M
S
50
75
100
125
20
21
22

ward. Continuing to weaken, the storm crossed the border south of Laredo early on the 22d. Later in the day Beulah broke up in the mountains near Monterrey, Mexico.

Northern Mexico suffered extensive damage from Beulah's torrential rains and resultant flooding. Matamoros, San Fernando, Reynosa, San Miguel de Camargo, and Ciudad Carmargo were hard hit. Some 100,000 Mexicans were left homeless but only 19 persons lost their lives. Timely and accurate warnings allowed evacuation of low-lying areas.

The SHIRLEY LYKES, in Port Brownsville, reported a 118 kt. wind gust during Beulah's passage. Winds gusted to 125 m.p.h. or more over portions of Cameron and Willacy Counties. Hurricane force winds were felt as far north as the Matagorda Peninsula in the east and northern McMullen County in the west. Corpus Christi recorded a peak gust of 86 m.p.h. early on the 20th.

More damaging than wind or tide was the torrential rainfall which resulted in mammoth flooding of all streams and rivers south of San Antonio. Rainfall totals greater than 20 in. were recorded between Corpus Christi and San Antonio, and between Brownsville and Laredo. Five in. or more fell over an area bounded roughly by Laredo, Austin, and Houston. Rio Grande City, Edoy, Falfurrias, and Skidmore all reported 30 in. or more.

Record breaking floods resulted from the hurricane rainfall. The San Antonio River reached a record crest of 53.4 ft. near Goliad; flood stage at that point is 35 ft. The Nueces River crested at 46 ft.; the previous record crest on that river was 44 ft. The Lavaca River crested at 26.2 ft. at Edna, 5.2 ft. over flood stage, and the Navidad River crested at 31.9 ft. at Ganado, 10.9 ft. over flood stage. Most of the area south and east of a Laredo-San Antonio-Matagorda arc was isolated for over a week because of flooded roads. The Arroyo Colorado, swollen with water from a broken flood-control waterway, left its banks and caused extensive damage to an exclusive residential section in Harlingen. At Sinton, Three Rivers, and George West, flooding was the heaviest in the history of the towns. To compound the misery at Three Rivers, the floodwaters brought a smelly film of oil from nearby oil fields that left a stain on all city structures, marking the high water level.

Beulah spawned a multitude of small tornadoes in Texas; the count has reached 115 with further studies being made. This number surpassed the previous high of 26 hurricane-associated tornadoes during Carla in 1961. Most of the tornadoes were confined to the Upper Coast, South Central, and Coastal Bend sections; however, tornadoes occurred as far north as Burleson in Johnson County and as far west as the Big Bend area. Most of these tornadoes were small in size and occurred in rural areas where they dipped down just long enough to cause minor damage. One tragic exception was the tornado that struck near Palacios on the morning of the 20th, killing four persons and injuring six. All 10 persons were lifted into the vortex of the funnel and dropped in a nearby field. Another tornado struck Louise in Wharton County the same day, causing one death. Other tornadoes that resulted in damage occurred at Burnet on the 20th where the funnel moved across the entire width of the city causing an estimated $100,000 damage and one injury, and at New Braunfels, where on the same day, the tornado completely destroyed several homes and caused an estimated $250,000 damage. A tornado hit the Lavaca County community of Sweet Home on the 20th destroying the Post Office and causing $750,000 damage and three injuries, and another tornado hit Fulton Beach near Rockport on the same day causing $200,000 damage.

Fifteen persons died in Texas as a result of Hurricane Beulah. Five of these deaths were caused by tornadoes; 10 were the result of flooding. Only 35 injuries were reported. Property losses over the state are conservatively estimated at $160 million and crop losses at $40 million. Fence damage alone in the flooded area is estimated to be at least $10 million. At least 3,000 head of cattle were lost. Wind and flood damage to pepper, tomatoes, and cucumbers was extensive throughout the Rio Grande Valley. Millions of tons of rich topsoil were washed away; some areas lost up to 3 in. The Red Cross gave the following breakdown of storm damage to property: homes: 542 destroyed, 25,890 damaged; mobile homes: 198 destroyed, 477 damaged; farm buildings: 607 destroyed, 1,146 damaged; boats: 110 destroyed or major damage; small businesses: 520 destroyed or major damage. A Red Cross official said 31,263 families in Texas suffered losses of property of all categories.

HURRICANE CHLOE, SEPTEMBER 5-21

Hurricane Chloe, the season's third tropical cyclone, evolved from a depression which had originated just west of the Azores. Ship and satellite reports indicated Chloe had organized into a tropical storm, near 22.5°N., 38°W., early on the 8th. On the 9th, after a northerly journey, Chloe became a hurricane as maximum winds increased to 80 m.p.h. and pressure fell to 997 mb. The hurricane then turned westward with no significant change in intensity for the next two days. Late on the 11th the central pressure dipped to 987 mb. as the storm turned toward the northwest. Chloe reached maximum intensity late on the 13th when winds reached 110 m.p.h. around a 958-mb. pressure center; the center was located near 29°N., 52°W.

Chloe maintained her 105-m.p.h. punch until the 15th. Then, the storm, beginning to weaken, recurved toward the northeast. She crossed 35°N., near 58°W. on the 15th and 40°N., near 57°W. late on the 16th. Pressure rose to 973 mb. on the 15th, but then fell to 967 mb. by the 17th. Chloe accelerated eastward on the 17th. Early on the 18th the 969-mb. storm was centered near 43°N., 42°W.; maximum winds were still more than 90 m.p.h. The colder air of high latitudes gradually infiltrated Chloe's circulation and by the 21st the 992-mb. storm was deemed extratropical, in the Bay of Biscay, just north of Gijon, Spain. The storm moved along the northern coast of Spain and into southern France on the 21st. Once inland the storm gradually dissipated. In the Bay of Biscay the FIETE SCHULZE went down in heavy seas; 3 crewmen drowned and 11 were missing.

HURRICANE DORIA, SEPTEMBER 7-19

Doria developed from a tropical depression that had lingered off the central Florida coast for several days. The depression reached tropical storm strength, early on the 9th, some 90 mi. east of Melbourne, Florida. The pressure at this time was 1004 mb. Moving northeastward Doria intensified, reaching hurricane strength near 30.3°N., 77.2°W. early on the 10th. Later in the day winds reached 80 m.p.h. around a 984-mb. pressure center. The hurricane turned east-northeastward, dropped back to tropical storm intensity, then regained hurricane force within the space of 24 hr. Early on the

13th the pressure was 989 mb. and winds were 75 m.p.h.; the storm was centered near 36.8°N., 64.2°W.

Doria then reversed her direction and slowly turned westward. Late on the 14th Doria was generating 80-m.p.h. winds around a 973-mb. pressure center; this was the lowest reported pressure in this storm's history. Late on the 15th the ESSO NEW ORLEANS, some 60 mi. to the northwest of Doria's center encountered 90-kt. winds. Six hr. later, with the center 60 mi. to its south, the ESSO NEW ORLEANS reported northeast winds of 99 kt. Winds decreased to 90 m.p.h. as Doria continued to drift toward the Maryland - Virginia coast. At 7 a.m. e.s.t. on the 16th, less than 60 mi. offshore, Doria turned sharply southward. Winds along the Virginia - Maryland - North Carolina coast gusted from 55 to 60 m.p.h., tides ran 2-3 ft. above normal, and rainfall totaled 1/2 - 1 1/2 in. Only minor damage was reported along the coast from New Jersey to North Carolina. Three persons lost their lives off Ocean City, New Jersey in a boating accident.

The hurricane dropped to tropical storm intensity, late on the 16th, before making landfall at the Virginia-North Carolina border. On the 17th Doria moved over extreme eastern North Carolina and weakened to depression stage. The storm, continuing to degenerate, turned southeastward after leaving North Carolina. On the 18th the depression crossed the 75th meridian near the 32d parallel. The following day Doria turned eastward and dissipated.

TROPICAL STORM EDITH, SEPTEMBER 26-OCTOBER 1

Tropical storm Edith, fifth tropical cyclone of the season in the North Atlantic, formed east of the Lesser Antilles on the 26th. Reconnaissance aircraft first located the storm near 12.7°N., 49.5°W.; winds at this time were about 50 m.p.h. near the center. Edith, slowly intensifying, moved west-northwestward. On the 27th winds increased to 60 m.p.h. near the 1008-mb. pressure center which was located at 13.0°N., 51.5°W. - about 550 mi. east of Barbados. The storm weakened slightly as it moved slowly westward. On the 28th Edith stalled near 14.8°N., 57.0°W. At this time maximum winds were about 60 m.p.h.; gales extended 100 mi. in the northern semicircle and 50 mi. in the southern semicircle. Gradually the storm regained its westward movement. On the 29th Edith accelerated but remained weak and poorly organized, some 220 mi. east-southeast of Guadeloupe. Generating 50-m.p.h. winds, Edith passed between Dominica and Martinique on the 30th. The tropical storm weakened to a depression later in the day. By the 1st of October Edith had degenerated into an area of disturbed weather in the eastern Caribbean.

HURRICANE FERN, OCTOBER 1-4

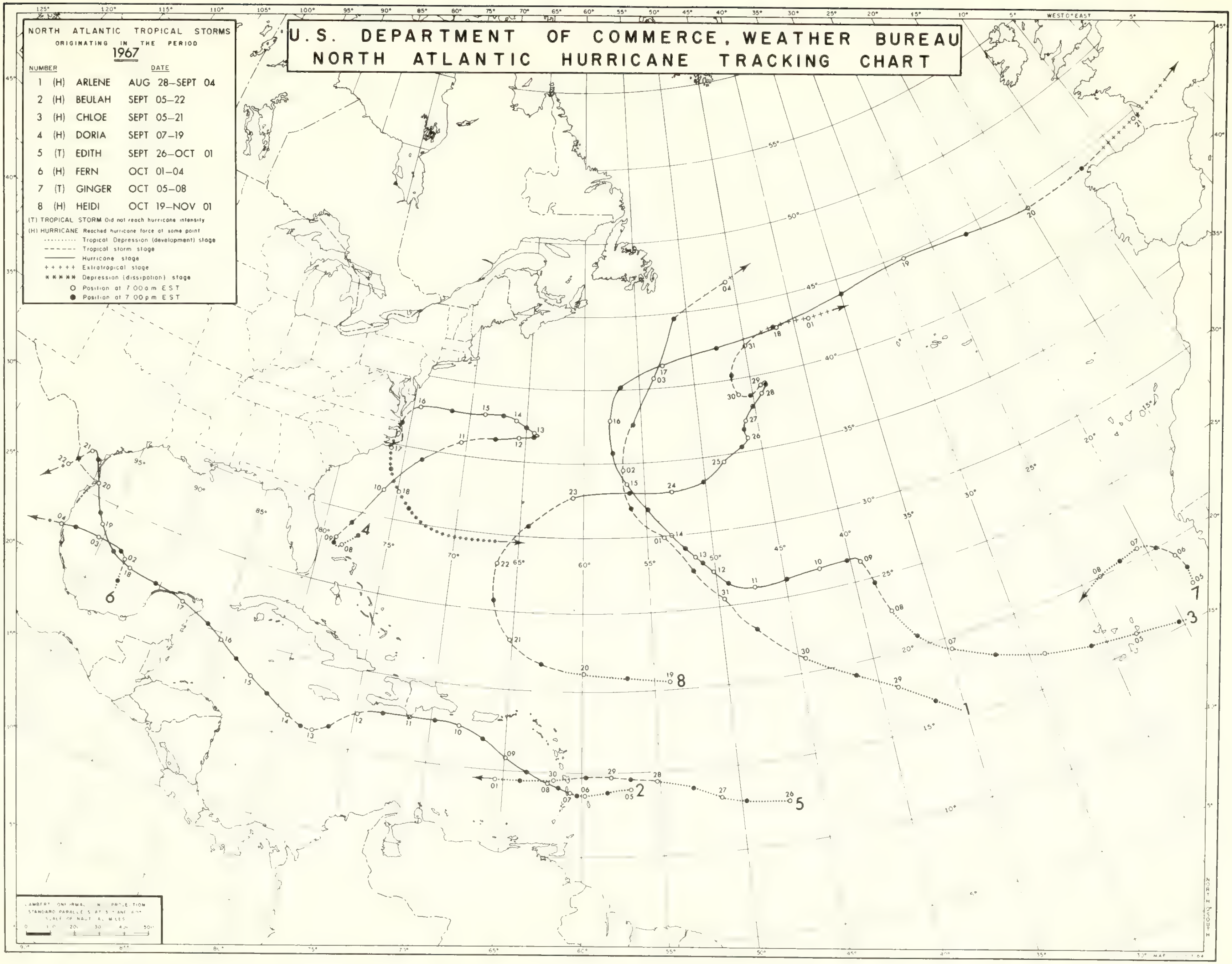
Fern developed rapidly from a tropical disturbance discovered in the Bay of Campeche on the 1st. The British ship PLAINSMAN encountered storm force winds and a pressure of 1004 mb. near the storm's center on the 2d. Early on the 3d, pressure had dropped to 987 mb. with winds of 85 m.p.h. The hurricane, which had been moving northward, turned toward the west. Fern began to fill as she approached the Mexican coast. Generating minimum hurricane force winds. Fern moved across the Mexican coastline just north of Tampico early on the 4th. Heavy rains accompanying the storm flooded the Panuco River at Tampico. Once inland the storm was torn apart by the Sierra Madre Oriental Mountains. The Panuco River, already high from Beulah's rains, overflowed drowning three persons. There was little damage from Fern.

TROPICAL STORM GINGER, OCTOBER 5-8

Tropical storm Ginger formed on the 5th, in the wake of a tropical depression which had moved off the African Coast two days earlier. Satellite photographs indicated a possible tropical storm circulation near 17°N., 18°W. on the 5th. It was not until the 6th when several ships reported 35- to 40-kt. winds that the existence of a tropical storm was confirmed. The storm crossed 20°N. near 19 °W. and turned westward early on the 7th. Ginger weakened to a depression at this time. Remnants of the circulation were tracked until the 8th.

HURRICANE HEIDI, OCTOBER 19-NOVEMBER 1

The last hurricane of the season was spawned about 500 mi. northeast of the Lesser Antilles in mid-October. The depression formed near 20.5°N., 54°W. The SUNRANA, near the center on the 20th, reported 50-kt. wind squalls and a 1008-mb. pressure. Heidi had been moving westward but late in the day she began to turn toward the northwest. The storm remained weak for the next two days as it turned northward then northeastward. On the 22d the HOMERIC encountered 60-kt. winds just east of the center. Later that day Heidi intensified as central pressure dropped to 995 mb. near 31°N., 64°W. Early on the 23d Heidi was upgraded to hurricane status. The hurricane moved east-northeastward for 24 hr. then turned toward the northeast again. During this time Heidi remained at minimal hurricane intensity. Maximum winds of 115 m.p.h. occurred on the 25th while lowest pressure - 981 mb. - was attained on the 26th. The GALICH encountered 80-kt. winds near the storm's center on the 27th. Heidi dropped to tropical storm strength near 39.5°N., 44°W. on the 29th. By the 30th the storm had lost its tropical characteristics and turned toward the east as an extratropical low.


U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
NORTH ATLANTIC HURRICANE TRACKING CHART
NORTH ATLANTIC TROPICAL STORMS
ORIGINATING IN THE PERIOD
1967
NUMBER
DATE
1 (H) ARLENE AUG 28–SEPT 04
2 (H) BEULAH SEPT 05–22
3 (H) CHLOE SEPT 05–21
4 (H) DORIA SEPT 07–19
5 (T) EDITH SEPT 26–OCT 01
6 (H) FERN OCT 01–04
7 (T) GINGER OCT 05–08
8 (H) HEIDI OCT 19–NOV 01
(T) TROPICAL STORM Did not reach hurricane intensity
(H) HURRICANE Reached hurricane force at some point
Tropical Depression (development) stage
Tropical storm stage
Hurricane stage
+ + + + + Extratropical stage
* * * * * Depression (dissipation) stage
Position at 7:00 a.m. EST
Position at 7:00 p.m. EST

NORTH ATLANTIC TROPICAL CYCLONES 1967

STORM NAME	DATE	ORIGIN	COAST LINES CROSSED	HIGHEST REPORTED WIND SPEED	LOWEST REPORTED PRESSURE	AREA OF DISSIPATION	INTENSITY	REMARKS
1. ARLENE	Aug. 28-Sept. 4	Mid-tropical Atlantic	None	75 kt. on Sept. 3	982 mb. on Sept. 3	East of Newfoundland	Hurricane	Latest starting first tropical cyclone since 1941
2. BEULAH	Sept. 5-22	East of Windward Islands	St. Lucia Dominican Republic Mexico Texas	130 kt. by Recon. on the 10th	923 mb. by Recon. on the 20th	Northern Mexico	Hurricane	Caribbean Islands: 20 deaths; $7.5 million damage; Mexico: 24 deaths Texas: 15 deaths; $200 million damage
3. CHLOE	Sept. 5-21	East of Cape Verde Islands	France	95 kt. on 13th	958 mb. on 13th	France	Hurricane	The German ship FIETE SCHULZE sank, in the Bay of Biscay; three men drowned, 11 missing.
4. DORIA	Sept. 7-19	East of central Florida Coast	North Carolina	99 kt. - ESSO NEW ORLEANS at 0000 on the 16th	973 mb. on 14th	South of Bermuda	Hurricane	Caused minor damage and beach erosion along Mid Atlantic States. Three deaths in boating mishap.
5. EDITH	Sept. 26-Oct. 1	East of Windward Islands	Martinique	48 kt. on 28th	1000 mb. on 28th	Eastern Caribbean	Tropical Storm	
6. FERN	Oct. 1-4	Gulf of Campeche	Central Mexico	74 kt. on 2d	987 mb. on 2d	West of Tampico, Mexico	Hurricane	Three people drowned in northern Mexico.
7. GINGER	Oct. 5-8	East of Cape Verde Islands	None	40 kt. on 6th		North of Cape Verde Islands	Tropical Storm	
8. HEIDI	Oct. 19-Nov. 1	Northeast of Leeward Islands	None	100 kt. on 25th	981 mb. on 26th	Northwest of Azores	Hurricane	

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS

TOTAL NUMBER OF TROPICAL CYCLONES, LOSS OF LIFE AND DAMAGE

	Total Number Tropical Cyclones*		Total Number Hurricanes		Loss of Life		Damage by Categories**	
Year	All Areas	Reaching U.S. Coast	All Areas	Reaching U.S. Coast	Total All Areas	United States	Total All Areas	United States
1886	10	7	8	6				
1887	17	4	10	3				
1888	10	6	5	3				
1889	9	4	5	2				
1890	1	0	1	0				
	47	21	29	14				
1891	11	4	8	2				
1892	9	3	4	0				
1893	12	7	10	6				
1894	6	3	[illegible]	2				
1895	6	4	2	1				
	14	21	29	11				
1896	6	4	6	4				
1897	[illegible]	4	2	1				
1898	[illegible]	6	4	3				
1899	6	4	5	3				
1900	7	3	3	1		6,000		7
	33	21	20	12				
1901	10	6	3	2		10		6
1902	5	3	3	1		#		#
1903	9	2	8	2		9		6
1904	5	3	2	2		#		6
1905	5	2	1	0		#		#
	34	16	17	7				
1906	11	6	6	4		285		7
1907	4	3	0	0		#		#
1908	8	2	5	1		#		#
1909	10	7	4	3		404		7
1910	4	2	3	2		13		6
	37	20	18	10				
1911	4	2	3	2		17		6
1912	6	1	4	2		12		6
1913	4	3	3	2		#		#
1914	1	1	0	0		#		#
1915	5	4	4	3		600		8
	20	11	14	9				
1916	14	8	11	6		107		7
1917	3	1	2	1		5		5
1918	5	2	3	1		34		6
1919	3	2	1	[illegible]		287		7
1920	4	3	4	2		2		6
	29	16	21	11				
1921	6	2	4	2		[illegible]		6
1922	4	1	2	0		0		#
1923	7	4	3	2		0		4
1924	8	3	5	2		2		3
1925	2	2	1	1		6		3
	27	12	15	7				
1926	11	4	8	4		269		8
1927	7	1	4	0		0		#
1928	6	3	4	2		1,836		7
1929	3	2	3	2		3		6
1930	2	1	2	0		0		2
	29	11	21	8				
1931	9	2	2	0		0		#
1932	11	5	6	2		0		#
1933	21	7	[illegible]	5		63		7
1934	11	5	6	3		17		6
1935	6	2	5	2		414		7
	58	21	28	12				
1936	16	7	7	3		9		6
1937	[illegible]	4	3	0		0		4
1938	8	4	3	2		600		8
1939	5	3	3	1		3		3
1940	8	3	4	2		51		6
	46	21	20	8				
1941	6	4	4	2		10		7
1942	10	3	4	2	17	8	7	7
1943	10	4	5	1	19	16	7	7
1944	11	4	7	3	1,076	64	8	8
1945	11	5	5	3	29	7	8	8
	48	20	25	11				
1946	6	1	3	1	5	0	7	7
1947	[illegible]	7	5	3	72	53	8	8
1948	9	4	6	3	24	3	7	7
1949	13	3	7	2	4	1	8	8
1950	13	4	11	3	27	14	7	7
	50	22	32	12				
1951	10	1	8	0	244	0	7	6
1952	7	2	6	1	16	3	6	6
1953	14	6	6	2	3	2	7	7
1954	11	4	8	3	720+	193	9	[illegible]
1955	12	5	9	3	1,518+	218	9	9
	54	18	37	9				
1956	8	2	4	1	76	21	8	7
1957	8	5	3	1	475	395	8	8
1958	10	1	7	0	49	2	7	7
1959	11	7	7	3	57	24	7	7
1960	7	5	4	2	585	65	8	8
	44	20	25	7				
1961	11	3	8	2	345	46	8	8
1962	5	1	3	0	4	4	6	6
1963	[illegible]	1	7	1	7,218	11	9	7
1964	12	6	6	4	266	49	[illegible]	9
1965	6	2	4	1	76	75	9	[illegible]
	43	13	28	8				
1966	11	2	7	2	[illegible]	54	8	[illegible]
1967	8	2	6	2	68	18	8	8
Total	662	291	392	160				
Median	8	4	4	2				

** The Weather Bureau has for some time recognized that, without detailed expert appraisal of damage, all figures published are merely approximations to fact. Since errors in dollar estimates vary in proportion to the total damage, storms are placed in categories varying from 1 to 9 as follows

1 Less than $50	4 $5,000 to $50,000	7 $5,000,000 to $50,000,000
2 $50 to $500	5 $50,000 to $500,000	8 $50,000,000 to $500,000,000
3 $500 to $5,000	6 $500,000 to $5,000,000	9 $500,000,000 to $5,000,000,000

Blank spaces indicate no figures available.

* Including hurricanes.

\# Not reported in literature, believed minor.

\+ Additional deaths for which figures are not available.

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS—CONT'D

Frequency of Tropical Cyclones (Including Hurricanes) by Months and Years

Year		May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
1886			3	1	2	2	2			10
1887		1		2	2	3	6	1	2	17
1888			1	1	2	2	1	3		10
1889		1	1		1	5	1			9
1890					1					1
1891				1	2	3	4	1		11
1892			1		1	4	3			9
1893			1	1	5	3	1	1		12
1894					2	1	3			6
1895					2	1	3			6
1896				1	1	2	2			6
1897					1	2	2			5
1898					2	5	2			9
1899				1	2	1	2			6
1900					1	3	3			7
1901			1	2	2	3	2			10
1902			2			1	1	1		5
1903				1	1	4	2	1		9
1904			1			1	3			5
1905						3	2			5
1906			2		1	3	4	1		11
1907			1			2	1			4
1908	(Mar.) 1			1	1	3	2			8
1909			2	2	2	2	1	1		10
1910					1	2	1			4
1911					2	1	1			4
1912			1	1		1	2	1		6
1913			1		1	1	1			4
1914						1				1
1915				1	2	2				5
1916			1	2	3	4	3	1		14
1917					2	1				3
1918					3	2				5
1919				1		1		1		3
1920						4				4
1921			1			3	2			6
1922			1			1	2			4
1923					1	1	5			7
1924			1		2	2	2	1		8
1925						1		1		2
1926				1	2	5	2	1		11
1927					1	3	3			7
1928					2	3	1			6
1929			1			1	1			3
1930					2					2
1931			1	1	2	3	1	1		9
1932		1			3	3	3	1		11
1933		1	1	3	7	5	3	1		21
1934		1	1	1	2	2	3	1		11
1935					3	1	2			6
1936			3	2	6	4	1			16
1937				1	2	6				9
1938					3	1	3	1		8
1939			1		1	1	2			5
1940		1			3	2	2			8
1941						4	2			6
1942					3	3	3	1		10
1943				1	2	4	3			10
1944				3	2	4	2			11
1945			1	1	4	3	2			11
1946			1	1	1	1	2			6
1947				1	2	3	3			9
1948		1		1	2	3	1	1		9
1949					3	7	2	1		13
1950					4	3	6			13
1951		1			3	4	2			10
1952	(Feb.) 1				2	2	2			7
1953		1			3	4	4	1	1	14
1954			1	1	2	4	1	1	1	11
1955				1	4	5	2			12
1956			1	1	1	4	1			8
1957			2		1	4	1			8
1958			1		4	4	1			10
1959		1	2	2	1	3	2			11
1960			1	2	1	3				7
1961				1		6	2	2		11
1962					2	2	1			5
1963				1	1	5	2			9
1964			1	1	4	4	1	1		12
1965			1		2	2	1			6
1966			1	4	1	4		1		11
1967					1	4	3			8
	Mar. Feb.									
Totals	1 1	10	43	50	146	226	151	30	4	662

Frequency of Tropical Cyclones Reaching Hurricane Intensity by Months and Years

Year		May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1886			2	1	2	2	1			8
1887				1	2	3	2	1	1	10
1888			1		2		1	1		5
1889		1			1	3				5
1890					1					1
1891				1	2	3	2			8
1892					1	2	1			4
1893			1	1	5	3				10
1894					1	1	3			5
1895					1		1			2
1896				1	1	2	2			6
1897					1	1				2
1898					2	2				4
1899				1	2	1	1			5
1900					1	2				3
1901				1	2					3
1902			1			1	1			3
1903				1	1	3	2	1		8
1904						1	1			2
1905							1			1
1906			1		1	2	2			6
1907										0
1908	(Mar.) 1			1		2	1			5
1909				1	1	1	1			4
1910						2	1			3
1911					2	1				3
1912						1	2	1		4
1913			1		1	1				3
1914										0
1915					2	2				4
1916			1	2	3	2	2	1		11
1917					1	1				2
1918					2	1				3
1919						1				1
1920						4				4
1921			1			2	1			4
1922						1	1			2
1923					1	1	1			3
1924					2	1	1	1		5
1925								1		1
1926				1	2	4	1			8
1927					1	3				4
1928					2	1	1			4
1929			1			1	1			3
1930					2					2
1931						2				2
1932					3	1	1	1		6
1933			1	1	3	3	1			9
1934			1	1	1	1	1	1		6
1935					2	1	2			5
1936			1	1	3	2				7
1937						3				3
1938					2	1				3
1939					1		2			3
1940					3	1				4
1941						3	1			4
1942					3			1		4
1943				1	1	2	1			5
1944				2	1	3	1			7
1945			1		1	1	2			5
1946				1		1	1			3
1947					2	1	2			5
1948					1	3	1	1		6
1949					2	4	1			7
1950					4	3	4			11
1951		1			2	3	2			8
1952					2	2	2			6
1953					2	3	1			6
1954			1		2	3	1		1	8
1955					3	5	1			9
1956				1	1	1	1			4
1957			1			2				3
1958					3	3	1			7
1959			1	2		3	1			7
1960				1	1	2				4
1961				1		5	1	1		8
1962					1	1	1			3
1963				1	1	4	1			7
1964					2	3	1			6
1965					2	1	1			4
1966			1	3	1	1		1		7
1967					1	3	2			6
	Mar.									
Totals	1	2	18	29	108	145	73	13	2	392

TROPICAL CYCLONES IN THE EASTERN NORTH PACIFIC, 1967

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Seven hurricanes and 11 tropical storms originated in the eastern North Pacific during the 1967 tropical cyclone season. The season began on June 7, with the appearance of tropical storm Agatha, and ended November 3 when Ramona dissipated. Hurricane Sarah moved into the western Pacific and, as a 130-kt. typhoon, ravaged Wake Island. Two tropical depressions failed to reach storm intensity.

The total of 18 tropical cyclones originating in the eastern North Pacific betters the previous record of 13 set in 1966. There can be no doubt the apparent increase in storm activity is due to the now regular surveillance of the area by weather satellites. Weather satellite pictures (APT) were the number one tool for detection, tracking, and evaluation. Ship reports were sparse, particularly on storms for which warnings had been issued. Aircraft reconnaissance was regularly accomplished by the U. S. Air Force; some of the flights were staged from southern California to increase range over that from the home base at Sacramento.

Two destructive hurricanes, Katrina and Olivia, tore up the east coast of Baja California and a third, Priscilla, lashed the Revillagigedo Islands with 80-kt. winds. One death was charged to Katrina at San Felipe and there were reports of two drownings at Mulege during Olivia. A large number of people were left homeless at San Felipe and Mulege; the fishing fleet was wiped out and five million dollars property damage was estimated at San Felipe. Hurricane Lily threatened southern California with heavy rains and squally winds before turning away during dissipation. Destructive surf from storms to the south was a recurrent problem on southern California beaches and piers.

Summaries of the individual tropical cyclones follow. All time references are GMT. Tracks and tropical cyclone highlights are shown in the accompanying table and chart.

TROPICAL STORM AGATHA, JUNE 7-10

Ship reports and satellite photos marked the beginning of tropical storm Agatha at 0000 on June 7. The center of the tropical depression was located at 14.0°N., 117.0° W., and maximum winds were estimated at 33 kt. The depression, moving westward, reached tropical storm strength later in the day. Winds increased to 50 kt. as Agatha continued along a westerly course on the 9th. Early on the 10th the storm began to dissipate. At 1800 on the 10th, reconnaissance aircraft found a weak center near 15.2°N., 125.6°W. Early on the 11th there was no organized circulation.

TROPICAL STORM BRIDGET, JUNE 16

Tropical storm Bridget developed from a squally depression near 16.3°N., 101.3°W., at 0000 June 16. The storm, generating 40-kt. winds, moved northwestward then turned northward only to be absorbed by a thermal trough over Mexico as it reached 17.3°N., 102.7°W., at 1800 on the 16th.

HURRICANE CARLOTTA, JUNE 22-26

Carlotta became the first hurricane of the season early on the 24th. First indication of a tropical disturbance was noted late on the 21st when the AWATA MARU reported a north wind of 20 kt. and a pressure of 1008 mb. near 11°N., 102°W. Satellite pictures later in the day indicated a squally area with no definite circulation. Early on the 22d the AWATA MARU reported 1005.8 mb. and a southwest wind of 30 kt. Later in the day the KEYSTONER, some 100 mi. southwest of Acapulco, Mexico, encountered easterly winds of 35 kt., frequent squalls, and rough to heavy seas. At 1800 Carlotta was upgraded to a tropical storm near 14°N., 102°W. Moving northwestward the storm reached hurricane strength at 0000 on the 24th near 17°N., 105°W. Carlotta, generating 65-kt. winds, continued northwestward. At 1800 on the 25th the storm dropped below hurricane intensity and was generating 50-kt. winds within 20 mi. of its center. Degeneration continued as maximum winds dropped to 35 kt. early the following day. Carlotta dissipated early on the 27th near 23°N., 116°W., as winds diminished to 25 kt.

TROPICAL STORM DENISE, JULY 5-15

Tropical storm Denise evolved from a tropical depression near 15°N., 112°W., late on the 8th. The depression had its origin in a loosely organized area of squalls which had first appeared on satellite pictures near 10°N., 96°W., late on the 5th. Maximum winds were estimated near 40 kt. at 0000 on the 9th. The storm moved on a west-northwesterly track reaching 17°N., 120°W., by 0000 on the 11th. Maximum winds increased to 55 kt. near the center late on the 10th but decreased to 35 kt. 24 hr. later. Denise then accelerated westward across the broad expanse of the Pacific. Satellite photos taken on the 15th indicated Denise had dropped below tropical storm intensity near 16°N., 147°W.

TROPICAL STORM ELEANOR, JULY 13-15

Tropical storm Eleanor formed in the wake of tropical storm Denise late on the 13th. It was first recognized as a storm near 17°N., 121°W., close to where Denise had passed 3 days earlier. Maximum winds at this time were estimated at 45 kt. Early the next day the storm was generating 55-kt. winds close to its center. The CHEVRON TRANSPORTER, some 100 mi. northeast of the center, reported 40-kt. winds. At 0000 on the 15th Eleanor was located near 18°N., 128°W. Continuing west-northwestward the storm weakened, then degenerated into a trough of low pressure late on the 15th near 20°N., 133°W.

TROPICAL STORM FRANCENE, JULY 23-27

Tropical storm Francene began as a tropical depression near 12°N., 96°W., on the 23d. Storms forming in this area during July tend to move parallel to the coastline, and Francene was no exception. The depression reached tropical storm intensity early on the 24th. Francene moved west-northwestward then northwestward remaining 150-300 mi. off the coast of Mexico and Baja California. This small, well-organized storm was encountered by the UNION FREEDOM on the 26th. At 1400 the ship reported north-northeast winds of 55 kt. and a barometer reading of 996 mb. as it passed within 30 mi. of the storm's center. Maximum winds were estimated at about 60 kt. during this period. Late on the 27th, near 26 °N., 118°W., reconnaissance aircraft found that the storm was dissipating.

YEAR 1967

TROPICAL STORM GEORGETTE, JULY 25-30

While Francene was off the Baja California coast Georgette was developing from a depression near 15°N., 127°W. Georgette was generating 50-kt. winds late on the 26th when storm intensity was first detected. The storm moved westward past 130°W. during the night then turned toward the northwest to continue in that direction for the next 3 days. It dropped to depression stage near 21°N., 137°W., early on the 30th.

TROPICAL STORM HILARY, AUGUST 9-10

Short-lived tropical storm Hilary was detected by satellite on the 9th at 2200 near 17.5°N., 110°W. Maximum winds were estimated at 40 kt. The storm moved westward for about 24 hr. in an area with no surface reports, then was found as a disorganized cloud mass near 19°N., 115°W., at 2235 on the 10th.

TROPICAL STORM ILSA, AUGUST 11-17

Tropical storm Ilsa was detected on the 11th when the NORBERTO CAPAY reported 12-ft. seas and east-northeast winds blowing at 45 kt. At 1800 the center of the storm was located near 13°N., 106°W. Ilsa moved along a track between west and northwest for the next 6 days. She reached peak intensity on the 14th as high altitude air reconnaissance estimated 60-kt. surface winds near the storm center at 20°N., 120°W. Reporting ships managed to stay out of the path of this storm and no winds of more than 20 kt. were reported after initial detection. By the 17th Ilsa had turned into a weak, unorganized depression near 23°N., 130°W.

HURRICANE JEWEL, AUGUST 17-21

Hurricane Jewel, second hurricane of the season in eastern North Pacific waters, was found by the EXCELLENCY at 1800 August 17 as an intensifying storm generating 35-kt. winds and 10-ft. seas. Apparently the storm was developing from a cloud mass which had been photographed by satellite near 15°N., 111°W., on the previous day. The storm was moving west-northwestward. On the 18th reconnaissance reports indicated 60-kt. winds; a few hours later the PIONEER MIST encountered hurricane force winds and a pressure of 977 mb. From this report winds were estimated at about 90 kt. near the center which was located at 18°N., 117°W. Late on the 19th the hurricane dropped to tropical storm intensity and turned northwestward; moving over colder water the storm continued to dissipate. At 1200 on the 20th Jewel was located near 22°N., 123°W. Air Force reconnaissance found remains of the storm near 24°N., 126°W., at 1800 on the 21st. Only a disorganized cloud mass remained the next day.

HURRICANE KATRINA, AUGUST 29-SEPTEMBER 2

The JOHN LYKES encountered 42-kt. winds and 8-ft. seas west of Acapulco on the 29th. This was the first indication of a brewing storm soon to become hurricane Katrina, one of the two devastating storms of the season. It is possible that the storm had organized the night before. At 1800 on the 30th reconnaissance reports placed the tropical storm center at 20°N., 110°W. The storm, moving northward, intensified rapidly. The Danish freighter CIMBRIA, within 60 mi. of the eye, reported hurricane force winds and 30-ft. seas. Southeasterly winds piled water into the Gulf of California. Katrina crossed Baja California late on the 31st. On September 1 Katrina moved northward over the Gulf of California to wreak havoc at San Felipe, a fishing-resort village. Destruction came as a result of torrential rains, a tidal surge, and hurricane force winds. When it was over, half the town was demolished. Some 1,500 of the town's 5,000 people along with 2,000 tourists were left stranded; only one person died. The biggest loss was the town's shrimp-fishing fleet--its major source of income. Some 28 of the 41 fishing vessels were irreparably damaged. One pilot counted 60 vessels, fishing and pleasure craft, wrecked as he flew down the coast. The highway between San Felipe and Mexicali was washed out and the normally arid desert area looked like a big lagoon. Damage at San Felipe was estimated at $5 million. After ravaging the Gulf Coast of Baja California, Katrina weakened and moved into northern Mexico. Remnants of the storm were tracked into Arizona; they caused more than 2 in. of rain at Yuma.

HURRICANE LILY, SEPTEMBER 5-11

Hurricane Lily evolved, on the 3d, from a heavy cloud mass in the intertropical convergence zone. At 0000 on the 4th the depression was located near 13° N., 106°W. Twenty-four hr. later, near 13°N., 107°W., the depression was upgraded to tropical storm intensity as maximum winds reached 50 kt. Late on the 5th the SUAMICO encountered 40-kt. winds; the following day the AMERICAN ROBIN, within 50 mi. of the storm's center, reported 70-kt. winds, 20-ft. seas, and a 991-mb. pressure. The storm had become a hurricane and was located near 14°N., 114°W., at 1800 on the 6th. The hurricane, still intensifying took a north-westerly track. The KYSKA felt the full force of Lily, late on the 8th, near 21°N., 120°W., when she encountered 85-kt. winds in mountainous seas. The hurricane turned northward; reconnaissance aircraft found the center near 25°N., 123°W., at 1800 on the 8th; maximum winds had dropped to 65 kt. Moving over relatively cool water, Lily began to dissipate. At 0500 on the 10th the AMERICAN CONDOR, within a few miles of the center, reported 50-kt. winds and 9-ft. seas. Lily, now a tropical storm, continued to weaken and became a disorganized depression as she reached the 30th parallel near 120°W.

HURRICANE SARAH, SEPTEMBER 8-22

Sarah sprung up over the central North Pacific in early September. On the 8th, near 11.2°N., 149.2°W., she was an organized tropical storm; winds near the center were 40 kt. Moving west-northwestward at a forward speed of 15 kt. the storm intensified; by the 10th Sarah was a full-fledged hurricane generating 65-kt. winds. As Sarah moved along, some 300 mi. southwest of the Hawaiian Islands, she dropped back to tropical storm intensity. On the 11th she turned westward after reaching 18.4°N., 164.4°W. Tropical storm Sarah crossed the international date line at 18°N. on the 14th.

On the 15th Sarah became a raging typhoon in the western North Pacific; by the 16th maximum winds measured 120 kt. Now, at peak intensity, typhoon Sarah engulfed Wake Island. Seas were whipped over the island by 130-kt. winds; torrential rains battered the tiny outpost; buildings were ripped apart and the control tower blew away. Inhabitants of the island had been evacuated. This was only the third tropical cyclone since 1935 to bring typhoon-force winds to Wake

Island. A typhoon in 1941 brought 120-kt. winds and another in 1952 lashed the island with 150-kt. winds.

Sarah continued westward for the next 2 days; at 1200 on the 18th she was centered near 20°N., 158°E., and generating 100-kt. winds. The typhoon swung northwestward and early on the 20th the SANTA CLARA VICTORY encountered 70-kt. winds just 60 mi. northeast of the storm's center. A few hours later the ALICE BROWN also reported 70-kt. winds some 50 mi. east of the storm's center. On the 21st Sarah turned toward the northeast after crossing the 30th parallel near 150°E. Moving into the northern latitudes the typhoon began to acquire extratropical characteristics. She still packed a powerful punch however, as attested to by the CITADEL when she encountered 64-kt. winds about 80 mi. east of the center early on the 22d. Later in the day Sarah was deemed extratropical near 39°N., 154°E.

TROPICAL STORM MONICA, SEPTEMBER 13-20

Tropical storm Monica was detected early on the 13th when the AMERICAN CONDOR encountered 50-kt. winds, in 12-ft. seas, near 16°N., 106°W. The storm's initial position was 16.8°N., 107.2°W., at 1800 on the 13th. Her final position was located less than 300 mi. away, near 18.8°N., 111.8°W., on the 20th. Maximum winds in the storm were never greater than the initially reported 50 kt. From 1800 on the 15th to 0000 on the 19th Monica was in a tropical depression stage. Although she was upgraded on the 19th, and was moving over warm water, Monica did not regenerate as expected.

TROPICAL STORM NANETTE, SEPTEMBER 13-21

Tropical storm Nanette was first detected near 15°N., 111°W., early on the 13th. Late in the day satellite pictures indicated maximum winds were 40-kt. near the center. Nanette moved westward, at a forward speed of 5 kt., for the first 2 days, then turned toward the west-northwest. Winds were estimated at 55 kt. from 0000 on the 16th through 0600 on the 17th. No ships were close to the center during this period. On the 19th near 20.5°N., 130.0°W., Nanette turned abruptly eastward. This eastward movement continued for 2 days while the storm dissipated.

HURRICANE OLIVIA, OCTOBER 5-14

Olivia was first detected by satellite at 1800 on the 5th near 13°N., 108°W. The generating depression was tracked for 3 days before it reached tropical storm strength near 14.2°N., 113.7°W. The storm turned toward the north-northeast and continued to intensify. By the 12th it was apparent that Olivia would hit Baja California. At 0000 on the 13th she was some 200 mi. southwest of La Paz. The MONTIVIDEO encountered 45-kt. winds about 30 mi. west-northwest of Cape San Lucas, before Olivia crossed Baja California later that day. Once into the warm Gulf of California the storm intensified to hurricane strength; winds of 60 kt. were reported by a Mexican tanker anchored a few miles west of the storm's center.

Generating 110-kt. winds, Olivia battered the east coast of the peninsula near the town of Mulege. The high winds and torrential rains left most of the town's 1,500 inhabitants homeless. The town remained isolated for several days. Meanwhile Olivia exhausted herself in the rugged terrain northwest of Mulege.

HURRICANE PRISCILLA, OCTOBER 13-20

Priscilla evolved from a tropical storm first detected some 200 mi. south of Acapulco on the 13th. Satellite photographs indicated the tropical storm covered an area 250 mi. in diameter and was centered near 12.5°N., 101.0°W. On the 15th the USS BOSTON, close to the intensifying storm, reported: Priscilla located at 16.3°N., 107.6°W., at 1523; radar presentation excellent; eye circular, 9 mi. in diameter; feeder bands all quadrants; surface wind 256°/22 kt., pressure 1004.2 mb.

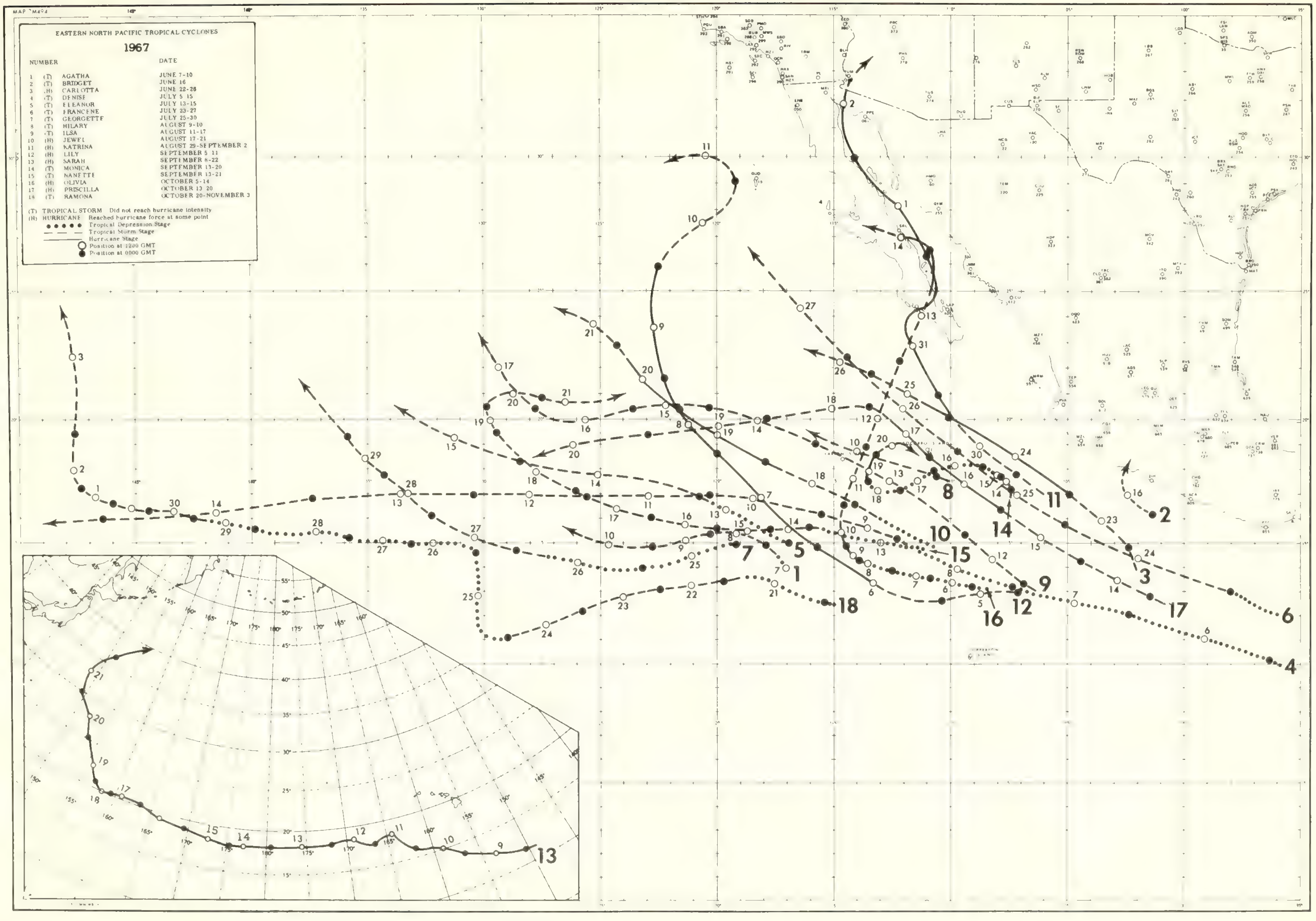
Moving northwestward, Priscilla reached hurricane strength early on the 16th near 16.3°N., 107.8°W., Socorro Island reported 80-kt. winds at 0000 on the 17th; the hurricane was still some 60 mi. southeast of the Island. This was the last radio report from Socorro; a few hours later the island felt the full fury of Priscilla. The DRURY VICTORY encountered 60-kt. winds at about the time the hurricane was raking Socorro.

On the 18th the STRATHCONON reported 40-kt. winds north of the center. Priscilla dropped to tropical storm intensity and headed westward. On the 20th the storm dissipated near 18°N., 128°W.

TROPICAL STORM RAMONA, OCTOBER 20-NOVEMBER 3

Tropical storm Ramona was detected as an organizing circulation from a satellite picture taken at 2026 on the 20th. The center was located at 12.5°N., 115.0°W. A tropical storm with winds 45 kt. and center 13.5°N., 119.0°W., was evident on pictures taken late on the 21st. The storm then moved west-southwestward, weakened, and was downgraded to depression stage early on the 25th; the center was located near 11.0°N., 129.0°W. The depression regenerated to minimum tropical storm intensity after moving to 16°N., 142°W., late on the 29th. The storm continued on a west-northwesterly course reaching 12°N., 147°W., late on November 1, then turned northward to dissipate near 24°N., 148°W., late on the 3d.

STORM NAME	INTENSITY	DATE	ORIGIN	COAST LINES CROSSED	HIGHEST REPORTED WIND SPEED	LOWEST REPORTED PRESSURE	AREA OF DISSIPATION	REMARKS
1. AGATHA	Tropical Storm	June 7-10	14°N, 117°W	None			15°N, 126°W	
2. BRIDGET	Tropical Storm	June 16	East of Acapulco, Mexico	None	35 kt., PANAMA and GEORGEL		Southeast of Manzanillo, Mexico	Apparently absorbed into thermal trough over land
3. CARLOTTA	Hurricane	June 22-26	14°N, 102°W	None	50 kt., SANTA FE and ORPHEUS		23°N, 116°W	
4. DENISE	Tropical Storm	July 5-15	10°N, 96°W	None	25 kt., MAFFO		16°N, 147°W	
5. ELEANOR	Tropical Storm	July 13-15	15°N, 117°W	None	40 kt., CHEVRON TRANSPORT		20°N, 133°W	
6. FRANCENE	Tropical Storm	July 23-27	12°N, 96°W	None	55 kt., UNION FREEDOM	996.0 mb., UNION FREEDOM	26°N, 118°W	
7. GEORGETTE	Tropical Storm	July 25-30	15°N, 119°W	None	35 kt., VERONA	1006.0 mb., VERONA	21°N, 137°W	
8. HILARY	Tropical Storm	Aug. 9-10	18°N, 110°W	None			North of Clarion Island	
9. ILSA	Tropical Storm	Aug. 11-17	13°N, 106°W	None	45 kt., NORBERTO CAPAY		23°N, 130°W	
10. JEWEL	Hurricane	Aug. 17-21	15°N, 111°W	None	65 kt. PIONEER MIST	997.0 mb., PIONEER MIST	24°N, 126°W	
11. KATRINA	Hurricane	Aug. 29-Sept. 2	17°N, 106°W	Baja California Mexico	85 kt., San Felipe, Baja California		East of Yuma, Arizona	One life lost and $5 million damage at San Felipe
12. LILY	Hurricane	Sept. 5-11	12°N 105°W	None	85 kt., KYSKA	980.7 mb., KYSKA	West-northwest of Guadalupe Island	Threatened southern California during weakening stage before turning west
13. SARAH	Hurricane	Sept. 8-22	11°N, 149°W	Wake Island	130 kt. Wake Island	955.5 mb., OCADA MARU (east of date line)	Crossed date line at 18°N, to reintensify as typhoon. Extra-tropical 38°N, 153°E	Hit Wake Island in Western Pacific with 130-kt. winds
14. MONICA	Tropical Storm	Sept. 13-20	17°N, 107°W	None	50 kt., AMERICAN CONDOR		Northwest of Socorro Island	
15. NANETTE	Tropical Storm	Sept. 13-21	15°N, 111°W	None	34 kt., ALLISON LYKES		20°N, 124°W	Eye clearly visible in photos on 15th and 16th
16. OLIVIA	Hurricane	Oct. 5-14	13°N, 108°W	Baja California	110 kt., near Mulege, Baja California	939.0 mb., Mexican tanker	West of Santa Rosalia, Baja California	Severe damage at Mulege
17. PRISCILLA	Hurricane	Oct. 13-20	12°N, 101°W	Socorro Island	80 kt., Socorro Island		18°N, 128°W	
18. RAMONA	Tropical Storm	Oct. 20-25	12°N, 115°W	None	30 kt., JAMES LYKES		24°N, 145°W	No confirmation of storm intensity by surface observation


MAP 7M494
EASTERN NORTH PACIFIC TROPICAL CYCLONES
1967
NUMBER
DATE
1 (T) AGATHA JUNE 7-10
2 (T) BRIDGET JUNE 16
3 (H) CARLOTTA JUNE 22-28
4 (T) DENISE JULY 5 15
5 (T) ELEANOR JULY 13-15
6 (T) FRANCENE JULY 23-27
7 (T) GEORGETTE JULY 25-30
8 (T) HILARY AUGUST 9-10
9 (T) ILSA AUGUST 11-17
10 (H) JEWEL AUGUST 17-21
11 (H) KATRINA AUGUST 29-SEPTEMBER 2
12 (H) LILY SEPTEMBER 5 11
13 (H) SARAH SEPTEMBER 8-22
14 (T) MONICA SEPTEMBER 13-20
15 (T) NANETTE SEPTEMBER 13-21
16 (H) OLIVIA OCTOBER 5-14
17 (H) PRISCILLA OCTOBER 13 20
18 (T) RAMONA OCTOBER 20-NOVEMBER 3
(T) TROPICAL STORM Did not reach hurricane intensity
(H) HURRICANE Reached hurricane force at some point
Tropical Depression Stage
Tropical Storm Stage
Hurricane Stage
Position at 1200 GMT
Position at 0000 GMT

TYPHOONS OF THE WESTERN NORTH PACIFIC, 1967

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The 1967 typhoon season was a vigorous one in the western North Pacific. January was the only month lacking tropical cyclone activity. The 34 tropical cyclones bettered the latest 10 yr. average of 30, while the 19 that reached typhoon strength was just below the latest 10 yr. average. Of the 19 typhoons, Carla, Opal, Emma, and Gilda were super typhoons (winds 130 kt. or greater). This compares to 3 super typhoons in 1966 and a record 11 in 1965. Typhoon Carla was the most intense storm of 1967 with sustained maximum winds of 160 kt.

In the following narrative typhoon summary, and in the accompanying tables and figures, typhoon intensity indicates wind speeds of 64 kt. or more; tropical storm intensity, 34-63 kt.; tropical depression intensity less than 34 kt. Tropical storm summaries can be found in the appropriate Smooth Log.

Dates given for individual tropical cyclones indicate the periods during which warnings were issued. Storm tracks and maximum winds are based on post storm analysis.

SALLY, MARCH 1-6

Sally, the Season's first typhoon, wasted little time in making her presence felt. A tropical storm on the 1st, she was generating 85-kt. winds early the next day. Koror, some 180 mi. east of the storm's center, was lashed by 75-kt. gusts; about 80 percent of the island's buildings were destroyed or damaged. The 85-kt winds and a 971-mb. pressure, early on the 2d, represent the storm's peak intensity. Sally headed west-northwest toward the Philippines. Early on the 3d, Sally, now a minimal typhoon, moved between Leyte and Mindanao, through the central islands and into the Sulu Sea. She crossed Palawan the following day, and on the 5th weakened to tropical storm strength. The 6th saw Sally dissipate 100 mi. west of the north Borneo coast.

VIOLET, APRIL 1-12

Luzon, target of many early-season typhoons, fell victim to Violet when she ripped across the island's northern sector on the 8th. Torrential rains and 105-kt. winds inflicted widespread damage; 4 persons on the island were killed. Violet had attained her greatest strength several days before; winds reached 120 kt. on the 5th and a 929-mb. pressure was recorded on the 6th. The storm had formed on the 1st, some 200 mi. southwest of Truk Island, and moved west-northwestward through the western islands of the Caroline chain. After her bout with Luzon, Violet traversed the South China Sea, rapidly losing her punch; the CHINA BEAR encountered 45-kt. winds just 60 mi. northeast of the storm's center early on the 9th. Violet recurved and, as a tropical storm brushed the southern tip of Taiwan, on the 11th, before turning northward. She dissipated among the southern Ryukyu Islands the following day.

*Based on the Annual Typhoon Report of the Joint Typhoon Warning Center, Fleet Weather Central, Guam, Mariana Islands.

ANITA, JUNE 26-30

Anita, the first typhoon in 2 1/2 mo. brushed storm-plagued Luzon before running afoul of the Chinese mainland. The storm developed some 300 mi. north-northwest of Koror Island, on the 26th. Anita moved west-northwestward and deepened; by the 28th pressure had dipped to 967 mb. while winds had increased to 75 kt. She then navigated the Babuyan Channel and moved into the South China Sea where winds reached a peak of 80 kt. Early on the 30th, sporting 70-kt. winds, Anita stormed ashore south of Shan T'ou, China. Once inland she gradually dissipated.

BILLIE, JULY 2-8

Billie became a killer in her extratropical stages. Moving as a wave along a stationary front she caused torrential rains throughout southern Japan late on the 8th. These rains, particularly heavy over Kyushu and southwestern Honshu, caused nearly 2,000 landslides resulting in an estimated 289 deaths, 73 missing persons and 452 injuries. Hardest hit were Hiroshima with 137 deaths and Nagasaki with 43 deaths. Police reported 1,200 homes destroyed or damaged and some 277 bridges swept away.

After an inconspicuous beginning on the 2d, some 300 mi. north of Yap Island, Billie attained respectability late on the 4th when winds reached 70 kt. around a 990-mb. pressure center. The storm, at this time, was 300 mi. east of northern Luzon; from here she turned north-northwestward and continued to intensify. Winds reached a 75-kt. peak on the 5th while the lowest recorded pressure (979 mb.) occurred on the 6th. The MORMACHAWK battled 25-ft. seas and 40-kt. winds, 120 mi. east of the storm's center, early on the 6th, while the VISTE VICTORY encountered 45-kt. winds, some 300 mi. south of the center, later in the day. Generating 50-kt. winds Billie moved through the southern Ryukyu Islands early on the 7th. Once into the East China Sea she gradually became extratropical.

CLARA, JULY 6-12

After a 1,500 mi. journey, Clara struck northern Taiwan on the 11th battering the island with 90-kt. winds and torrential rains. She had reached peak intensity late on the 10th when winds had climbed to 100 kt. and pressure had dipped to 960 mb. Clara began, 5 days earlier, about 300 mi. south-southeast of Iwo Jima. During those 5 days she followed a westerly, then a west-northwesterly course. She intensified rapidly at first; pressure fell from an initial 997 mb. to 984 mb. when Clara reached typhoon strength late on the 6th. This leveled off and it wasn't until the 8th that the pressure dropped below 980 mb. The VISTE VICTORY, running into its second storm in 2 days, encountered 40-kt. winds 60 mi. south of the storm's center on the 6th.

Clara's battle with the rugged Taiwan terrain left her weak and disrupted when she appeared in the Formosa Strait on the 11th; winds had dropped to 50 kt. She staggered onto the China mainland, some 50 mi. south of Fu-Chou, early the next day and quickly

dissipated as she made her way inland.

ELLEN, JULY 28-AUGUST 2

The FRANCIS X. McGRAW was clobbered by 80-kt. winds, early on the 1st of August, about 120 mi. east of typhoon Ellen. The typhoon had reached peak intensity a short time before, generating 80-kt. winds around a 969-mb. pressure center, some 180 mi. east of Marcus Island. The storm, originating on the 28th, became a typhoon the following day just 120 mi. west-southwest of Marcus Island. She moved to the south of the island, and then turned north-northwestward. Late on the 1st Ellen began to weaken; the HAWAII, 110 mi. north of the center, reported 58-kt. winds. Cold air intruded into her circulation and, tropical storm Ellen became extratropical near 37° N., 153°E. on the 2d.

KATE, AUGUST 19-21

Amidst a flurry of tropical storm activity to the north, typhoon Kate developed just off the northwestern tip of Luzon. She crossed the South China Sea in 2 uneventful days, entered China some 60 mi. west of Hong Kong, and dissipated on the 21st. Kate was a typhoon for less than 24 hr.; she reached her peak late on the 20th when winds reached 70 kt. and pressure dipped to 978 mb. A short time later Kate was over China.

MARGE, AUGUST 24-29

Northern Luzon was rocked for the 3d time this season when typhoon Marge, sporting 75-kt. winds, roared through the Babuyan Channel on the 28th. The island was previously battered by Violet and Anita. Marge formed 420 mi. northwest of Guam on the 24th. Moving westward she reached typhoon strength early on the 26th. She then turned west-southwestward and continued to intensify. By early on the 27th Marge was at full strength; winds were 125 kt. around a 937-mb. pressure center. At this time she was just 180 mi. off the Luzon coast. She feinted southwestward then turned toward the northwest. Marge weakened rapidly after her battle with Luzon, and on the 29th she was a weak depression in the South China Sea.

NORA, AUGUST 27-30

Nora, reminiscent of typhoon Clara, cut through northern Taiwan some 60 mi. south of Taipei on the 29th. Just 2 days earlier Nora was a weak depression near 18°N., 133°E. During the next 2 days the storm moved west-northwestward. It reached typhoon strength on the 28th and later in the day reached its peak intensity; winds climbed to 70 kt. around a 981-mb. pressure center. Nora entered Taiwan with 65-kt. winds but the rugged terrain took its toll; she emerged as a weak tropical storm. Weakening to a depression she staggered to the Chinese mainland on the 30th making her way ashore south of Chuanchow.

OPAL, AUGUST 30-SEPTEMBER 14

Opal became the first super typhoon of the season late on the 2d some 300 mi. west of Wake Island. She reached her peak the following day when winds rose to 155 kt. while pressure fell to 919 mb. The typhoon had formed on the 30th of August about 200 mi. southeast of Wake Island. She maintained super typhoon strength until the 4th when winds fell below 130 kt. Still ferocious Opal turned northwestward. Early on the 8th she was generating 95-kt. winds near 27°N., 145°E. The typhoon then turned westward and roared through the Bonin Islands on the 9th. Opal recurved on the 11th before reaching Japan. On the 13th she was generating 80-kt. winds as she crossed the 30th parallel near 138°E. heading northeastward.

It was on the 13th that the British freighter DENNY ROSE was last heard from. The ship, with its 42 crewmen, was in the rough waters south of Opal. Opal, still generating 60-kt winds, became extratropical on the 14th near 39°N., 143°E.

RUTH, SEPTEMBER 6-13

Farther eastward but in the same general circulation as Opal, Ruth moved on a similar course. Initially a tropical depression, some 300 mi. north of Wake Island, she moved erratically westward, and then turned toward the north. So erratic was her course that on the 11th she was only 350 mi. west of her initial position. By this time however, she was a full-blown typhoon; winds near the center had reached 100 kt. Early on the 12th Ruth reached full strength; 110-kt. winds wound around a 939-mb. pressure center. The PHILIPPINE ADMIRAL, some 370 mi. north of the center, encountered 60-kt. winds in 24-ft. seas the following day. Ruth continued northward and, with the intrusion of cold air, was deemed extratropical on the 13th.

SARAH, SEPTEMBER 8-22

Although hurricane Sarah traversed part of the western Pacific it originated east of 180° and was described in the article "Eastern North Pacific Tropical Cyclones, 1967" in the March 1968 issue of the Mariners Weather Log.

WANDA, SEPTEMBER 18-24

Wanda orginated some 230 mi. east-southeast of Iwo Jima on the 18th. From the 19th through the 22d Wanda executed a figure-eight between 22°N. and 24°N. During this period Wanda reached typhoon strength and then, on the 21st, winds climbed to 95 kt. while pressure dipped to 960 mb. After completing the figure-eight Wanda, slowly degenerating, accelerated north-northeastward. On the 24th the storm was deemed extratropical near 33°N., 150°E.

AMY, SEPTEMBER 28-OCTOBER 6

Amy originated some 500 mi. west of Wake Island on the 28th. After turning a loop between 20°N. and 21°N. the storm headed westward. Early on the 3d, near 21°N., 154°E., Amy reached typhoon strength. She was beginning to recurve. On the 4th Amy was generating 80-kt. winds around a 961-mb. pressure center; these were the extremes. She headed north-northeastward and, with the intrusion of cold air, became extratropical on the 6th near 35°N., 150°E.

CARLA, OCTOBER 12-20

Northern Luzon, already thrice ravaged this season, was despoiled again by super typhoon Carla in mid-October. On the 17th in Baguio the normally silent predawn hours were shattered by the arrival of Carla.

Her 100-kt. winds laced nearby areas while torrential rains soaked the entire island; as far off as Manila there was the sound of gales and the pelt of rain. Later in the day Carla left the island, but her fury was felt well into the 18th. In her wake was tragedy and destruction. Homes were toppled by landslides and at least 30 persons died. An unbelievable 47.86 in. of rain fell in Baguio on the 17th; a total of 50.36 in. was recorded during the 3-day period.

Carla was at super status from the 14th through the 16th; winds were 130 kt. or more during this period. Her peak came on the 14th when 160-kt. winds roared around a 901-mb. pressure center. This was the highest typhoon wind speed of the season. The radius of Carla's surface circulation extended 675 mi. at this time--a huge, violent typhoon. Wind speeds slowly diminished as she neared the Philippines. However, she remained potent. The ASTERION, some 300 mi. northeast of Carla's center on the 16th battled 20-ft. seas and 53-kt. winds. Maximum winds were 110 kt. when Carla made her way inland. The Luzon crossing disrupted the storm's circulation; when she entered the South China Sea, on the 17th, maximum winds had fallen to 75 kt. while central pressure had risen to 978 mb. Carla, still a large storm, made her way toward China. On the 19th the PRESIDENT POLK and the PRESIDENT ROOSEVELT encountered force 9 winds northeast of the storm's center. The POLK was 300 mi. away while the ROOSEVELT was just 200 mi. distant. Tropical storm Carla moved across the Hai-nan Peninsula and dissipated in the Gulf of Tonkin early on the 20th.

DINAH, OCTOBER 17-27

Torrential rains from the extratropical stages of typhoon Dinah caused landslides and floods throughout central Honshu on the 28th. This resulted in 27 deaths and 34 persons injured; 18 persons died when a landslide carried away a hut in which 30 workers were sleeping.

Dinah formed on the 17th, 150 mi. east-southeast of Guam; she reached typhoon strength the following day. After moving west-southwestward for 2 days Dinah swung northward paralleling the Philippines. On the 24th she turned westward toward Taiwan. The BARVIK, 100 mi. north of the storm's center, encountered 64-kt. winds in 20-ft. seas; she didn't fare any better the following day when she encountered 64-kt. winds in 25-ft. seas. Dinah was at full strength during this period; she was generating 100-kt. winds around a 948-mb. pressure center. She turned sharply northeastward on the 25th and paralleled the Ryukyu Chain for the next 2 days. Even after becoming extratropical, on the 27th, Dinah was still violent; the STEEL ROVER reported 80-kt. winds and a 973-mb. pressure late on the 27th close to the storm's center.

EMMA, OCTOBER 31-NOVEMBER 8

Super typhoon Emma ripped through the central Philippines on the 3d and 4th of November. Damage from the violent storm was estimated near $5 million and 23 persons drowned on Iloilo Island. The typhoon was particularly damaging to the Philippine coconut industry; a 15 percent drop in production is attributed directly to Emma.

Emma began as a tropical storm, on the 31st of October, some 350 mi. south-southwest of Guam. Following a west-northwesterly course, from which she never deviated, she intensified quickly and, by the 1st of November, was generating 80-kt. winds while passing 60 mi. south of Yap Island. Twenty-four hr. later maximum winds reached 125 kt., and later on the 2d, Emma, at peak intensity, was generating 140-kt. winds around a 908-mb. pressure center. At the height of the storm the 560-ton MINDORO went down in the Philippine Sea; 81 persons were believed lost. Emma banged ashore over southern Luzon on the 3d; maximum winds were 110 kt. It took the typhoon 24 hr. to cross the island; the center passed within a few miles of Manila before reaching the South China Sea. The mountainous terrain had disrupted Emma and she emerged from Luzon as a tropical storm. Emma continued to degenerate as she traversed the South China Sea. When she finally made landfall just east of the Luichow Peninsula, on the 8th, Emma was merely a weak depression. Her journey across the South China Sea, however, left three ships in distress; the LAYD ERA, the HABIB MARIKAR and the LOYAL FORTUNES were all driven aground. There was no loss of life.

FREDA, NOVEMBER 7-10

Typhoon Freda was first detected, at tropical storm strength, in the Mindanao Sea early on the 7th. Moving westward through the Philippine Islands the storm reached typhoon intensity early the next day shortly after barging ashore over Palawan. Freda continued to intensify as she moved into the South China Sea. On the 9th the typhoon reached her peak intensity -- 85-kt. winds and a 971-mb. pressure. Winds dropped to 60 kt. late in the day as Freda banged ashore along the central South Vietnamese coast. Once inland the storm dissipated rapidly.

GILDA, NOVEMBER 8-18

Gilda, the fourth super typhoon of the season was detected, on the 8th, near Ponape in the Caroline Islands. She reached typhoon strength on the 10th some 250 mi. northwest of Ponape. Gilda was generating 125 kt. winds around a 920-mb. pressure center as she passed between Guam and Saipan early on the 13th. The following day Gilda was at full strength with winds of 130 kt. and a 890-mb. pressure; this was the lowest pressure recorded in a typhoon since 1961. Her intensity diminished somewhat as Gilda turned toward Taiwan. Her violence was felt far to the north when the DON HERNAN was driven aground near Okinawa. Generating 80-kt. winds, Gilda ripped through Taiwan early on the 18th. Flood waters surged over half the city of Hualien as Gilda made her way across the island. The rugged journey left her weak and disorganized and later on the 18th she dissipated over the Formosa Strait.

HARRIET, NOVEMBER 17-24

Harriet was just a tropical depression 100 mi. south of Eniwetok Atoll on the 17th. The depression moved west-northwestward growing in size and intensity. On the 19th, shortly before brushing Saipan, Harriet reached typhoon intensity. After crossing the 15th parallel the typhoon began to recurve. However she continued to intensify and, late on the 20th, pressure reached a minimum of 953 mb.; a short while later winds hit a peak of 110 kt. Harriet headed north-northeastward and slowly began to weaken. By the 22d winds dropped to 80 kt. while pressure rose to 975 mb. Early on the 23d Harriet fell to tropical storm strength, and before the day was out she was a tropical depression. Early the following day all that remained was an ill-defined cloud mass near Iwo Jima.

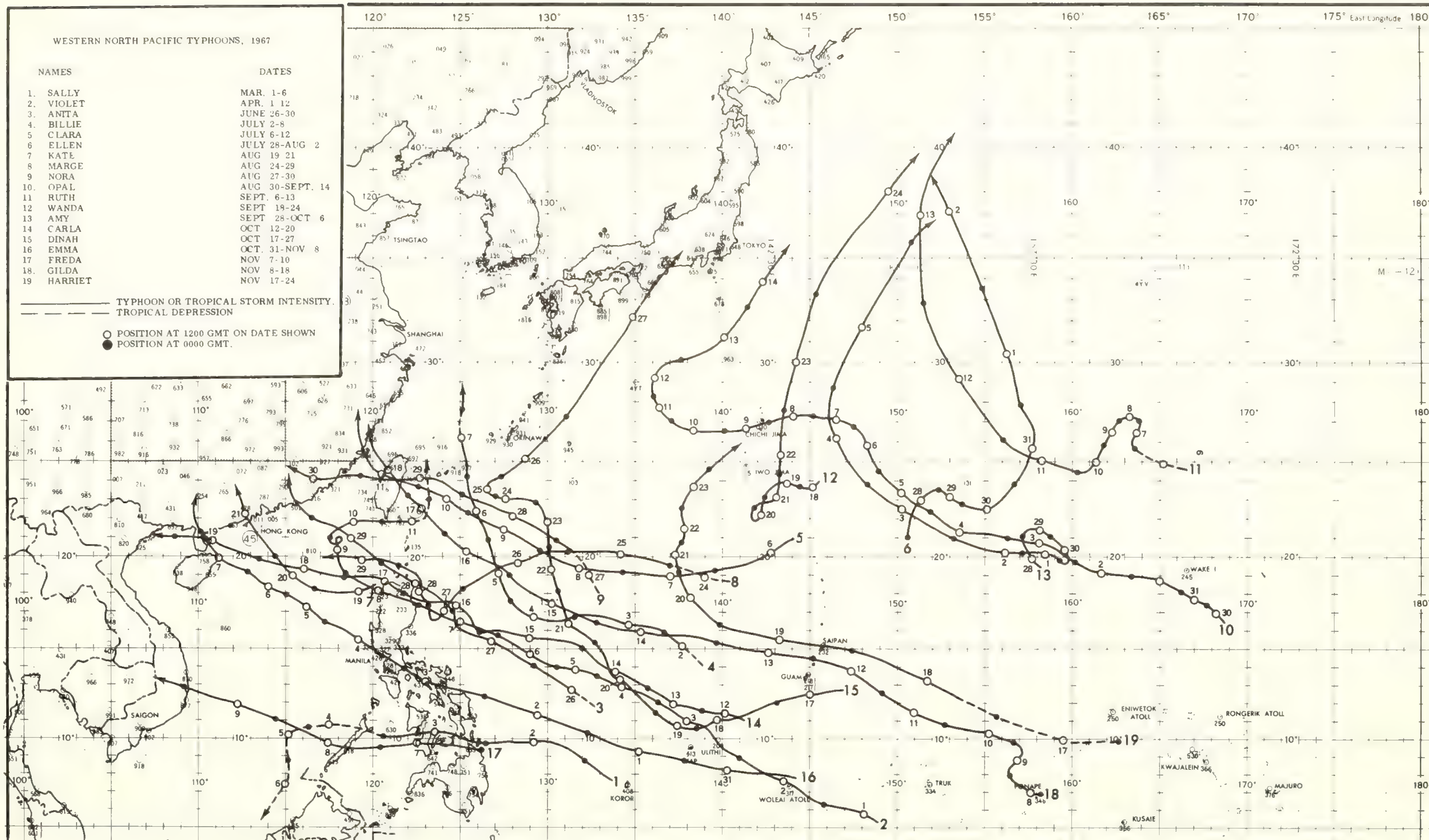
WESTERN NORTH PACIFIC TROPICAL CYCLONES FOR PAST YEARS

Frequency of Tropical Cyclones (Including Typhoons) by Months and Years

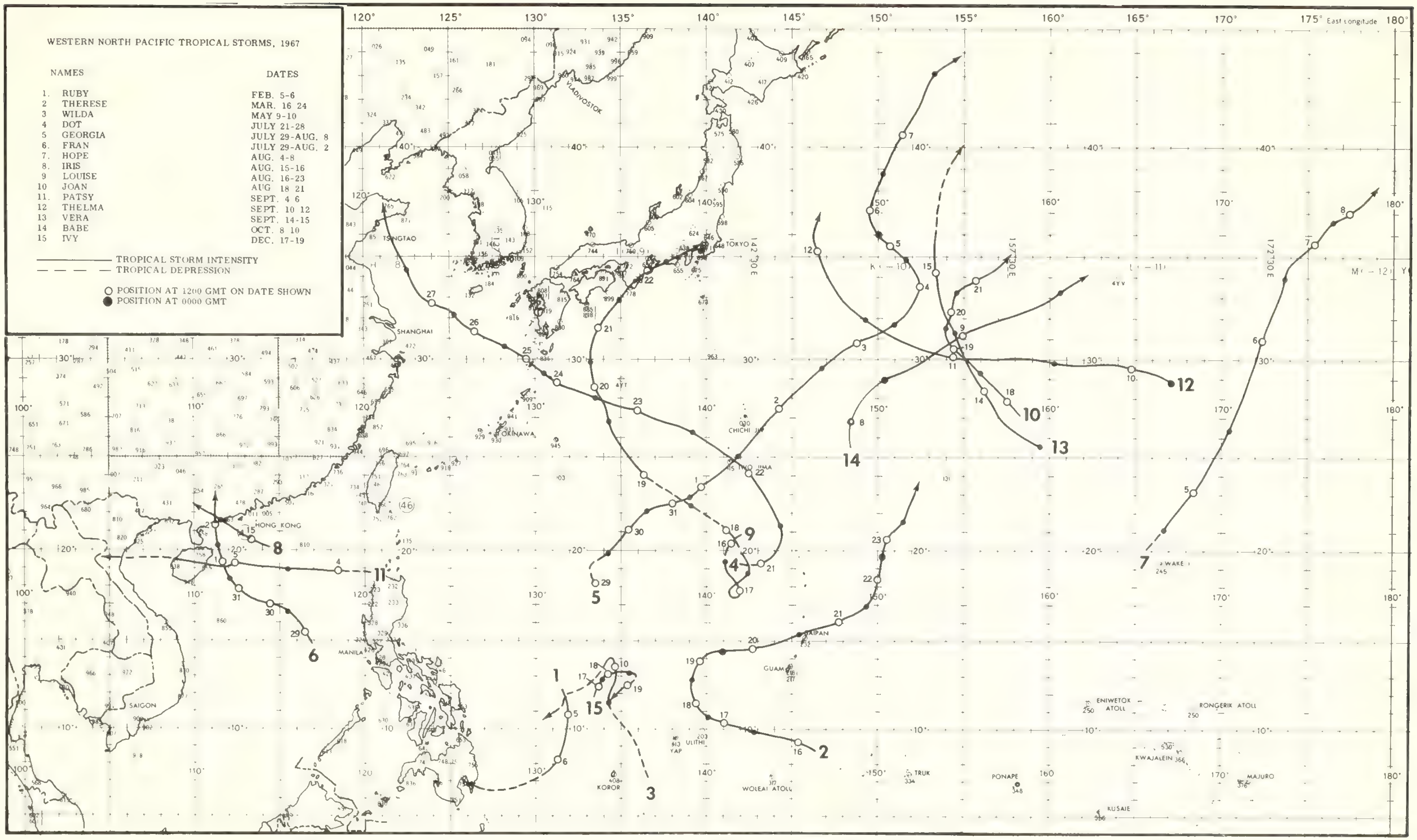
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1958	1				1	2	6	3	2	3	2	1	21
1959		1	1	1			3	5	7	3	2	2	25
1960				1	1	3	3	10	3	4	1	1	27
1961	1	1	1	1	3	2	6	3	6	5	1	1	31
1962		1		1	2		6	7	4	4	3	2	30
1963				1	1	3	4	3	5	5		3	25
1964					2	2	7	8	7	6	6	1	39
1965	2	2	1	1	2	3	5	6	7	2	2	1	34
1966				1	2	1	5	8	7	3	2	1	30
1967		1	2	1	1	1	6	8	6	4	3	1	34
Average	.4	.6	.5	.8	1.5	1.7	5.1	6.1	5.4	3.9	2.2	1.4	29.6

Frequency of Tropical Cyclones Reaching Typhoon Intensity by Months and Years

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1958	1				1	2	5	3	3	3	1	1	20
1959				1			1	5	3	3	2	2	17
1960				1		2	2	8		4	1	1	19
1961			1		[illegible]	1	3	3	5	3	1	1	20
1962				1	2		5	7	2	4	3		24
1963				1	1	2	3	3	3	4		2	19
1964					2	2	6	3	5	3	4	1	26
1965	1			1	2	2	4	3	5	2	1		21
1966				1	2	1	3	6	4	2		1	20
1967			1	1		1	3	3	4	3	3		19
Average	.2	0	.2	.7	1.2	1.3	3.5	4.4	3.4	3.1	1.6	.9	20.5



WESTERN NORTH PACIFIC TYPHOONS, 1967
NAMES
DATES
1. SALLY MAR. 1-6
2. VIOLET APR. 1 12
3. ANITA JUNE 26-30
4. BILLIE JULY 2-8
5 CLARA JULY 6-12
6 ELLEN JULY 28-AUG 2
7 KATE AUG 19 21
8 MARGE AUG 24-29
9 NORA AUG 27-30
10. OPAL AUG 30-SEPT. 14
11 RUTH SEPT. 6-13
12 WANDA SEPT 19-24
13 AMY SEPT 28-OCT 6
14 CARLA OCT 12-20
15 DINAH OCT 17-27
16 EMMA OCT. 31-NOV 8
17 FREDA NOV 7-10
18. GILDA NOV 8-18
19 HARRIET NOV 17-24
TYPHOON OR TROPICAL STORM INTENSITY.
TROPICAL DEPRESSION
POSITION AT 1200 GMT ON DATE SHOWN
POSITION AT 0000 GMT.
East Longitude
VLADIVOSTOK
TSINGTAO
SHANGHAI
TOKYO
OKINAWA
CHICHI JIMA
IWO JIMA
HONG KONG
MANILA
SAIGON
SAIPAN
GUAM
ULITHI
KOROR
WOLEAI ATOLL
TRUK
PONAPE
KUSAIE
ENIWETOK ATOLL
RONGERIK ATOLL
KWAJALEIN
MAJURO
WAKE I


WESTERN NORTH PACIFIC TROPICAL STORMS, 1967
NAMES
DATES
1. RUBY FEB. 5-6
2 THERESE MAR. 16 24
3 WILDA MAY 9-10
4 DOT JULY 21-28
5 GEORGIA JULY 29-AUG. 8
6. FRAN JULY 29-AUG. 2
7. HOPE AUG. 4-8
8. IRIS AUG. 15-16
9 LOUISE AUG. 16-23
10 JOAN AUG 18 21
11. PATSY SEPT. 4 6
12 THELMA SEPT. 10 12
13 VERA SEPT. 14-15
14 BABE OCT. 8 10
15 IVY DEC. 17-19
TROPICAL STORM INTENSITY
TROPICAL DEPRESSION
POSITION AT 1200 GMT ON DATE SHOWN
POSITION AT 0000 GMT
East Longitude
VLADIVOSTOK
TSINGTAO
SHANGHAI
HONG KONG
MANILA
SAIGON
TOKYO
OKINAWA
CHICHI JIMA
IWO JIMA
GUAM
SAIPAN
ULITHI
YAP
KOROR
WOLEAI ATOLL
TRUK
PONAPE
KUSAIE
ENIWETOK ATOLL
RONGERIK ATOLL
KWAJALEIN
MAJURO
WAKE

GENERAL SUMMARY OF FLOOD LOSSES

YEAR 1966

Elmer R. Nelson and Raymond J. Haley
Office of Hydrology, Weather Bureau

Monetary losses from floods in the United States during 1966, estimated at $117 million, were small compared to the previous year (1965) when the damages totalled $785 million. The flood losses during 1966 were the lowest in 5 years ($75 million in 1962). In comparison with the national average of $400 million, based on the 15-year period 1951 to 1965 (adjusted to the 1965 price index), the flood losses in 1966 were 29%. Destructive overflows have caused property damage in some years estimated at more than $1 billion.

The total loss of life in 1966 from floods was 31 compared to 119 in 1965 and 100 in 1964. This is the lowest loss of life since 1962 when 19 lives were lost.

The most significant floods during 1966 were the severe floods in the Trinity and Sabine Basins in northeastern Texas during April and May. Severe flash flooding occurred along the smaller tributaries, necessitating the evacuation of residents from low-lying areas. The United States Geological Survey reported that Joe's Creek in Dallas, Texas, crested 2 feet higher than the highest flood since 1900. Bachman Branch, in Dallas, crested 5 feet higher than the highest known flood. The excessive rains produced runoff comparable to the record floods of 1908 and 1957. The Trinity River did not reach the high water levels of those floods due to flood control storage and improved floodways. Crests along the Sabine River ranged up to nearly 12 feet above flood stage. Flood damages and loss of life were heavy. The losses totalled over $20 million and the loss of life due to drowning was 14.

The savings resulting from the Weather Bureau Forecasting Service in 1966 were, as compiled from fragmentary information, at least $25 million. The Pittsburgh, Pa., River District alone estimated a savings of nearly $8 million, so the savings over the entire Country were perhaps considerably more than $25 million. Based on fragmentary information, the average annual savings resulting from the Weather Bureau Forecasting Service during the 15-year period 1951 to 1965 is approximately $50 million.

ANNUAL FLOOD LOSSES FOR UNITED STATES

Annual Flood Losses and Savings for years 1933 to 1947, inclusive, have been published in the Monthly Weather Review as follows:

Year	Issue of Review	Pages
1933	Vol. 62, No. 1, Jan. 1934	25-27
1934	Vol. 62, No. 12, Dec. 1934	465-467
1935	Vol. 63, No. 12, Dec. 1935	362-365
1936	Vol. 65, No. 1, Jan. 1937	28-31
1937	Vol. 66, No. 12, Dec. 1938	426-430
1938	Vol. 68, No. 9, Sept. 1940	262-263
1939	Vol. 68, No. 11, Nov. 1940	329-330
1940	Vol. 69, No. 7, July 1941	217-218
1941	Vol. 71, No. 11, Nov. 1943	185-186
1942 & 1943	Vol. 73, No. 8, Aug. 1945	137-139
1944 & 1945	Vol. 76, No. 6, June 1948	113-116
1946	Vol. 76, No. 9, Sept. 1948	208-210
1947	Vol. 77, No. 9, Sept. 1949	262-265

Beginning with flood losses for the year 1948, annual flood loss data are published in Climatological Data National Summary as follows:

Year	Issue of Climatological Data
1948	August 1950
1949	Annual 1950
1950) 1951)	Annual 1951
1952	Annual 1952
1953	Annual 1953
1954	Annual 1955
1955	Annual 1956
1956	Annual 1957
1957	Annual 1958
1958	Annual 1959
1959	Annual 1960
1960	Annual 1961
1961	Annual 1962
1962	Annual 1963
1963	Annual 1964
1964	Annual 1965
1965	Annual 1966

Prior to 1933 Flood Losses and Savings were published monthly, as a rule, in the Monthly Weather Review.

ESTIMATED FLOOD LOSSES FOR 1966

In Thousands of Dollars

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
HUDSON BAY DRAINAGE																
Red River of North and tributaries....	A3,100.0	...	...	...	...	B7,700.0	...	...	...	...	1,500.0	...	...	...	C12,300.0	...
Total	3,100.0	...	...	...	...	7,700.0	...	...	...	...	1,500.0	...	...	...	12,300.0	...
ST. LAWRENCE DRAINAGE																
Lake Erie																
Maumee River..........................	75.0	20.0	1.0	...	25.0	...	...	...	...	...	25.0	10.0	20.0	...	176.0	...
Total	75.0	20.0	1.0	...	25.0	...	...	...	...	...	25.0	10.0	20.0	...	176.0	...
ATLANTIC SLOPE DRAINAGE																
Rivers in Maine.......................	...	...	...	...	327.5	...	...	...	...	...	...	...	...	200.0	527.5	...
Darby Creek (Delaware County, Pa.) ...	...	...	...	...	8.0	...	...	...	...	...	...	...	...	...	8.0	1
Santee River and tributaries..........	...	...	...	...	...	100.0	...	...	...	...	...	...	15.0	...	115.0	...
Savannah River........................	...	...	...	...	...	...	...	...	...	...	...	...	...	50.0	50.0	...
Altamaha River and tributaries........	...	...	...	...	...	...	...	...	...	...	200.0	...	...	...	200.0	1
Ogeechee River........................	...	...	...	...	...	...	...	...	...	...	...	...	...	10.0	10.0	...
Total	...	...	...	...	335.5	100.0	...	...	...	...	200.0	...	15.0	260.0	910.5	2
EAST GULF OF MEXICO DRAINAGE																
Suwannee River........................	...	...	...	...	...	...	...	...	...	...	...	...	...	50.0	50.0	...
Flint River...........................	A 371.6	...	...	...	...	B 581.8	...	...	...	...	76.6	...	...	...	1,030.0	...
Chattahoochee River...................	A 8.8	...	...	...	...	B 293.3	...	...	...	...	4.6	...	...	...	306.7	...
Apalachicola River....................	A 301.4	...	...	...	...	B 94.6	...	...	...	...	126.5	...	...	...	522.5	...
Choctawhatchee and Pea Rivers.........	...	...	...	...	...	B 23.0	...	...	...	...	14.0	...	...	...	C 37.0	...
Yellow and Blackwater Rivers..........	...	...	...	...	...	B 7.0	...	...	...	...	1.5	...	...	...	C 8.5	...
Escambia and Conecuh Rivers...........	...	...	...	...	...	B 106.0	...	...	...	...	15.0	...	...	...	C 121.0	...
Conasauga River.......................	...	...	...	...	...	B 296.0	...	...	...	...	19.6	...	...	...	C 315.6	...
Coosawattee River.....................	...	...	...	...	...	B 144.5	...	...	...	...	2.5	...	...	...	C 147.0	...
Oostanaula River......................	...	...	...	...	...	B 154.0	...	...	...	...	14.5	...	...	...	C 168.5	...
Etowah River..........................	A 6.0	...	...	...	...	B 30.9	...	...	...	...	4.0	...	...	...	C 40.9	...
Coosa River...........................	A 1.0	...	...	...	...	B 515.6	...	...	...	...	17.7	...	...	...	C 534.3	...
Tallapoosa River......................	...	...	...	...	...	B 42.3	...	...	...	...	3.6	...	...	...	C 45.9	...
Cahaba River..........................	...	...	...	...	...	B 60.0	...	...	...	...	5.0	...	...	...	C 65.0	...
Alabama River.........................	...	...	...	...	...	B 310.9	...	...	...	...	20.2	...	...	...	C 331.1	...
Tombigbee and Black Warrior Rivers....	14.0	...	...	...	...	B 620.0	...	...	...	...	16.0	...	...	251.7	C 901.7	...
Chickasawhay River....................	A 3.0	...	...	...	...	B 48.0	...	...	...	...	8.0	...	...	...	C 59.0	...
Leaf River............................	A 31.0	...	...	...	...	B 93.0	...	...	...	...	28.0	...	...	...	C 152.0	...
Pascagoula River......................	...	...	...	...	...	B 28.0	...	...	...	...	3.0	...	57.0	...	C 88.0	...
Pearl River...........................	A 158.0	...	...	...	...	B1,018.2	...	...	...	...	286.7	...	...	...	C 1,462.9	...
Total	894.8	...	...	...	...	4,467.1	...	...	...	...	667.0	...	57.0	301.7	6,387.6	...
MISSISSIPPI SYSTEM																
Upper Mississippi Basin																
Baraboo River.........................	A 225.0	...	...	...	...	...	...	...	...	...	...	...	...	...	225.0	...
Kickapoo River........................	5.7	1.5	9.0	5.0	14.0	...	...	...	1.0	0.2	2.0	1.5	8.9	...	48.8	...
Turkey River..........................	A 10.5	...	...	...	...	125.0	...	...	50.0	...	...	...	...	...	185.5	...
Maquoketa River.......................	...	...	...	...	...	B 15.0	...	...	...	...	...	...	...	...	C 15.0	...
Wapsipinicon River....................	...	...	...	...	...	B 38.0	...	...	...	...	...	...	...	...	C 38.0	...
Pecatonica River and tributaries......	A 15.0	...	...	...	...	B 72.5	...	...	...	...	...	...	...	...	C 87.5	...
Rock River............................	...	...	...	...	...	B 15.0	...	...	...	...	...	...	...	...	C 15.0	...
Sangamon, Kaskaskia & Big Muddy Rivers	A 115.0	...	...	...	...	B 175.0	...	...	...	...	...	...	...	...	290.0	...
Meramec River.........................	...	...	...	...	...	5.0	...	...	40.0	...	...	...	...	...	45.0	...
Mississippi River above Cape Girardeau, Mo.	A 312.4	...	...	...	...	...	...	...	...	...	...	...	604.7	...	C 917.1	...
Total	683.6	1.5	9.0	5.0	14.0	445.5	...	...	91.0	0.2	2.0	1.5	613.6	...	1,866.9	...
Missouri Basin																
Tributaries in Southwest North Dakota.	...	...	...	...	...	...	...	...	...	...	1,700.0	...	...	...	1,700.0	4
Niobrara River........................	...	...	...	...	...	...	...	...	...	...	25.0	30.0	2.5	...	57.5	...
James River...........................	...	...	...	...	50.0	160.0	40.0	...	45.0	...	120.0	...	55.0	...	470.0	...
Big Sioux and Rock Rivers.............	3.0	...	...	...	...	...	...	...	...	...	7.0	...	3.0	...	13.0	...
North Loup River (Nebraska)...........	A 10.0	...	...	...	...	B 660.0	...	...	...	...	D 210.0	...	...	...	C 880.0	...
Cedar River (Nebraska)................	A 560.0	...	...	...	...	B1,770.0	...	...	...	...	D 420.0	...	...	...	C2,750.0	...
Beaver River (Nebraska)...............	A 180.0	...	...	...	...	B 560.0	...	...	...	...	D 510.0	...	...	...	C1,250.0	...
Shell Creek (Nebraska)................	A 5.0	...	...	...	...	B1,090.0	...	...	...	...	D 5.0	...	...	...	C1,100.0	...
Loup River (Nebraska).................	A1,450.0	...	...	...	...	B2,010.0	...	...	...	...	D 960.0	...	...	...	C4,420.0	...
Elkhorn River (Nebraska)..............	...	...	...	...	...	...	...	50.0	...	...	...	...	...	...	C 50.0	...
Platte River (Nebraska)...............	...	...	...	...	...	B 460.0	...	...	...	...	D 202.3	...	6.0	...	C 668.3	...
Beaver Creek (Nebraska)...............	...	...	...	...	...	52.5	...	...	...	...	D 2.5	...	...	...	C 55.0	...
Sappa Creek (Nebraska-Kansas).........	...	...	...	...	...	232.9	...	...	...	...	D 164.5	...	...	...	C 397.4	...
Prairie Dog Creek (Kansas)............	...	...	...	...	...	11.0	...	...	...	...	...	...	...	...	C 11.0	...
Stranger and Mud Creeks (Kansas)......	...	...	...	...	...	71.4	...	...	...	...	D 15.0	...	...	...	C 86.4	...
Little Blue and East Fork Rivers (Mo.)	3.6	...	4.8	...	...	95.6	...	...	...	...	34.5	...	...	...	C 138.5	...

See reference notes at end of table.

ESTIMATED FLOOD LOSSES FOR 1966

In Thousands of Dollars

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
Missouri Basin (Cont'd)																
Wakenda River and tributaries	...	...	...	...	...	393.0	...	...	...	...	D 34.2	...	...	...	C 427.2	1
Grand River	...	...	...	...	...	10.0	...	...	...	...	2.0	...	...	...	C 12.0	...
Little Chariton River and tributaries	...	...	...	...	...	962.0	...	...	...	...	5.0	...	...	...	C 967.0	...
Chariton and Mussel Fork Rivers	...	...	...	...	...	543.8	...	...	...	...	D 2.0	...	...	...	C 545.8	...
Blackwater River	...	...	...	...	...	21.4	...	...	...	...	...	...	...	...	C 21.4	...
Total	2,211.6	...	4.8	...	50.0	9,103.6	40.0	50.0	45.0	...	4,419.0	30.0	66.5	...	16,020.5	5
Ohio Basin																
Monongahela River	51.0	19.5	35.5	16.0	7.0	...	...	...	...	...	...	1.0	112.0	...	242.0	...
Allegheny River	75.0	38.5	16.0	7.5	1.0	...	...	...	...	...	...	...	78.3	...	216.3	...
Muskingum River	...	...	...	...	...	...	...	...	...	...	...	...	...	523.0	C 523.0	...
Little Kanawha River	...	...	...	...	...	...	...	...	...	...	...	...	...	23.0	C 23.0	...
Leading Creek (Flash Flood, Rutland, Ohio)	1.0	5.0	10.0	10.0	5.0	1.0	...	0.5	3.0	3.0	1.0	1.0	1.0	...	41.5	...
Hocking River	...	...	...	...	...	...	...	...	...	...	...	...	...	209.0	C 209.0	...
New River and tributaries	25.0	...	25.0	...	50.0	2.0	0.5	5.0	1.0	1.2	20.0	...	...	...	129.7	...
Kanawha River	...	...	...	...	...	...	...	...	...	...	...	...	...	2.0	C 2.0	...
Paint Creek (Kentucky)	...	...	...	...	0.2	...	...	...	...	...	...	0.1	...	...	0.3	...
Little Sandy River	...	...	...	...	...	...	...	...	...	...	...	...	...	66.0	C 66.0	...
Wabash River and tributaries	5.0	...	5.0	5.0	120.0	200.0	...	...	...	...	210.0	...	16.9	E 972.0	1,533.9	...
Cumberland River and tributaries	5.2	...	...	...	100.0	...	...	...	1.0	...	83.0	3.0	18.0	...	210.2	1
Streams in Great Smoky Mountain Nat'l. Park, Tennessee	3.0	8.0	174.3	...	21.7	...	...	...	...	...	700.0	...	23.0	...	930.0	...
French Broad River and tributaries	5.0	5.0	31.7	5.4	0.3	...	...	...	...	...	21.0	...	...	...	68.4	...
Duck River	...	...	...	...	...	...	...	...	...	...	...	...	5.0	...	5.0	...
Ohio River and minor tributaries	374.5	57.5	114.0	65.0	30.0	9.5	...	...	2.0	...	10.0	29.2	307.1	4,994.0	5,993.1	...
Total	544.7	133.5	411.5	108.9	335.5	212.5	0.5	5.5	7.0	4.2	1,045.0	34.3	561.3	6,789.0	10,193.4	1
White Basin																
Buffalo River	...	...	...	...	10.0	125.0	...	...	0.5	...	25.0	...	...	...	160.5	...
Black River	10.0	5.0	...	...	58.0	56.0	...	...	35.5	21.0	78.0	15.0	...	CE1,065.0	1,343.5	...
Cache River and tributaries	22.3	...	...	...	12.8	1,079.4	...	6.0	301.0	27.0	407.5	10.0	104.9	...	1,970.9	...
White River and minor tributaries	35.0	10.0	2.0	5.5	165.8	320.5	...	17.9	46.2	20.5	279.6	...	0.5	...	903.5	...
Total	67.3	15.0	2.0	5.5	246.6	1,580.9	...	23.9	383.2	68.5	790.1	25.0	105.4	1,065.0	4,378.4	...
Arkansas Basin																
Poteau River	...	...	...	...	12.0	...	...	...	...	...	...	...	...	...	12.0	...
Petit Jean and Fourche La Fave Rivers	...	...	...	...	...	...	...	...	...	...	...	...	...	E 148.0	148.0	...
Arkansas River and tributaries above John Martin Dam	10.0	10.0	...	50.0	10.0	250.0	17.0	...	10.0	...	250.0	...	100.0	...	707.0	...
Total	10.0	10.0	...	50.0	22.0	250.0	17.0	...	10.0	...	250.0	...	100.0	148.0	867.0	...
Red Basin																
Little River	...	...	...	...	...	50.0	...	10.0	5.0	5.0	10.0	5.0	5.0	...	90.0	...
Sulphur River	30.0	5.0	75.0	50.0	100.0	100.0	5.0	10.0	20.0	2.0	100.0	20.0	150.0	...	667.0	2
Cypress Creek	250.0	...	...	...	150.0	100.0	...	...	75.0	...	200.0	...	...	...	775.0	...
Little Missouri River	...	...	...	...	...	57.0	...	...	...	...	...	...	...	6.0	C 63.0	...
Saline River	...	...	...	...	10.0	50.0	...	...	...	...	6.0	...	...	...	66.0	...
Ouachita and Caddo Rivers	57.0	22.0	20.0	20.0	376.0	96.0	...	24.5	28.0	20.0	16.0	...	111.5	...	791.0	...
Red River	...	...	...	...	...	240.0	...	...	...	...	10.0	...	...	...	250.0	...
Total	337.0	27.0	95.0	70.0	636.0	693.0	5.0	44.5	128.0	27.0	342.0	25.0	266.5	6.0	2,702.0	2
Lower Mississippi Basin																
Indian Creek (Tipton County, Tenn.)	7.0	10.0	5.0	...	75.0	550.6	...	...	10.0	...	...	...	...	...	657.6	...
St. Francis River	...	...	...	...	...	142.5	...	...	...	...	14.0	...	5.0	...	161.5	...
Yazoo River and tributaries	...	...	...	...	...	437.0	...	...	...	...	77.0	...	...	...	C 514.0	...
Big Black River	...	...	...	...	...	105.0	...	...	...	...	...	...	...	...	C 105.0	...
Total	7.0	10.0	5.0	...	75.0	1,235.1	...	...	10.0	...	91.0	...	5.0	...	1,438.1	...
WEST GULF OF MEXICO DRAINAGE																
Sabine River and tributaries	...	...	480.0	...	...	980.0	...	...	...	710.0	2,410.0	...	...	...	4,580.0	...
Trinity River and tributaries	200.0	150.0	600.0	200.0	3,540.0	7,700.0	...	310.0	1,200.0	50.0	1,020.0	200.0	350.0	...	15,520.0	14
Brazos River	...	...	...	...	...	1,200.0	...	16.0	60.0	...	4.0	...	...	...	C 1,280.0	...
Nueces River and tributaries	40.0	33.0	10.0	10.0	105.0	10.0	1.5	85.0	210.5	14.0	116.5	16.5	46.0	...	698.0	...
Rio Grande and tributaries	278.0	20.0	71.1	5.0	190.2	1,955.0	...	55.0	69.7	...	2,749.2	62.9	73.8	...	5,529.9	...
Total	518.0	203.0	1,161.1	215.0	3,835.2	11,845.0	1.5	466.0	1,540.2	774.0	6,299.7	279.4	469.8		27,607.9	14

ESTIMATED FLOOD LOSSES FOR 1966

In Thousands of Dollars

River and drainage	Urban Property					Rural Property					Other Property		Miscel-laneous	Unclassi-fied	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
GULF OF CALIFORNIA DRAINAGE																
Colorado Basin																
Virgin, Bill Williams and Verde Rivers and minor tributaries..............	12.0	3.0	4.0	6.8	3,380.4	350.2	405.0	2.0	35.9	7.3	209.0	2.4	1.0	....	4,919.0	1
Total	12.0	3.0	4.0	6.8	3,880.4	350.2	405.0	2.0	35.9	7.3	209.0	2.4	1.0	....	4,919.0	1
GREAT BASIN																
Flash flood in southeast Salt Lake City, Utah.........................	10.0	....	....	....	5.0	....	....	....	....	....	....	....	....	....	15.0	...
Tulare Lake:																
Kuweah and Tule Rivers.............	2,173.7	0.4	669.1	150.1	2,531.5	150.3	....	....	393.2	....	....	108.3	98.2	....	6,274.8	3
Buena Vista Lake:																
Kern River; Caliente Creek.........	2,422.0	....	....	....	2,600.0	400.0	....	....	....	....	....	....	....	....	5,422.0	1
Total	4,605.7	0.4	669.1	150.1	5,136.5	550.3	....	....	393.2	....	....	108.3	98.2	....	11,711.8	4
PACIFIC SLOPE DRAINAGE																
Salinas River........................	....	....	500.0	....	....	1,000.0	....	....	500.0	....	....	....	....	....	2,000.0	...
San Joaquin and Kings Rivers.........	....	....	....	....	700.0	....	....	....	....	....	....	....	....	....	700.0	...
Corte Madera Creek (Marin County, Calif.)...........................	350.0	100.0	75.0	25.0	50.0	....	....	....	....	....	....	....	....	....	C 600.0	...
Russian River........................	650.0	100.0	400.0	200.0	100.0	350.0	50.0	25.0	200.0	100.0	200.0	50.0	75.0	....	C 2,500.0	...
Smith, Eel, Mad and other streams in Humboldt County..................	A 2,040.0	....	....	....	4,000.0	450.0	....	....	....	....	350.0	10.0	....	....	F 6,850.0	...
Coquille and Coos Rivers.............	....	....	....	14.0	15.0	200.0	....	....	36.0	....	64.0	3.0	263.0	E 10.0	605.0	...
Willamette River.....................	....	....	....	....	....	....	....	....	....	....	....	....	....	1,678.0	C 1,678.0	...
Willapa River........................	....	....	....	....	....	....	....	....	....	....	....	....	....	40.0	C 40.0	...
Chehalis River.......................	....	....	....	....	....	....	....	....	....	....	....	....	....	520.0	C 520.0	...
Deshutes River (Puget Sound).........	....	....	....	....	....	....	....	....	....	....	....	....	....	10.0	C 10.0	...
Snohomish River......................	....	....	....	....	....	....	....	....	....	....	....	....	....	11.0	C 11.0	...
Nooksack River.......................	....	....	....	....	....	....	....	....	....	....	....	....	....	8.0	C 8.0	...
Dosewallips River....................	....	....	....	....	....	....	....	....	....	....	....	....	....	3.0	C 3.0	...
Total	3,040.0	200.0	975.0	239.0	4,865.0	2,000.0	50.0	25.0	736.0	100.0	614.0	63.0	338.0	2,280.0	15,525.0	...
GRAND TOTAL	16,106.7	623.4	3,337.5	850.3	19,456.7	40,533.2	519.0	616.9	3,379.5	981.2	16,453.8	578.9	2,717.3	10,849.7	117,004.1	G 31

A. Includes all urban
B. Includes all agricultural
C. Furnished by U. S. Engineers
D. Includes Public Utilities
E. Mostly agricultural damage
F. Per California Dept. of Water Resources
G. Includes two lives lost in flash flood in Kamakoa Gulch in Waimea area on Isle of Hawaii. No damage figure available.

LOSS OF LIFE AND PROPERTY IN THE UNITED STATES FROM FLOODS

Property Losses in Thousands of Dollars
BY DISTRICTS AND YEARS, 1925-1966

District	1925		1926		1927		1928		1929		1930		1931		1932	
	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property
Great Lakes----------	---	--------	---	19	48	15,750	---	--------	---	171	---	36	---	1	---	1
North Atlantic-------	---	50	---	137	40	29,408	3	2,105	---	245	---	--------	---	1,050	---	25
South Atlantic-------	---	2,999	---	--------	---	1	5	8,382	8	10,196	---	--------	---	31	---	191
East Gulf------------	2	615	---	37	8	255	---	2,428	5	8,746	---	466	---	174	---	615
Ohio Valley----------	---	33	2	5,523	94	15,639	4	10,279	34	17,050	---	7,042	---	1	---	288
* Upper Mississippi----	14	3,983	1	5,435	---	19,612	---	1,173	---	3,677	---	15	---	20	---	88
Lower Mississippi----	---	115	---	42	100	133,898	---	7,819	4	9,980	---	530	---	--------	---	1,840
Missouri-------------	---	--------	6	1,434	1	4,880	2	6,714	13	2,118	---	13	---	886	---	451
Arkansas-------------	---	224	6	8,938	132	26,183	1	4,349	12	7,516	---	213	---	6	---	2,528
Red------------------	---	--------	1	155	---	100,908	---	153	1	100	14	3,616	---	19	---	516
West Gulf------------	6	1,436	---	301	---	208	---	75	---	8,124	---	924	---	2	11	3,522
Colorado-------------	---	--------	---	447	---	12	---	100	12	175	---	--------	---	3	---	13
Pacific--------------	14	468	---	--------	---	902	---	1,032	---	--------	---	--------	---	560	---	217
Miscellaneous east of Rockies------------	---	--------	---	1,000	---	--------	---	--------	---	--------	---	2,500	---	--------	---	--------
Miscellaneous west of Rockies------------	---	--------	---	--------	---	--------	---	--------	---	--------	---	495	---	55	---	--------
Total	36	9,923	16	23,468	423	347,656	15	44,611	89	68,098	14	15,850	---	2,808	11	10,295

District	1933		1934		1935		1936		1937		1938		1939		1940	
Great Lakes----------	---	14	---	--------	---	13,185	1	9	---	690	---	240	---	11	2	--------
North Atlantic-------	2	5,418	---	142	52	16,340	24	146,035	---	2,689	8	37,068	2	56	4	2,519
South Atlantic-------	---	19	---	240	---	77	2	2,391	---	989	---	455	---	454	12	5,034
East Gulf------------	---	444	---	13	---	719	---	1,240	---	357	---	1,655	1	6,680	---	5,497
Ohio Valley----------	5	7,725	2	928	5	8,536	82	122,296	65	413,936	8	4,481	80	3,773	28	8,077
* Upper Mississippi----	4	1,157	12	1,023	---	1,506	---	313	3	1,127	2	3,659	---	228	---	199
Lower Mississippi----	---	6,933	---	--------	17	6,631	---	55	72	6,657	---	1	---	1,448	---	--------
Missouri-------------	2	1,391	6	1,906	125	38,959	---	109	2	1,367	71	4,333	---	610	5	1,759
Arkansas-------------	---	776	---	18	4	8,344	6	817	---	1,557	---	2,202	---	179	2	1,332
Red------------------	---	38	22	640	8	2,751	---	16	---	24	---	755	---	22	---	12
West Gulf------------	---	1,160	---	422	20	29,522	24	8,376	---	1,830	6	6,003	---	360	7	7,622
Colorado-------------	---	--------	1	22	---	--------	---	--------	---	264	---	256	---	13	---	180
Pacific--------------	20	11,604	45	5,008	5	557	3	892	---	9,245	85	39,990	---	--------	---	8,236
Total	33	36,679	88	10,362	236	127,127	142	282,549	142	440,738	180	101,098	83	13,834	60	40,467

District	1941		1942		1943		1944		1945		1946		1947		1948	
Great Lakes----------	---	--------	---	153	1	9,564	---	130	---	119	---	251	1	5,761	4	20,270
North Atlantic-------	---	--------	35	22,321	4	1	---	--------	3	5,729	14	8,500	---	198	4	12,467
South Atlantic-------	---	89	---	608	---	152	---	1,926	3	1,007	---	172	---	944	1	1,372
East Gulf------------	---	24	2	155	---	773	---	2,660	---	268	---	2,963	2	654	---	3,122
Ohio-----------------	---	1,122	16	16,546	44	31,416	---	806	27	52,887	---	10,914	5	7,812	16	16,871
* Upper Mississippi----	---	3,018	1	5,592	16	42,097	7	27,031	---	9,288	4	8,642	27	87,937	---	2,905
Lower Mississippi----	---	--------	---	475	---	829	---	1,550	---	3,601	---	4,407	1	2,555	---	5,390
Missouri-------------	2	12,019	1	22,511	13	62,630	13	44,616	4	34,403	---	8,305	18	163,176	1	31,490
Arkansas-------------	9	13,346	---	6,577	26	41,850	10	11,171	20	15,068	---	1,791	1	1,424	14	18,721
Red------------------	---	1,855	---	2,205	---	44	---	1,676	6	22,209	---	1,434	---	1,446	---	220
West Gulf------------	34	5,458	2	12,489	---	2,589	3	8,938	4	10,987	10	15,967	---	330	1	4,604
Colorado-------------	2	1,061	---	3	---	310	---	575	10	182	---	--------	---	3	---	1
Pacific--------------	---	1,532	11	8,872	3	7,477	---	--------	14	9,530	---	7,367	---	88	37	111,826
Great Basin----------	---	--------	---	--------	---	--------	---	--------	---	520	---	100	---	--------	---	--------
Total	47	39,524	68	98,507	107	199,732	33	101,079	91	165,798	28	70,813	55	272,328	82	229,959

District	1949		1950		1951		1952		1953		1954		1955		1956	
Great Lakes----------	---	1,619	9	33,542	---	131	---	2,350	1	2,654	---	15,000	---	2,596	---	1,327
North Atlantic-------	11	9,273	2	7,149	1	916	5	1,222	1	10,637	11	7,337	211	761,303	11	1,453
South Atlantic-------	3	291	---	1,203	---	9	---	236	---	109	1	546	2	902	3	2,720
East Gulf------------	---	1,747	---	1,435	---	4,310	---	347	2	2,444	---	543	6	5,300	1	1,379
Ohio-----------------	7	4,754	50	25,195	1	4,889	14	4,940	5	778	9	18,594	15	14,645	12	17,836
*Upper Mississippi----	---	406	2	11,060	6	71,799	7	22,439	2	5,602	4	24,656	---	85	---	388
Lower Mississippi----	---	10,020	6	10,071	---	5,996	---	444	12	7,857	---	490	---	1,352	---	865
Missouri-------------	6	33,503	18	35,090	31	889,872	8	181,335	14	44,255	---	11,999	1	2,753	1	6,360
Arkansas-------------	---	6,696	---	8,294	10	44,331	---	5	2	2,020	---	296	2	5,362	---	24
Red------------------	2	365	1	1,105	---	2,101	---	836	---	2,061	---	923	---	2,003	1	250
West Gulf------------	18	22,462	---	417	---	238	10	9,584	1	34,849	29	21,639	2	4,286	3	3,714
Colorado-------------	---	155	---	--------	---	889	---	76	---	7	---	1,890	---	2,173	---	--------
Pacific--------------	1	2,640	5	37,362	2	3,260	10	20,251	---	8,931	1	2,929	63	186,785	6	27,930
Great Basin----------	---	--------	---	4,127	---	--------	---	9,999	---	--------	---	--------	---	5,946	4	442
Total	48	93,931	93	176,050	51	1,028,741	54	254,064	40	122,204	55	106,842	302	995,491	42	64,688

District	1957		1958		1959		1960		1961		1962		1963		1964	
Great Lakes----------	1	1	---	10	---	12,746	2	1,942	1	216	---	--------	1	35,872	---	325
North Atlantic-------	---	11	---	167	---	6,952	2	15,274	---	1,168	---	8	6	1,325	---	11,342
South Atlantic-------	---	166	---	3,917	---	631	---	172	---	600	---	97	---	89	---	16,786
East Gulf------------	---	4,526	---	3,434	---	241	---	13,780	3	30,386	---	5,768	---	1,726	---	10,490
Ohio-----------------	25	135,972	10	68,248	8	82,503	1	7,519	31	33,748	5	30,583	26	98,824	15	94,034
*Upper Mississippi----	8	14,648	---	20,770	8	3,427	2	12,901	4	25,320	1	5,341	---	413	---	--------
Lower Mississippi----	6	15,608	---	11,979	---	199	---	496	---	11,462	---	3,546	---	293	---	1,125
Missouri-------------	15	26,057	21	45,819	3	12,162	8	28,105	7	33,990	2	10,501	3	14,705	37	41,902
Arkansas-------------	5	50,082	---	360	2	12,886	1	3,480	1	9,173	3	1,254	2	563	1	1,607
Red------------------	6	16,037	---	11,768	---	880	---	226	---	1,609	---	581	1	2,361	---	124
West Gulf------------	16	73,057	6	18,127	4	2,886	14	8,205	1	2,945	2	1,948	---	640	5	7,178
Colorado-------------	---	741	---	240	---	100	---	--------	3	552	---	1,080	---	--------	---	55
Pacific--------------	---	23,397	10	33,404	---	5,638	2	876	1	1,825	6	12,198	---	15,305	42	463,959
Great Basin----------	---	--------	---	12	---	4	---	--------	---	1,039	---	2,332	---	3,530	---	2,715
Total	82	360,303	47	218,255	25	141,255	32	92,976	52	154,033	19	75,237	39	175,646	100	651,642

District	1965		1966	
Great Lakes----------	---	20	0	176
North Atlantic-------	2	55	1	535
South Atlantic-------	---	268	1	375
East Gulf------------	---	2,665	0	6,388
Ohio-----------------	8	3,591	1	10,193
* Upper Mississippi----	15	182,053	0	14,167
Lower Mississippi----	---	811	0	1,438
Missouri-------------	26	451,832	5	16,021
Arkansas-------------	16	70,152	0	5,245
Red------------------	---	852	2	2,702
West Gulf------------	33	40,039	14	27,608
Colorado-------------	8	12,648	1	4,919
Pacific--------------	11	18,745	4	15,525
Great Basin----------	---	4,315	0	11,712
Total	119	788,046	29	117,004

* Including Red River of the North

LOSS OF LIFE AND PROPERTY IN THE UNITED STATES FROM FLOODS

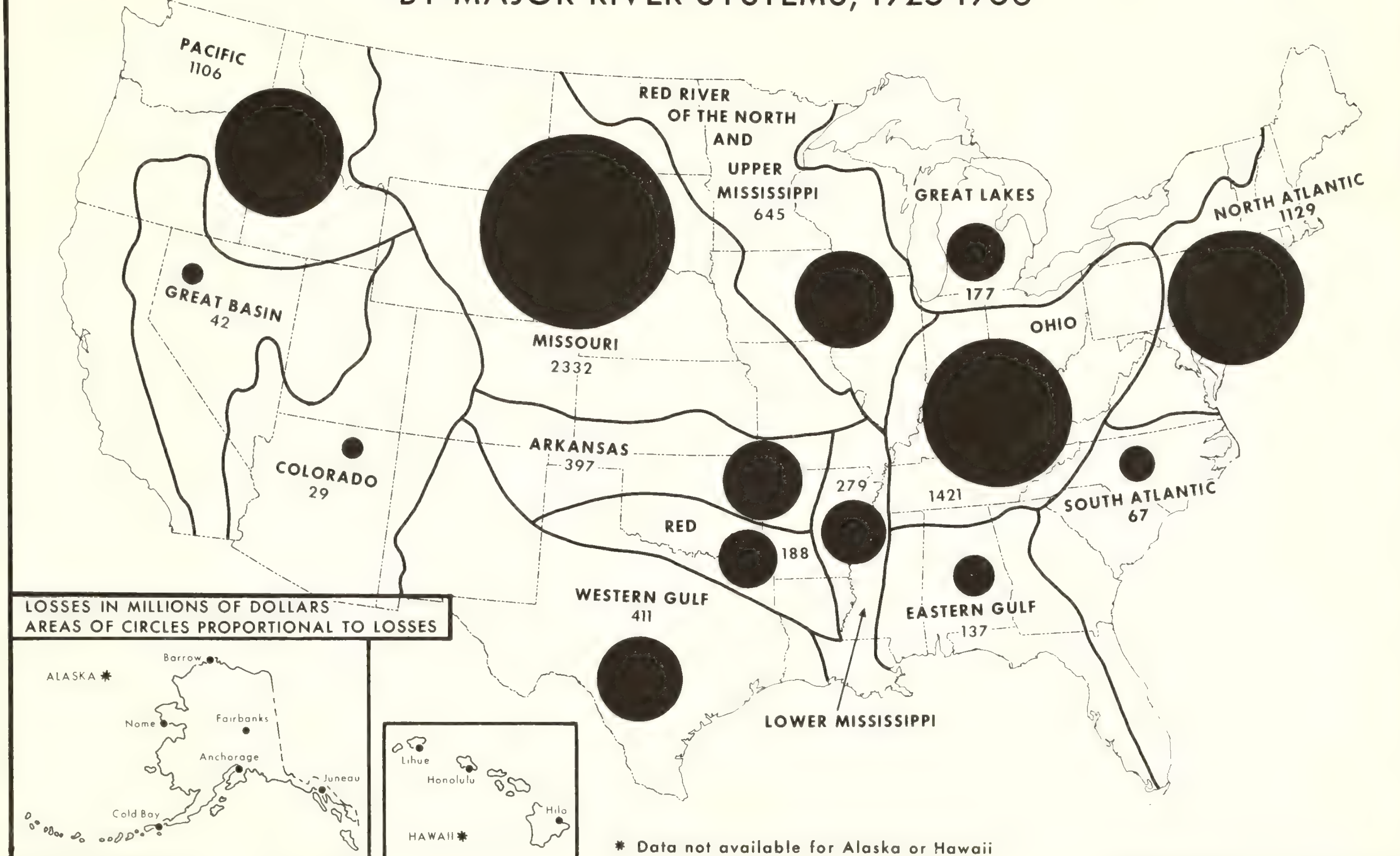
PROPERTY LOSSES IN THOUSANDS OF DOLLARS
By Months and Years, 1925-1966

Year	January		February		March		April		May		June	
	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life
1925	3,614	2	141	0	74	0	-	0	65	6	3,980	14
1926	19	0	600	0	77	0	293	0	-	0	-	1
1927	2,626	8	1,867	0	407	0	283,207	232	7,566	95	1,125	0
1928	4	0	9	0	758	0	1,168	0	105	0	12,296	1
1929	122	0	2,964	0	21,247	47	1,937	0	15,668	5	10,268	5
1930	7,110	0	7	0	146	0	-	0	5,021	14	3,042	0
1931	-	0	30	0	572	0	-	0	8	0	13	0
1932	1,207	0	-	0	165	0	373	0	1,552	0	1,245	0
1933	308	0	87	0	2,008	1	2,709	4	10,785	4	2,650	4
1934	5,002	45	9	0	706	0	1,693	34	-	0	899	0
1935	297	0	1	0	2,177	4	2,698	5	16,903	40	62,702	122
1936	341	0	2,107	6	145,936	24	124,743	82	1,118	6	124	0
1937	411,481	65	7,691	75	62	0	4,524	0	2,627	0	5,429	0
1938	260	0	3,712	2	27,819	86	3,008	0	12,402	0	3,624	58
1939	3	0	1,657	4	738	0	1,982	0	37	0	4,271	1
1940	58	0	7,246	0	1,048	2	2,185	0	438	0	2,790	12
1941	3	0	516	0	820	2	1,970	4	3,081	7	12,718	12
1942	131	0	1,901	1	327	0	18,369	[illegible]	14,837	31	25,586	1
1943	3,579	4	69	5	7,183	8	10,161	5	130,478	57	41,771	0
1944	3	0	35	1	2,633	3	42,646	13	24,103	0	24,535	16
1945	146	0	5,882	0	33,202	14	54,054	36	23,530	0	28,866	8
1946	13,385	0	4,015	0	631	0	2	0	12,587	12	20,343	3
1947	486	3	96	0	1,458	0	56,037	2	18,032	1	193,134	48
1948	6,479	6	11,429	1	17,896	4	28,667	15	107,244	35	22,160	15
1949	9,772	6	5,073	2	11,676	3	9,261	2	18,195	10	32,861	17
1950	4,619	3	6,925	7	3,451	7	14,668	0	51,126	21	22,340	34
1951	884	0	5,823	2	7,264	1	18,287	2	15,166	6	5,383	8
1952	9,139	14	926	1	1,909	9	199,127	10	6,438	3	22,775	[illegible]
1953	8,575	1	368	0	10,675	2	-	0	41,656	5	53,572	29
1954	2,554	4	84	0	20	0	557	0	6,213	1	52,076	20
1955	-	0	1,620	4	17,372	17	2,653	4	9,231	2	3,825	1
1956	9,455	0	2,731	3	3,403	2	1,202	0	24,799	10	2,300	4
1957	61,383	15	29,750	2	-	0	106,130	18	44,182	13	101,696	32
1958	273	0	12,501	11	11,193	0	21,145	3	24,884	2	67,537	0
1959	95,601	8	2,448	0	2,031	6	427	0	7,181	8	350	0
1960	534	1	713	2	29,988	4	28,056	0	2,214	3	9,956	13
1961	32	0	13,870	1	14,242	3	5,053	0	67,785	6	4,324	4
1962	884	0	24,906	9	28,418	4	8,920	0	1,893	0	2,265	2
1963	2,343	0	16,392	0	99,429	31	2	0	1,573	0	14,682	3
1964	787	0	15	0	97,945	14	16,763	1	1,313	0	71,666	37
1965	11,084	0	2,566	2	4,158	1	180,337	16	36,328	3	495,750	66
1966	13,114	0	12,823	2	2,012	1	40,460	16	1,315	0	4,377	1
Total	687,697	185	191,605	143	613,976	300	1,295,464	506	769,679	406	1,451,846	594
Average	16,373	4	4,562	3	14,618	7	30,844	12	18,326	10	34,568	14

Year	July		August		September		October		November		December		* Total	
1925	140	0	275	0	1,171	14	380	0	83	0	-	0	9,923	36
1926	55	0	7	0	7,729	6	12,699	6	135	0	1,854	3	23,468	16
1927	241	0	3,460	0	-	0	1,627	0	45,093	88	437	0	347,656	423
1928	13,339	0	9,272	3	4,047	5	-	0	3,567	6	46	0	44,611	15
1929	4,959	32	130	0	92	0	9,379	0	556	0	76	0	68,098	89
1930	244	0	251	0	-	0	29	0	-	0	-	0	15,850	14
1931	1,215	0	201	0	2	0	1	0	744	0	22	0	2,808	0
1932	1,627	0	763	0	2,666	11	335	0	3	0	359	0	10,295	11
1933	1,117	0	6,516	4	489	0	10	0	-	0	10,000	16	36,679	33
1934	178	0	322	9	84	0	28	0	1,287	0	154	0	10,362	88
1935	29,370	52	159	5	7,551	0	2,691	0	61	0	2,517	8	127,127	236
1936	2,428	20	205	0	5,046	4	378	0	118	0	5	0	282,549	142
1937	124	2	760	0	140	0	256	0	97	0	7,546	0	440,738	142
1938	10,373	9	232	8	39,641	17	3	0	5	0	19	0	101,098	180
1939	1,725	78	3,408	0	13	0	-	0	-	0	-	0	13,834	83
1940	5,314	0	18,853	40	2,135	6	88	0	95	0	217	0	40,467	60
1941	314	0	23	0	6,247	15	10,446	7	3,361	0	25	0	39,524	47
1942	13,064	17	267	0	3,234	0	5,678	2	-	0	15,113	14	98,507	68
1943	2,870	3	3,621	25	-	0	-	0	-	0	-	0	199,732	107
1944	3,198	0	928	0	1,708	0	108	0	-	0	1,182	0	101,079	33
1945	8,280	3	2,942	13	1,059	3	1,424	3	-	0	6,413	11	165,798	91
1946	1,636	4	1,148	0	7,346	9	1,965	0	1,314	0	6,441	0	70,813	28
1947	652	1	1,431	0	455	0	248	0	5	0	304	0	272,328	55
1948	17,550	2	1,144	0	590	0	-	0	3,553	0	13,247	4	229,959	82
1949	3,762	5	568	0	618	0	1,551	2	578	1	16	0	93,931	48
1950	19,224	6	1,687	0	3,718	4	5,562	3	6,638	3	36,092	5	176,050	93
1951	972,458	25	2,509	7	621	0	-	0	-	0	346	0	1,028,741	51
1952	3,858	9	296	0	9,376	6	-	0	30	0	190	0	254,064	54
1953	3,873	1	1,926	2	887	0	42	0	300	0	330	0	122,204	40
1954	2,218	2	6,606	3	3,170	8	33,341	17	-	0	3	0	106,842	55
1955	1,071	0	712,085	193	3,471	0	52,442	18	1,168	0	190,553	63	995,491	302
1956	5,849	15	11,671	4	-	0	1,892	0	137	3	1,249	1	64,688	42
1957	4,669	0	722	2	335	0	2,663	0	8,610	0	163	0	360,303	82
1958	42,779	29	18,631	1	14,560	0	2,336	1	2,416	0	-	0	218,255	47
1959	557	0	5,550	0	1,844	0	19,602	3	4,970	0	154	0	141,255	25
1960	9,038	1	677	0	5,266	2	5,818	6	360	0	356	0	92,976	32
1961	5,825	25	3,974	6	26,041	7	580	0	1,641	0	10,666	0	154,033	52
1962	2,428	1	708	0	3,266	3	-	0	580	0	970	0	75,238	19
1963	4,261	4	36,926	1	38	0	-	0	-	0	-	0	175,646	39
1964	29	0	517	0	5,477	3	16,432	1	750	2	439,948	42	651,642	100
1965	24,705	17	193	0	9,652	0	894	0	-	0	22,379	14	788,046	119
1966	840	4	17,773	0	658	0	0	0	528	2	23,104	5	117,004	31
Total	1,227,458	367	879,337	326	180,443	123	190,928	69	88,783	105	792,496	186	8,369,712	3,310
Average	29,225	9	20,937	8	4,296	3	4,546	2	2,114	3	18,869	4	199,279	78

*Not adjusted to present price index

DISTRIBUTION OF ESTIMATED FLOOD LOSSES IN THE UNITED STATES BY MAJOR RIVER SYSTEMS, 1925-1966



LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
May-June 1903-------	Kansas, Lower Missouri, and Upper Mississippi Rivers----------------------	100	$ 40,000
July 1908-----------	Missouri River----------------------------	---	9,339
	Upper Mississippi River-------------------	---	5,600
	Red River---------------------------------	---	16,200
July 1909-----------	Missouri River east of Kansas City--------	---	5,500
March 1912----------	Lower Mississippi River-------------------	---	70,000
March 1913----------	Ohio River and tributaries----------------	467	147,000
	Mississippi River-------------------------	---	7,000
December 1913-------	Texas rivers------------------------------	177	9,000
June 1915-----------	Kansas River------------------------------	---	5,950
August 1916---------	Rivers of the Carolinas-------------------	---	21,700
June 1921-----------	Arkansas River in State of Colorado-------	120	25,000
September 1921------	Texas rivers------------------------------	215	19,000
April-May, 1922*----	Upper Mississippi River-------------------	---	4,700
	Ohio Valley-------------------------------	---	4,000
	Lower Mississippi River-------------------	---	7,500
October 1923--------	Lower Arkansas, including the State of Oklahoma----------------------------	---	15,000
March 1924----------	Potomac River-----------------------------	---	6,000
Spring of 1927------	Mississippi Valley------------------------	313	284,118
August 1927---------	Arkansas River and tributaries------------	---	3,440
November 1927-------	New England rivers------------------------	88	45,578
June 1928-----------	Ohio Valley-------------------------------	---	7,536
August 1928---------	South Atlantic drainage-------------------	---	4,400
September 1928------	South Atlantic drainage-------------------	---	4,000
March-June 1929-----	East Gulf drainage------------------------	---	8,000
	Ohio Valley-------------------------------	---	16,500
	Missouri Valley---------------------------	---	2,000
	Upper Mississippi Valley------------------	---	3,600
	Lower Mississippi Valley------------------	---	10,000
	Arkansas-White Valley---------------------	---	2,700
	Rivers in Texas---------------------------	---	8,000
July 1929-----------	Rivers in Central Kansas------------------	---	4,000
October 1929--------	Rivers in Southeastern States-------------	---	** 9,000
January 1930--------	White-Wabash Rivers-----------------------	---	7,000
May 1930------------	Red River and tributaries-----------------	---	3,000
Sept.-Oct. 1932-----	Lower Rio Grande--------------------------	---	2,500
March 1933----------	Ohio River--------------------------------	---	2,000
December 1933-------	Columbia River and tributaries------------	---	10,000
May 1935------------	Rivers in eastern Colorado----------------	---	6,000
May-June 1935-------	Republican and Kansas Rivers--------------	110	18,000
	Lower Missouri River----------------------	---	10,000
July 1935-----------	Upper Susquehanna tributaries-------------	52	26,000
December 1935-------	Houston, Texas, area----------------------	---	2,500
March-April 1936----	Rivers in Eastern United States-----------	107	270,000
July 1936-----------	Rivers in central Texas-------------------	---	2,000
September 1936------	Rivers in central and northern Texas------	---	5,000
Jan.-Feb. 1937------	Ohio and lower Mississippi River basins---	137	417,685
December 1937-------	Sacramento Valley-------------------------	---	7,100
March 1938----------	Streams in southern California------------	79	24,500
September 1938------	Rivers in New England---------------------	---	37,000
July 1939-----------	Licking and Kentucky Rivers---------------	78	1,715
Feb.-Mar. 1940------	Sacramento Valley-------------------------	---	6,700
August 1940---------	Rivers in southern Virginia, the Carolinas, and eastern Tennessee------------	40	12,000
Oct.-Nov. 1941------	Arkansas River Basin----------------------	---	8,500
April-June 1942-----	Upper Mississippi, Missouri, Arkansas, Red, and Trinity River Basins-----------	---	44,350
May 1942------------	Delaware & Susquehanna River Basins-------	33	13,000
July 1942-----------	Upper Allegheny River and Sennemahoning Creek Basins---------------------------	15	10,000
Nov.-Dec. 1942------	Willamette River--------------------------	10	6,900
Dec.1942-Jan.1943---	Ohio River--------------------------------	---	10,540
Apr.-June 1943------	Maumee, Wabash, upper Mississippi, Missouri, White, and Arkansas River Basins----------------------------------	60	172,500
August 1943---------	Little Kanawha----------------------------	23	1,300

LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902-Cont'd

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
April-June 1944	Upper Mississippi, Missouri, Arkansas, Red, lower Mississippi Basins and east Texas Streams	17	$ 82,000
Feb.-Mar. 1945	Ohio River	18	30,000
Feb.-Apr. 1945	Trinity and Sabine Rivers	---	9,000
Mar.-July 1945	Lower Mississippi River	---	9,500
July 1945	Lake Section of Rensselaer County, N. Y.	---	3,500
December 1945	Willamette River	9	6,000
January 1946	Cumberland River	---	3,925
	Tennessee River and tributaries	---	4,500
May-June 1946	Trinity River	---	4,150
September 1946	San Antonio and Nueces Rivers	9	6,050
December 1946	Willamette River	---	5,525
April 1947	Allegheny	---	4,319
May-July 1947	Rivers in Middle West in the lower Missouri and middle Mississippi River Basins	29	235,000
June 1947	East Creek at Rutland, Vt.	---	2,000
March 1948	Susquehanna River and tributaries	---	4,300
Apr.-May 1948	Red River of North and tributaries	---	18,700
May-June 1948	[1] Columbia Basin	35	101,725
June-July 1948	Arkansas River and minor tributaries	---	14,500
December 1948	Housatonic River	---	4,200
April 1949	Rio Grande	---	3,300
May 1949	Trinity River	10	14,000
June 1949	Shenandoah and Potomac Rivers	11	8,850
Apr.-May 1950	[2] Red River of North	9	33,000
June 1950	Central West Virginia	31	4,020
Nov.-Dec. 1950	Central Valleys of California and Western Nevada	---	23,000
February 1951	Western Washington	---	2,688
Mar.-Apr. 1951	Alabama-Georgia	---	3,292
April 1951	Upper Mississippi Basin	---	18,622
June-July 1951	[3] Kansas-Missouri	28	935,224
Jan.-Feb. 1952	Ohio River	---	1,898
April 1952	[4] Red River of the North-Upper Mississippi-Missouri River Basins	11	198,000
May 1952	Great Basin	---	8,373
September 1952	West Gulf of Mexico Drainage	---	7,762
January 1953	Northern California, Oregon, and Washington	---	5,971
March 1953	New England States	---	10,000
Apr.-May 1953	Louisiana-Texas	12	38,959
June 1953	Northwestern Iowa	14	32,950
June 1954	Middle Rio Grande and lower Pecos	16	19,079
October 1954	Pecos River in New Mexico	13	1,783
March 1955	Ohio Basin	15	14,396
August 1955	[5] Hurricane floods in Northeast	187	714,079
December 1955	[6] West Coast	61	154,532
May-June 1956	[7] Columbia and Kootenai Rivers	---	14,025
Jan.-Feb. 1957	[8] Streams in Southeastern Kentucky, Southwestern West Virginia, adjoining portions of Tennessee and Virginia	14	58,000
February 1957	Snake River and tributaries	---	20,500
Apr.-June 1957	Streams in Texas, Arkansas, Kansas, Louisiana, Missouri and Oklahoma	18	105,000
June-July 1957	Wabash River and tributaries	9	63,000
June 1958	White and Wabash Rivers	---	57,000
July 1958	Flash flood on East Nishnabotna River in Iowa	19	5,850
January 1959	Ohio River Basin	8	81,921
January 1959	Lake Erie Drainage in Ohio and New York	---	11,265

LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902-Cont'd

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
Mar.-Apr. 1960-----	[9] Snowmelt Floods in the Missouri and Upper Mississippi Basins---------	7	$ 34,466
Feb.-March 1961-----	East Gulf of Mexico Drainage--------------	---	13,997
March 1961----------	Upper Mississippi Basin-------------------	---	7,499
July 1961-----------	Flash Flood on Small Streams in Charleston, W. Va.----------------------	22	3,238
September 1961------	Kansas-Missouri---------------------------	---	23,557
Feb.-March 1962-----	Kentucky----------------------------------	---	16,067
Feb.-March 1962-----	Southeastern Idaho------------------------	---	6,318
March 1963----------	Ohio River Basin--------------------------	26	97,600
June 1964-----------	Montana-----------------------------------	31	54,279
December 1964-------	California and Oregon---------------------	40	415,832
March 1964----------	Ohio River Basin--------------------------	13	81,602
March-May 1965------	[10] Upper Mississippi, Missouri, and Red of North Basins----------------------------	16	181,325
May 1965------------	Brazos River------------------------------	---	30,802
June 1965-----------	South Platte Basin------------------------	16	415,076
June 1965-----------	Sanderson, Texas Flash Flood--------------	26	2,715
June 1965-----------	Arkansas Basin----------------------------	16	58,340
January 1966--------	Streams in Humboldt County, Calif.--------	---	6,850
April-May 1966------	Sabine and Trinity Basins, Texas----------	14	20,100
December 1966-------	Tulare and Buena Vista Lakes Drainages in California-----------------	4	11,712

\# Loss of Life Carried Only Where Considerable
* No Lives Lost in Mississippi Valley Floods of 1922
** Partly Storm Damage Caused by Tropical Disturbance

References

1. Monthly Weather Review, January 1949
2. Monthly Weather Review, September 1951
3. Technical Paper No. 17
4. Technical Paper No. 23
5. Technical Paper No. 26
6. Climatological Data, National Summary, December 1955
7. Climatological Data, National Summary, Annual 1956
8. Climatological Data, National Summary, January 1957
9. Technical Paper No. 45
10. Technical Report No. WB-3

FLOOD DAMAGE ESTIMATES BY STATES

1955-1966
Flood Losses in Thousands of Dollars

States	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Alabama	3,379	720	2,324	872	-	670	12,625	3,529	1,280	5,343	723	2,366
Alaska	-	*	-	-	-	-	**	***	-	-	-	0
Arizona	226	-	-	-	100	-	325	1,000	-	55	11,330	3,050
Arkansas	61	255	27,938	6,202	3,090	580	3,503	91	2,500	598	143	5,055
California	165,767	8,745	13	33,063	4	516	95	2,780	11,834	229,168	11,321	24,347
Colorado	2,567	5,135	2,901	240	-	-	-	80	50	-	452,293	707
Connecticut	379,360	-	-	-	-	750	-	-	-	-	-	0
Delaware	117	-	-	-	-	-	-	-	-	-	-	0
District of Columbia	-	51	-	60	-	-	-	-	-	-	-	0
Florida	105	1,891	-	-	150	12,047	317	1,481	-	426	144	548
Georgia	1	212	1,068	323	-	392	5,236	-	445	3,641	397	1,628
Hawaii	-	-	-	400	-	-	-	-	2,300	-	-	0
Idaho	1,371	6,222	20,896	3	500	-	939	8,112	2,766	11,704	4,184	0
Illinois	102	1,026	1,206	17,970	1,506	7,503	11,553	891	513	3,044	30,564	577
Indiana	1,003	4,021	66,748	52,302	12,958	2,649	13,306	670	8,266	12,327	20	3,098
Iowa	35	51	1,543	7,508	128	7,612	9,389	6,778	70	240	32,462	904
Kansas	474	33	9,164	4,606	4,061	1,947	13,397	1,826	168	370	29,792	97
Kentucky	6,629	568	55,233	3,817	2,480	3	12,969	16,885	36,917	35,476	1,044	1,671
Louisiana	30	-	4,147	2,842	-	112	6,074	1,908	-	30	-	250
Maine	-	-	-	-	61	-	800	-	-	-	-	528
Maryland	5,450	837	-	40	-	-	-	-	-	-	53	0
Massachusetts	155,982	-	-	-	-	6,400	-	-	-	-	-	0
Michigan	-	1,278	-	-	-	1,181	-	-	-	-	-	0
Minnesota	-	11	9,128	17	50	212	552	1,291	26	-	97,603	4,300
Mississippi	3,132	1,270	2,693	13,826	280	744	15,918	1,982	19	3,152	1,931	2,706
Missouri	666	167	9,618	38,718	6,018	13,506	27,375	557	152	6,591	33,976	2,781
Montana	63	317	33	1	82	57	-	147	148	54,389	253	0
Nebraska	1,500	865	5,983	3,064	3,753	8,884	674	2,630	13,394	5,146	1,368	11,628
Nevada	7,398	237	-	-	-	-	891	762	2,858	2,454	4	307
New Hampshire	-	-	-	-	4,500	100	-	-	-	-	-	0
New Jersey	23,102	-	-	3	-	-	-	-	-	-	-	0
New Mexico	1,066	-	-	-	-	-	-	-	620	1,235	4,833	1,048
New York	30,072	1,089	166	42	5,667	7,229	608	-	33,102	3,275	-	0
North Carolina	625	831	788	3,201	506	100	1,400	-	-	15,816	88	198
North Dakota	2	-	100	-	28	136	-	-	-	-	5,192	9,700
Ohio	753	1,056	7	4,867	54,840	191	1,217	6,512	22,359	28,039	-	1,893
Oklahoma	977	-	35,665	169	8,907	2,638	2,483	792	413	798	2,508	12
Oregon	9,515	6,376	310	363	20	360	757	1,550	299	187,101	5,679	2,283
Pennsylvania	141,381	7,199	1,048	3,582	21,109	3,072	612	15	5,397	16,938	-	705
Rhode Island	28,830	-	-	-	-	-	-	-	-	-	-	0
South Carolina	74	-	60	680	122	72	369	97	89	1,809	268	140
South Dakota	11	10	3,969	-	-	3,417	1	3,030	-	-	740	470
Tennessee	977	279	5,118	128	-	226	2,263	651	6,262	156	2,472	1,608
Texas	5,165	3,715	78,881	18,101	2,886	8,093	2,846	1,948	20	5,435	39,395	28,001
Utah	226	210	169	10	4	-	281	1,272	64	70	1,746	1,577
Vermont	-	-	3	-	-	-	-	-	-	692	-	0
Virginia	10,695	-	139	-	26	211	231	-	5,937	-	2	0
Washington	1,165	6,472	1,664	50	4,914	-	130	-	1,013	11,817	1,012	592
West Virginia	5,187	3,185	11,052	1,170	709	370	3,455	5,914	17,624	4,169	49	1,868
Wisconsin	50	335	-	-	1,791	996	1,442	57	142	-	14,067	361
Wyoming	200	11	526	3	-	-	-	-	899	138	390	0
TOTAL	995,491	64,688	360,303	218,255	141,255	92,976	154,033	75,238	177,946	651,642	788,046	117,004

* Major Flood in May 1956
** Major Flood in June 1961
*** Ice Jam Flooding May 1962
*** Serious Flooding June 1962

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

YEAR 1967

Elmer R. Nelson, Office of Hydrology

Floodwise, the year 1967 was significant, in that it produced several major damaging floods. It was also significant in that the loss of life was comparatively small. Based on preliminary estimates of flood damage, the four most catastrophic floods during 1967 were as follows:

Location	Month	Total Damages	Loss of Life
1. Lower Missouri Basin	June	$80 million	2
2. Fairbanks-Nenana, Alaska	August	79 million	7
3. Ohio Basin	March	40 million	3
4. Hurricane Beulah floods in southern Texas	September	35 million	3

This report contains a brief summary, by months, of the most significant flooding during 1967. A detailed summary of flooding during 1967 appears in the monthly issue of this publication.

January

Widespread lowland flooding occurred in the San Francisco Bay region in Marin County and Redwood City, Calif., during January. Water reached depths as much as 6 feet in low areas and on roads. Many landslides occurred on hillsides in the bay area damaging or destroying scores of homes. The high water along the Russian River necessitated the evacuation of about 100 persons. Flooding was confined to the reach from Healdsburg to the Guerneville resort area. Even though the river crested 10.6 feet above flood stage at Guerneville, the flooding was not considered major. Flood damages along the Russian and Napa River were estimated at $1.5 million.

February

Flooding during February was minor and was confined mostly to the area east of the Mississippi River. No damages were reported from the minor overflows.

March

Severe flooding occurred in portions of the Ohio Basin during March. Several streams in West Virginia reached record to near record high stages. At least 3,800 families in the State received assistance from the Red Cross. West Virginia was declared a disaster area by the Governor. The second highest flood of record occurred along the Monongahela River from Greensboro, Pa., to Charleroi, Pa., and was exceeded only by the flood of July 1888. Flooding along the Ohio River was mostly light to moderate. Preliminary estimates of flood were placed at near $40 million.

April

Near record flooding occurred on the Chippewa River in Wisconsin during April. The crest at Durand, Wis., was the highest since 1884. Crests along the Mississippi River in the reach from Wabasha, Minn., to Burlington, Iowa, a distance of 350 miles, were near those of the 1952 flood. Major local flooding occurred on the Comite and Amite Rivers in Louisiana. Damages from flooding over the County was only a small fraction of what it was in March.

May

Significant flooding occurred along the lower Ohio River during May. The overflows were not as extensive as in March when there was general flooding along the entire Ohio River except in the reach below Pittsburgh, Pa., to Wheeling, W. Va. The crests during May were generally less than 5.5 feet above flood stage, except at Fords Ferry, Ky., where the crest was 11 feet above flood stage. Damages along the main stem were estimated at about $5 million.

A flash flood occurred in Hawaii on the island of Oahu during the afternoon of May 30, resulting in the loss of one life. This was the seventh drowning victim on the island during May.

June

Disastrous flooding occurred over a major portion of the lower Missouri Basin during June. It was the heaviest flooding since the early 1950's. Below Kansas City, Mo., the flooding was more severe than in 1951 or 1952 but the damages were not as high. Heavy damage resulted from the flooding of the Wood and Platte Rivers in the Grand Island, Nebr., area. About one-third of the city was inundated, necessitating the evacuation of around 5,000 people. Agricultural damage was high throughout the Platte River Basin. Record to near record crests occurred on some tributaries in Nebraska and Kansas. Preliminary estimates of flood damage were close to $80 million. Two lives were lost from drowning in Nebraska.

July

The most damaging floods during July occurred in the lower Columbia Basin. Flood damages were estimated at nearly $1 million.

Flash floods and severe local flooding were reported in several locations. Two deaths and damages estimated at $0.7 million resulted from severe local flooding near Oliver Springs, Tenn. Intense thunderstorms in the Kickapoo Creek drainage, northwest of Peoria, Ill., produced near record flooding. The greatest flood damage occurred at Edwards, Ill., where the flood

water was 4 to 4 1/2 feet deep. The loss was estimated at near $0.6 million. Flash floods in the Gila River Basin in southeastern Arizona resulted in 2 deaths. Damage was light.

August

Flooding of disastrous proportions occurred in Alaska during August. Fairbanks, much of which lies in the flood plain between the Chena and the Tanana Rivers was almost completely inundated. Virtually every home and business suffered major damage. The Alaska railroad and all roads leading from Fairbanks were impassable. Nearly the entire town of Nenana was evacuated. Only 6 residents out of 300 remained in town. Red cross officials estimated that they provided food and housing for 10 to 11 thousand persons. Shuttle flights carried many refugees to Anchorage, Alaska, and to Seattle, Wash. Flood damage was estimated at $79 million. At least 7 deaths were reported from drowning.

In conterminous United States, damaging floods were reported for the third time during the year in the Ohio Basin. Flood damages in the Green River Basin in Kentucky and in the French Broad Basin in North Carolina were estimated at over $3.5 million.

September

The most significant flooding during September was the flood disaster which followed in the wake of Hurricane Beulah in extreme southern Texas. Heavy flooding occurred on all streams from the Guadalupe River westward to the Rio Grande with many streams reaching record high levels. The San Antonio River at Goliad, Tex., crested at a record stage of 53.4 feet, 18.4 feet above flood stage or 7.8 feet above the previous highest stage recorded in 1913. Major damage occurred in the Goliad and Karnes County area, where the river exceeded a width of 3 miles. The area of major damage in the Guadalupe Basin occurred below the Nixon-Luling-Wallder, Texas, line. The Mission River at Refugio, Tex., and the Nueces River from near Tilden, Tex., to the mouth reached record heights. The inflow into Rio Grande just above Rio Grande City, Tex., was so rapid (the river rose 32 feet in 48 hours) and prolonged (9 days) that water flowed into the American Floodway System and filled it to more than capacity. The floodway overflowed and flooded the McAllen Airport and a large portion of south McAllen with several feet of water. This was the most severe flood on record in the Arroyo Colorado. Some 1,800 residences in Harlingen, Tex., were damaged by the flood. About 8,000 people or 20% of the population of Harlingen had to be evacuated. It was estimated that over one million persons were immobilized due to the Hurricane Beulah floods. Preliminary estimates of flood damage were placed at about $35 million.

October

The record flooding along the Nueces River in Texas resulting from the excessive rains accompanying Hurricane Beulah continued into October. Extensive damage occurred to residences and businesses in towns, and to farm homes, highways, and railroad beds throughout the area. Range and crop lands were heavily eroded and silted, and oil field installations were severely damaged.

Record flooding occurred along the upper Marais des Cygnes River in Kansas. Clark Creek in the upper Kansas River Valley at Junction City, Kans., crested slightly below the 1951 level. Lyon Creek in the lower Smoky Hill River Valley at Woodbine, Kans., crested 14.5 feet above flood stage or 3.3 feet below the 1951 high water mark.

November

No major flooding was reported in continental United States during November. Heavy rain caused localized mud slides in southern California but no serious damage resulted to any flood channels. Two deaths were attributed to flash flooding in mountain areas.

December

Considerable overflow occurred along the Santa Cruz and Gila Rivers in southern Arizona during December. Extensive flooding occurred between the mouth of the Santa Cruz and Painted Rock Dam. Approximately 13,500 acres of farmland were inundated. There was one death from drowning in the Tucson area. Preliminary estimates of flood damages were placed at over $2.5 million.

Damages exceeding $1.6 million occurred along the Tombigbee River where crests ranged from 4 feet above flood stage at Aberdeen, Miss., to more than 12 feet above flood stage at Gainesville, Ala. The high water along the Snoqualmie and Snohomish Basins in Washington during the latter part of December resulted in flood damages estimated at $1 million.

SOLAR RADIATION DATA

Average daily values (direct and diffuse) received on a horizontal surface, tabulated in langleys.

YEAR 1967

Station	January	February	March	April	May	June	July	August	September	October	November	December	Annual
ALBUQUERQUE N.M.	322	413	-	-	787	779	675	687	541	454	301	264	-
AMES IOWA	-	-	340	408	495	-	572	512	385	262	179	123	-
ANNETTE ALASKA	44	70	256	429	437	508	405	374	180	104	50	31	241
APALACHICOLA FLORIDA	288	-	456	555	621	537	531	464	465	448	351	234	-
ARGONNE NAT. LAB.ILL.	150	250	-	313	-	520	535	476	406	243	152	121	-
ASTORIA OREGON	65	154	235	415	504	514	575	503	384	198	144	71	319
ATLANTA GEORGIA	213	273	406	496	498	478	486	428	410	346	259	168	372
BARROW ALASKA	# 7	39	185	382	455	538	426	286	145	42	# 3	# 0	209
BETHEL ALASKA	31	98	225	300	496	414	327	300	243	102	27	19	215
BISMARCK N.DAK.	126	268	345	372	621	563	704	575	427	240	159	133	378
BLUE HILL MASS.	149	227	290	401	446	-	417	384	391	266	158	132	-
BOISE IDAHO	106	254	305	407	598	611	647	578	430	296	157	124	376
BOSTON MASSACHUSETTS	137	-	301	382	435	487	417	370	375	258	154	-	-
BROWNSVILLE TEXAS	265	337	482	556	604	669	657	521	-	-	-	252	-
BURLINGTON VERMONT	-	-	-	-	-	-	-	-	325	209	104	89	-
CANTON ISLAND P.I.	648	668	657	647	542	528	530	603	-	-	-	-	-
CAPE HATTERAS N.C.	199	273	425	503	479	507	494	-	387	383	277	200	-
CARIBOU MAINE	125	246	-	-	418	514	434	303	253	-	151	106	-
CHARLESTON S.C.	255	299	475	573	596	523	541	491	442	400	309	232	428
CLEVELAND OHIO	116	214	279	370	485	550	491	442	376	247	129	94	316
COLUMBIA MISSOURI	229	302	327	438	494	536	638	573	423	281	220	142	384
DAVIS CALIFORNIA	180	284	384	466	662	674	730	643	514	386	227	217	447
DODGE CITY KANSAS	267	355	428	508	577	616	553	576	475	400	256	209	435
E. LANSING MICHIGAN	141	266	328	384	538	500	580	496	393	222	131	109	341
EL CENTRO CALIF. NPF	254	341	410	505	565	581	536	528	471	412	294	255	429
EL PASO TEXAS	392	467	600	662	759	713	717	622	580	499	337	292	553
ELY NEVADA	239	367	431	532	621	679	-	573	489	428	279	249	-
EPPLEY NEWPORT R.I.	155	227	296	402	460	519	396	320	402	277	161	124	312
FAIRBANKS ALASKA	23	76	212	382	527	627	465	-	204	95	26	4	-
FLAMING GORGE UTAH	-	-	-	-	-	-	-	559	488	386	256	-	-
FORT WORTH TEXAS	302	341	469	441	602	626	605	582	398	420	281	222	441
FRESNO CALIFORNIA	163	268	382	456	660	688	678	617	497	402	201	198	434
GAINESVILLE FLORIDA	376	-	407	600	606	545	552	-	-	-	-	303	-
GLASGOW MONTANA	142	248	371	464	469	548	701	566	382	272	163	120	371
GRAND JUNCTION COLO.	239	340	440	548	616	639	-	602	509	409	264	219	-
GREAT FALLS MONTANA	117	198	366	435	542	535	680	604	443	261	159	113	371
GREENSBORO N.C.	215	-	420	471	446	-	456	412	415	309	246	161	-
INDIANAPOLIS INDIANA	158	283	316	462	-	571	559	508	412	252	165	130	-
INYOKERN CALIFORNIA	297	369	487	-	-	-	-	-	-	428	279	259	-
ITHACA NEW YORK	104	171	251	325	-	-	376	358	34	195	112	81	-
LAKE CHARLES LA.	228	327	438	477	538	616	511	431	419	402	294	174	405
LAKELAND FLORIDA	-	381	497	600	611	527	500	456	442	424	346	269	-
LANDER WYOMING	213	328	430	522	545	532	612	-	480	378	266	205	-
LARAMIE WYOMING	197	320	422	490	506	608	624	-	405	302	217	163	-
LAS VEGAS NEVADA	278	409	489	625	707	752	652	588	498	448	283	245	498
LITTLE ROCK ARKANSAS	-	-	-	430	565	618	567	540	402	318	-	190	-
LOS ANGELES CALIF.	247	377	451	452	612	632	677	639	428	428	300	286	461
LOS ANGELES CALIF.U	290	411	432	574	598	513	-	603	403	389	-	240	-
MADISON WISCONSIN	172	282	314	344	559	512	573	469	380	208	138	120	339
MANHATTAN KANSAS	212	293	302	384	424	460	483	506	359	271	202	133	336
MATANUSKA ALASKA	43	100	243	351	494	405	416	266	179	141	31	14	224
MAUNA LOA OBS.HAWAII	-	572	445	568	556	664	639	607	615	503	476	410	-
MEDFORD OREGON	110	222	329	429	631	691	721	615	477	294	154	99	399
MIAMI FLORIDA	-	317	357	467	574	459	572	522	437	-	348	319	-
MIDLAND TEXAS	332	364	462	511	608	571	601	508	418	423	267	243	434
NASHVILLE TENNESSEE	212	260	386	495	495	550	483	475	407	360	229	174	377
NEW YORK N.Y. U	142	217	288	393	440	515	428	373	403	267	159	116	312
NORTH OMAHA NEBRASKA	212	290	378	578	466	567	659	595	428	286	216	150	402
OAK RIDGE TENNESSEE	205	265	412	501	441	527	422	423	409	353	245	157	363
OKLAHOMA CITY OKLA.	-	289	369	422	524	533	495	528	392	362	264	200	-
PAGE ARIZONA	232	321	382	481	-	-	-	552	468	-	236	246	-
PALMER AAES ALASKA	37	-	208	314	422	353	353	237	152	121	26	13	-
PHOENIX ARIZONA	287	422	476	663	682	691	612	571	522	464	342	257	499
PORTLAND MAINE	134	234	320	407	445	471	417	423	375	257	162	128	314
PROSSER WASHINGTON	113	229	327	421	606	695	673	589	447	264	143	112	385
PULLMAN WASHINGTON	88	193	265	400	-	598	661	-	-	-	-	-	-
RAPID CITY S.DAK.	177	307	348	460	536	460	563	495	376	317	219	163	368
RENO NEVADA	184	313	348	429	596	598	613	553	439	342	198	194	401
RICHLAND 25 NW WASH.	114	210	313	399	531	604	644	599	414	251	139	110	361
RIVERSIDE CALIFORNIA	227	354	-	50	596	619	597	531	358	387	226	203	-
RUSTON LOUISIANA	169	251	354	351	493	508	430	460	375	359	234	145	344
SAINT CLOUD MINN.	-	260	331	345	521	530	600	488	402	241	161	95	-
SALT LAKE CITY	167	311	387	443	586	602	-	-	-	-	-	154	-
SAN ANTONIO TEXAS	266	327	418	432	535	604	617	534	424	408	259	214	420
SANTA MARIA CALIF.	233	376	409	505	645	550	646	573	443	423	260	261	444
SAULT STE MARIE MICH	122	266	338	370	586	521	525	494	389	172	104	94	331
SEATTLE TACOMA WASH.	66	138	227	397	-	593	592	542	396	180	126	59	-
SEATTLE WASH. UNIV.	59	122	217	347	391	518	522	471	360	-	111	56	-
SPOKANE WASHINGTON	100	197	282	415	534	625	684	571	425	214	132	81	355
STATE COLLEGE PENN.	155	247	314	421	466	562	457	422	427	238	157	119	332
STERLING VIRGINA	206	281	325	446	453	577	483	431	446	292	239	171	363
STILLWATER OKLAHOMA	266	-	378	406	506	521	495	480	378	367	234	-	-
SWAN ISLAND W.I.	376	479	-	598	641	544	581	541	543	455	403	383	-
TAMPA FLORIDA	-	382	484	622	644	562	555	510	475	458	390	307	-
TUCSON ARIZONA	313	378	481	587	643	637	595	563	496	432	314	237	475
WAKE ISLAND PACIFIC	315	360	-	638	637	563	484	512	401	465	417	377	-

Note: Langley is the unit to denote one gram calorie per square centimeter.
(U) Indicates Urban sites.
Sun below horizon November 19 through January 23, inclusive.

Chart I. Departure from Normal of Annual Temperature (°F) at Surface, 1967

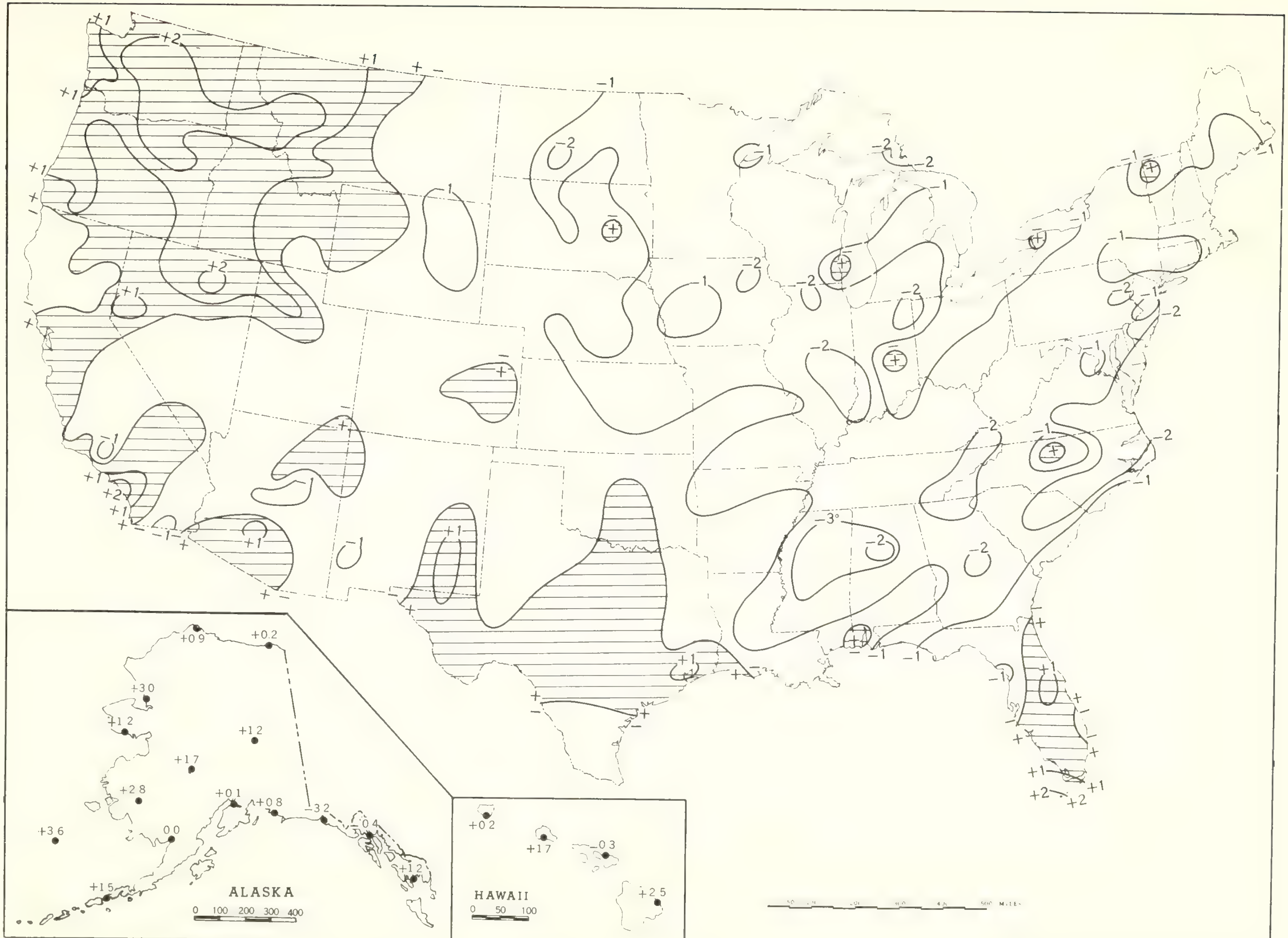


Chart II. Total Annual Precipitation (inches), 1967.

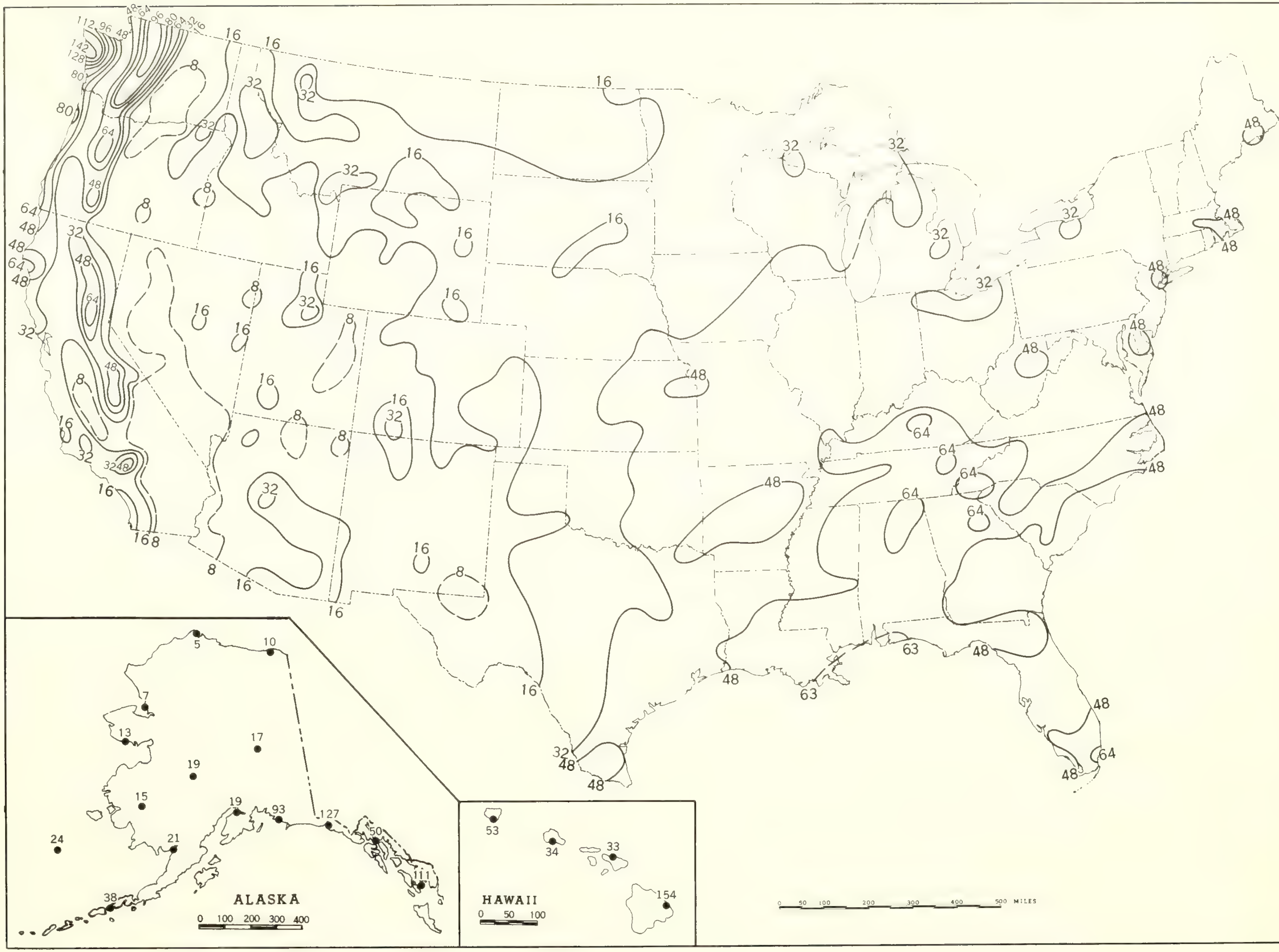
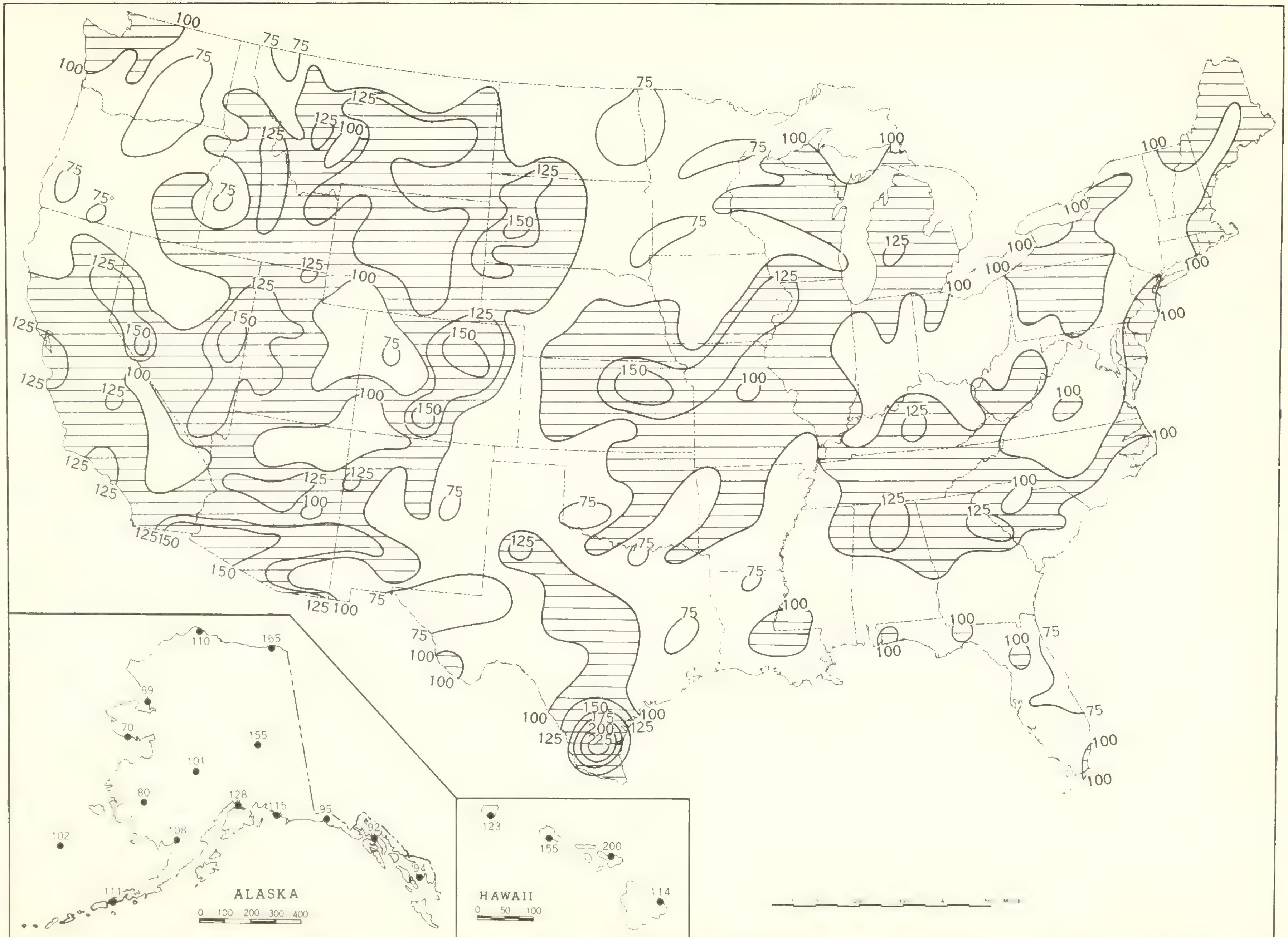


Chart III. Percentage of Normal Annual Precipitation, 1967.



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